

Whose values matter most?

Water and resource governance in the Okavango River Basin

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1 Introduction

Water is a problem of governance, above all.

- Global Water Partnership

All policy making discourse is partial in that it is made by coalitions, which reflect those who can best construct and deliver the most persuasive arguments. ... Policy is not made on the basis of rational science. Although well observed science can play a role if its messages are as effectively constructed as those of other participants in the policy-making process.

- Tony Allan (2003: 2)

When one speaks of the Okavango River a variety of images come to mind. How one thinks about and values the resources of that river depend very much on where one sits and what one does while sitting. For a conservation desk officer located in Berlin or London or Washington, starved of green spaces and horizons, whose senses are brutally assaulted by late-modern life, the Okavango is both idyllic symbol of the pre-modern and functional storeroom of the biosphere. For a Motswana, squatting in a delta reed bed during the high flow season, collecting reeds or fish, livestock grazing and watering nearby, the river is a life-sustaining artery flowing variably through a harsh physical environment. For a member of the Department of Water Affairs, sitting in Windhoek, worrying about dam levels, AGOA-driven development directives and population influx, the river appears primarily as a factor of production, a resource that must be harnessed if standards of living are to be maintained and livelihood options improved not only in Windhoek but throughout the central highveld.

The value of the river differs slightly for a member of Botswana's inner elite – someone in Cabinet, or a Permanent Secretary perhaps. Well-paid and interested in business opportunities, you are late in recognising the economic potential of tourism in the delta region. The river for as long as you can remember has been very far from the cut and thrust of every day politics in Gaborone, though there was that unfortunate incident some fifteen years ago when a government proposal to dredge the lower Boro river, upstream of the village of Maun, and transfer water to Orapa Mine did raise a significant public outcry among residents of Ngamiland. Thus, the tourism sector is dominated by foreigners – tour operators from South Africa, Australia, England, the United States – and you are now interested in getting in on the action. The lower Okavango, particularly the delta, to you is also a factor of production, but tourism is mainly a non-consumptive, post-industrial service industry.

Of all riparian state and basin dwelling actors, the Okavango resides furthest from the minds of policy makers in Luanda. Beleaguered for decades by a pernicious rebel movement, UNITA, assisted variously by South Africa and the United States, you have long been

preoccupied with economic and political survival. Moreover, your party and your interests are very much Luanda and north of Luanda-centred. The oil from Cabinda is your lifeline, not water from the Cubango and Cuito river systems that ultimately join to form the Okavango. Indeed, there are many rivers and much water in Angola; the Okavango is of little concern to you. But you do know that your neighbours, Namibia and Botswana, long allies in the struggles against colonialism, apartheid and more recently war in the DRC, are very interested in the resources of the Okavango River Basin (ORB). You want to accommodate them, but you have interests in other river basins shared with Namibia. Perhaps you can use the Okavango as a bargaining chip for mutual gain. At the same time, as a participating member of the Southern African Development Community (SADC) in the post-civil war era, you would like to play by the regional rules – although, unsure of what these mean for your sovereign right to act as a state, you have ratified almost none of the regional protocols.

Aside from these actors, if truth be told, the Okavango River system is unknown to most of the world. At best, only a smattering of citizens in the Western world may know only of the Okavango Delta through numerous wildlife documentaries. Proposed and on-going activities in the ORB, therefore, reflect the values, needs and concerns of special interest groups. As highlighted above, each comes to the region with different perceptions of the value of the resource base. Some of these conceptions may overlap and/or be simultaneously held by one person, group or organisation. How are these special interests being met? What is the (emerging) structure of governance? Whose interests dominate? Whose values matter most?

In this paper, I discuss the various ways in which water and other resources are valued in the ORB. I relate this discussion to existing and emerging structures of governance and highlight the political nature of these activities. I set the specific discussion within the conceptual framework of 'governance' and argue, following a theoretical framework provided by Allan (2003), that activities in the ORB, while appearing logically consistent and progressive, are in fact fraught with political in-fighting born of possibly non-compatible views of the value of the resource base. In the search for sustainable forms of resource governance, these issues must be openly acknowledged, not ignored.

2 Governance

The Okavango River Basin is geographically specific to Africa but its emerging governance structure is international in both scale and scope. Given that the river rises in the Bie Plateau region of Angola, forms part of the Angola-Namibia border before passing through the Caprivi Strip and empties into the vast swamplands of the Okavango Delta in Botswana, much is being made of the need to consider inter-state interests in any institutional set-up (Turton, Ashton and Cloete, 2003). Much is also being made of the need to include local people – defined as 'riverine communities' – in all resource use decision-making networks (ODMP, 2005a and 2005b).

Where international actors are involved, their efforts are almost always characterised as 'facilitatory': from DED, SIDA and USAID to IUCN, Conservation International, the Natural Heritage Institute and the South African Peace Parks Foundation. Rarely are the activities of these actors regarded as determining.

Similarly, Central State activity, though emanating from outside the basin in Luanda, Windhoek and Gaborone, is almost always characterised as undertaken in the 'national

interest', with their role portrayed as strictly developmental. Moreover, this national interest is said to be not pre-determined, but derived from broad-based stakeholder forums.

Three specific activities are pointed to as evidence of the coherence of emergent river basin governance in the ORB: the tripartite inter-state Okavango River Basin Commission (OKACOM); the community-based, transnational Every River Has Its People (ERHIP) project; and the Botswana-specific Okavango Delta Management Plan process. The first is put forward as evidence of inter-state cooperation for joint benefit-sharing of the resources of the ORB. The second is said to be evidence of riverine community involvement in resource use planning at basin level. The third is flagged as a significant step toward overcoming resource use conflicts and unsustainable practices among relevant stakeholders in the Botswana portion of the ORB, so also providing an important learning tool for the other basin states variously engaged in complementary activities.

Two related activities are often pointed to as evidence not only of benefit-sharing but of the peace-building potential of transboundary resource management: the Four Corners 'super park' project, and the Okavango and Upper Zambezi Integrated Tourism (OUZIT) project. Each of these bring states, (I)NGOs, donors, private companies and basin-specific CBOs together in pursuit of sustainable ecosystem management for mutual profit.

Central, but less overtly acknowledged, to all of these efforts are a series of linked discourses emanating from Western state houses, think tanks and interest groups and filtered down ultimately to ORB states and societies via global (e.g. Dublin, Rio, Johannesburg, The Hague, Bonn) and multilateral (e.g. EU-AU, EU-SADC, Commonwealth) forums and other network activities (e.g. multi-stakeholder meetings on wetlands, protected areas, biodiversity, forests, trade, human rights, democracy and debt). Increasingly, these seemingly separate issue areas (e.g. protected areas and free trade) are subject to the same criteria amassed under the general term 'good governance': stakeholder participation, transparency and accountability, sustainable development through entrepreneurship and capable state oversight but limited intervention – in other words, good governance is the intellectual justification for a liberal world order. 'Governance', understood as sustainable management of resources for mutual and equitable benefit among and by all relevant stakeholders, permeates environmental and conservation discourses: river basin governance (SIWI), ecosystem governance (IUCN), natural resources governance (USAID), to highlight three.

So, water is linked to ecosystems, and ecosystems are linked to other historical, sometimes wider (the state, international law) or narrower (a fishing cooperative among several villages, a borehole syndicate) forms of governance. Whose interests should hold sway among this complex array of interested and unequally empowered groups? This is a matter of some debate, but a complementary narrative of resource 'crisis' put forward by particular transnational interest groups has attempted to bring science to bear in the matter. Newson (2000) highlights some of these claims: resource 'scarcity' due to population growth (what Falkenmark (1999) calls 'demographic scarcity') is leading the world and arid regions in particular down a 'Malthusian funnel'. If nothing is done we face the prospects of 'hydrocide' (Lundqvist, 1998), 'water wars' (World Bank, 1995), and heightened and prolonged 'conflict' (Gleick, 2000). Thus, sustainable resource management must take place at the level of the resource if the direst of these scenarios are to be avoided. Given the centrality of water in all human and non-human activities (Falkenmark and Rockstrom, 2004), the river basin, itself comprising numerous ecosystems, is argued to be the proper management unit (IUCN; EU Water Framework Directive). Slater (1997) aptly labels this 'catchment consciousness'.

3 Theory

Water has been a global issue, off and on, for more than 30 years (although Aldo Leopold talked about the 'paramount value of watersheds' as far back as 1924). Since the early 1990s, a global community of experts has been steadily moving toward support for integrated water resources management (IWRM) (Van der Zaag, 2004). IWRM is conventionally understood as management practices that ensure equitable, efficient and environmentally sustainable water for all for ever (Jonker, 2004). At the same time, this same group of people has been moving steadily away from reliance on supply-side interventions as the primary basis for 'solving' the world's water crisis (WCD, 2001). Rather, judicious supply-side projects should be complemented by vigorous water demand management (Goldblatt et al, 2000; Wimpenny, 1997).

Almost all formal documents related to water resources use and management begin with the claim that 'water is life' – from the World Water Vision to the Africa Water Task Force, from the World Water Council to the Global Water Partnership, from the SADC Protocol (revised) on Shared Watercourses to the Okavango Delta Management Plan Project. Managing the water resources of the ORB, therefore, is an instance of global governance and global governance is portrayed as provision of a moral good (Swatuk, 2004).

In truth, however, all ORB management activities are at a very early stage of development, face substantial difficulties and constitute more hope for the future than current reality. When confronted with this fact, supporters of these activities emphasise the importance of process as a learning tool for developing best practice defined as transboundary resource good governance. Fair enough, but if we agree with the opening epigram from the Global Water Partnership that 'water is a question of governance', we should also recognise the profoundly political nature of arriving at water resource management regimes, be they sustainable or otherwise. Mark Twain's observation that 'whisky's for drinking and water's for fighting over' was not a harbinger of coming water wars, understood as acute conflict between sovereign states. It was, rather, to highlight that since water is central to all human uses, and some uses require more water than do others, deciding on who gets water when and why is essentially a political question. Indeed, given the need for large-scale finance in establishing water delivery systems, it is essentially a question of political economy. Hence the importance of Allan's quotation in the second epigram.

Analytical and project-oriented approaches that take 'governance' as their point of departure, however, underestimate the role of politics and the relevance of history in resource management. Rather, they focus on capacity, particularly human resource capacity and institutional/legal frameworks: properly skilled people sitting in right-sized institutions working within a conducive legal framework will lead to resource good governance. Yet, the fascination with basin-scale governance '[i]n the modern world, notably in the twentieth century ... has become popular beyond its proven record of success' (Newson, 2000: 210). Basin-level management regimes, involving complex abstraction, transfer and storage schemes, undertaken in service of a progress-driven 'hydraulic mission' (Allan, 2003) account for the current world water 'crisis'. And while per capita consumption in the West has declined while industrial output continues to rise, there remains a direct correlation between water consumption and political economic power on a world scale. Low-consumption countries argue that their hydraulic missions are incomplete. Thus practices regarded by conservation-oriented actors in the West as environmentally unfriendly and ecologically unsustainable (e.g. large dam construction and inter-basin water transfer) will continue in the global South – for political as well as developmental reasons.

Coalitions of influential Western actors (e.g. USAID, Conservation International, World Wildlife Fund) invoke ‘science’ as the basis for their resource-specific interventions. A host of international and regional protocols governing resource use decisions have their basis in generally accepted principles of, for example, biodiversity preservation, climate change, the water cycle, keystone species, stocking rates, fire regimes, invasive species, deforestation, desertification and soil degradation. Thus, the IUCN as key advisor and technical backstopper of the ODMP project argues that all actors must understand the ‘ecosystems approach’ and have it centrally in mind when making resource use decisions in the ORB (IUCN, 2005). As missionaries of environmental ‘truth’, these actors set themselves up for disappointment when their suggested interventions are resisted or bent to fit local interests.

What these groups would do well to remember is that ‘management’ priorities are a function of perceived need which itself is a sub-set of held values. Decisions regarding the allocation and use of key resources such as land and water thus reflect a complex inter-play or negotiation between and among competing values. Neither is the decision water-specific; rather, the value of water is itself a reflection of broader social/cultural values – Weltanschauung. Current practices reflect a hegemonic consensus, i.e. the value structure of those actors capable of influencing the discourse. For Allan (2003), this consensus constitutes a paradigm. Given that discourse is dynamic, the perceived or generally accepted value of a resource will change through time – for social, economic, cultural, environmental and technological reasons. At a global level, Allan argues that water resources management has passed through four paradigms and is now entering a fifth, of which IWRM constitutes its core (see Figure 1).

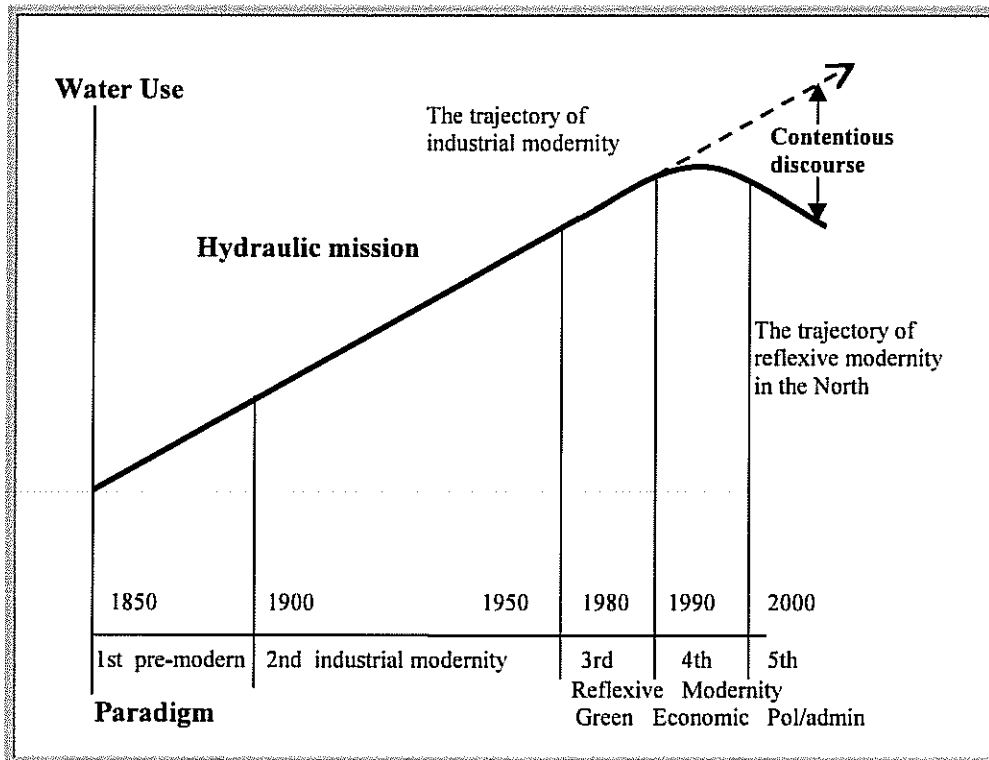


Fig. 1: Neo-liberal modernity and the water sector in semi-arid countries:
Sourced from Allan (2003)

Briefly stated, the first paradigm is associated with pre-modern communities with limited technical and organisational capacity. The second paradigm is that of industrial modernity where the state and private sector activities, assisted by developments in science and technology, gave shape to the hydraulic mission (i.e. harnessing water resources for human needs). Allan argues that the next three paradigms result from society-wide skepticism in the North regarding the ability of science to find solutions to problems deriving from human activity, an era Beck (1990) and others have labelled 'reflexive modernity'. The third paradigm reflects the interests of environmentalists in reducing the human impact on the natural world. The fourth paradigm 'was inspired by economists who had drawn the attention of water users in the North to the economic value of water and its importance as a scarce economic input' (Allan, 2003: 11). 'The environmental and economic phases are still in train ... [T]hey are being supplemented by a new fifth paradigm, which is based on the notion that water allocation and management are political processes' (Allan, 2003: 11). Stakeholder participation is perhaps the key political idea behind IWRM. Whereas other paradigms were pushed by partial interests (i.e. civil society, government, social movements, business), the fifth paradigm argues that all of these actors are central to the policy-making discourse.

A key observation made by Allan (2003: 15) is that, whereas the 'semi-arid plural North' can be seen to have accepted most of the ideas of the reflexive modern period, 'the South, where about five-sixths of the world's population live, is still very much involved in its hydraulic mission – the second paradigm'. Thus, '[t]he water policy discourses in the North and South are different. Those "outsiders" from the North who insist on preaching the environmental and economic values of water have little impact on the "insider" Southern water management discourses'.

As shown in the ORB case study below, although policy makers in SADC state houses have signed many late-modern reflexive era documents and written policy accommodating Northern interests, activities undertaken reflect the often conflicting interests of pre-modern and industrial modern actors located within and beyond the basin. Conservation-oriented actors in the North and their epistemic counterparts in the South recognise this fact, hence the palpable sense of urgency (e.g. Conservation International's 'hot spot' approach) in their on-going interventions on behalf of the ecosystems of the ORB.

4 The Okavango River Basin

The ORB is currently of great interest to the international community and to Basin state governments. This has not always been so. Lying in a remote and inhospitable area of central/southern Africa, only about 600,000 people reside in the entire basin, with possibly an influx of a similar number of people previously displaced from the basin due to civil war in Angola and liberation struggle in Namibia (Porto and Glover, 2003). The ORB has always been of interest to those who live there, especially at the headwaters and along the middle-to-lower reaches.

Rising in the highlands of Angola, the river has two main arms, the Cubango River and the Cuito River which join at Dirico, just past the Namibian town of Rundu and upstream of the Botswana-Namibia border at Mohembo (see Figure 2). The Cubango system, itself a complex of many tributaries, contributes roughly 55 per cent of total flow, whereas the Cuito contributes approximately 45 per cent. Rainfall patterns vary dramatically from north to south, with Huambo town receiving roughly 1300 mm/a, Rundu at mid-stream receiving

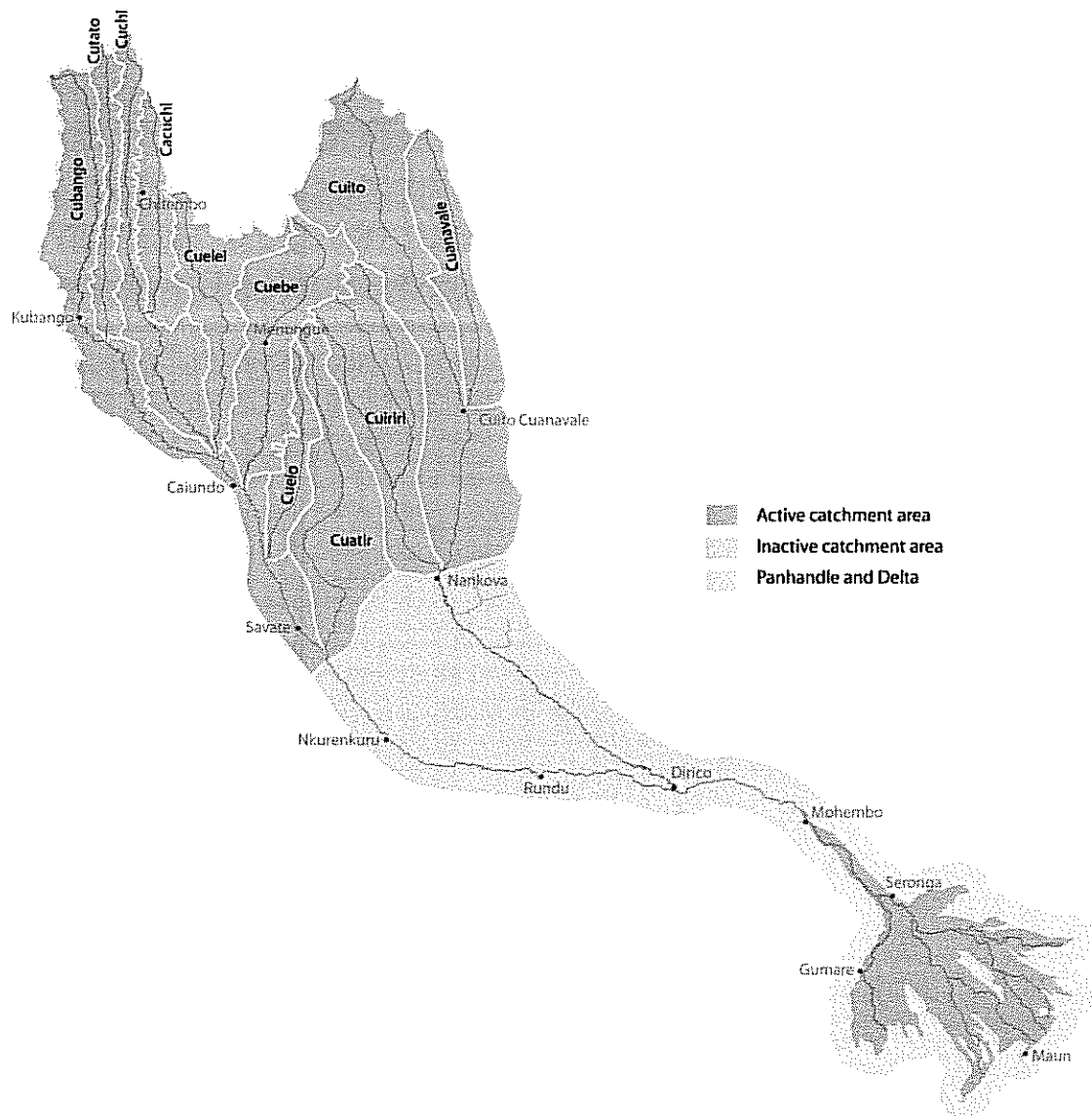


Fig. 2: The Okavango River Basin

roughly 560 mm/a, and Maun at the downstream end receiving roughly 450 mm/a (Mendelsohn and Obeid, 2004: 63). Flows can vary dramatically as shown in Table 1 below.

Table 1: Annual flows in cubic kilometres per season at selected points in the ORB

Place and years of data	Average (cubic km/year)	Minimum (year)	Maximum (year)
Rundu (1945-2001)	5.207	2.260 (1971/72)	9.810 (1962/63)
Mohembo (1933-2001)	9.384	5.313 (1995/96)	15.977 (1967/68)
Maun (1951-1999)	0.271	0 (1995-1997)	1.174 (1954/55)

Source: Mendelsohn and Obeid, 2004: 83

The river is often described as a linear oasis as it passes through regions of poor quality soils (arenosol predominating). For example, it is estimated that only 7 per cent of Kavangoland in Namibia is suitable for cultivation (Moyo et al, 1993: 177). The farming of drought-resistant crops such as sorghum and millet predominate in the basin, with maize and manioc being farmed in the better watered uplands of Angola, and mixed maize, sorghum and millet in the Delta. With regard to livestock, the great majority of cattle are held in the mid-stream and Delta regions of Kavangoland and Ngamiland. While livestock numbers are increasing in the region, and land degradation is evident in communal areas of Namibia and Botswana, Mendelsohn and Obeid (2004: 152) state 'that most increases occurred away from the river and that livestock numbers have been rather constant close to the Okavango and Delta'.

Current Central state and international actor interest in the ORB stems from several factors. As Namibia's population grows and as pressures to diversify development away from minerals increases, questions have arisen regarding adequate water resources for these various activities. The perennial waters along Namibia's borders (Cunene, Okavango, Orange) have therefore become a focus of attention. For Botswana, tourism without real government interest has developed into the second largest contributor to GDP. Botswana, as a historically pastoral society, show more interest in cattle than kudu. Also typical of pastoralists, they tend to regard predators (lion, leopard, hyena, wild dog) and large herbivores (elephant, rhino, hippo) as pests to be eradicated. However, the large parks system established by the colonial powers was inherited by and largely retained by independent Botswana. Concern for these areas was minimal as they were located far from the centres of human settlement. Today, however, these remote areas have become centres of wealth creation, so drawing the interest of the state and its citizens alike. Given that tourism depends on healthy ecosystems, Botswana's interest in the Delta and panhandle stresses limited consumptive use. This perspective coincides with the interests of the international community, the bulk of which is conservation-oriented. The ORB is perceived by the Western world as a 'near pristine' 'oasis in the desert' and 'one of the last unindustrialised rivers in the world' (Earle and Mendez, 2004). Perceived possible pressures on the system from Namibian Central state activity (inter-basin transfer, large-scale irrigation of cash crops, hydropower projects), from riverine communities themselves (population increase, unsustainable livestock numbers, streambank cultivation, haphazard irrigation) and from the Angolan provincial/central states (hydropower schemes) have led to a flurry of international actor interventions in the region (Turton, Ashton and Cloete, 2003). Most of these activities seek to provide a coherent institutional and legal basis to all resource use activities, with an overall view toward sustainable ecosystem governance. The Angolan government interests in the ORB are somewhat unclear, as discussed in Section 5 below.

5 Valuing water: actor interests in the ORB

Table 2 highlights the central actors involved in the resource governance discourse in the ORB.

Table 2: The Value of Water in the Okavango River Basin: Actor interests in the colonial and post colonial eras

ACTOR	'WATER' IN COLONIAL ERA	'WATER' IN POST-COLONIAL ERA
Riverine community (intra-basin, ecosystem people, limited technology, circumscribed political power – 'negative power')	Livelihood source (dependent on location in basin – soil profile, geography)	Livelihood source (food crops/livestock/fish/crafts)
Luanda (extra-basin, biosphere people, modern technology, primary political power)	Factor of production hard path (agriculture/hydropower)	Factor of production (hydro/agric) Bargaining tool
Windhoek (extra-basin, biosphere people, modern technology, primary political power)	Factor of production hard path (urban/industry/hydro/agric)	Factor of production (hard and soft options)
Gaborone (extra-basin, biosphere people, modern technology, primary political power)	Factor of production hard path (mining)	Factor of production (hard and soft options) Mining/agric/tourism Department dependent
Regional government (intra-basin, possibly extra-basin, eco/biosphere mix, limited technology, circumscribed political power – 'middle power')	Take cue from central government	Take cue from central government/ limited autonomy/ stakeholder forum
World Bank (as representative of IFIs) (extra-basin, extra-Africa, biosphere people, modern technology, economic and scientific power)	Factor of production hard path	Factor of production (within ecological limits)
Regional Bodies (e.g. SADC, SAPP)		Take cue from central state actors and consider extra-basin, extra-region and extra-African positions
Think Tanks (e.g. IWMI, DRFN, AWIRU, CSIR, HOORC) (intra- and extra-basin, biosphere people, modern technology, scientific power)		Poverty alleviation/ traditional management structures/ gender mainstreaming/ conservation/biodiversity
Business (Banks/Construction) (extra-basin, possibly extra-Africa, modern technology, economic power)	Factor of production (consumptive)	Factor of production (consumptive and non-consumptive)
Environmentalists (CI, IRN, NHI) (extra-basin, extra-Africa, biosphere people, modern technology, scientific power)		Late-modern Symbol/ biodiversity preservation/ intact ecosystems/ peace maker

The Table can be made both more and less complex. For example, it could be made more complex by introducing the competing interests of the various provincial governments both in and near to the basin. In Angola this includes Moxico, Huambo, Bié, Huila, Kuando Cubango and possibly Cunene provinces. In Namibia, this directly includes Kavango, but also Otjozondjupa, Omaheke and Caprivi. In Botswana, the affected districts are Ngamiland, Central and Chobe. It could also be made more complex by including the twelve different language groups living within the basin (excluding native English, German and Afrikaans speakers resident in towns and villages), and showing how their geographic location helps to determine their resource use interests. Delineating urban/peri-urban/rural/peri-rural settlements and interests would also further complicate the picture.

Table 2 can be made less complex, however when one considers the top-down management styles of each of these three states. Resource use decisions particularly regarding water, in both Namibia and Botswana are very much dominated by ruling parties located in Windhoek and Gaborone. Regional governments lack both capacity and autonomy to challenge Central government decisions. Thus, all provinces/districts take their cues from Central government directives.

However, post-war settlement deals struck in Angola between the governing MPLA and the former rebel group UNITA means that former UNITA strongholds and traditional tribal areas have been 'awarded' to UNITA by MPLA. This includes ORB provinces such as Cuando Cubango. However, MPLA officials have warned UNITA that this does not give them 'free rein' in their jurisdictions (personal communication, name withheld). Nevertheless, it does suggest that sustainable management of the upper basin may depend more on UNITA interests – as the governing 'party' of the region – and less on what Luanda's interests are. Although one suspects that Luanda regards the ORB first and foremost as a bargaining chip, it may be willing to trade in exchange for agreements made regarding resource use in more heavily populated basins such as the Cunene (personal communication, name withheld).

Beyond central state actors, Table 2 may also be reduced to two other key actors: riverine communities and conservation-oriented actors (both official and non-governmental). Other identified interest groups (e.g. IFIs, Think Tanks, business) tend to act on invitation and thus as extensions of one of the three main interests: national, local and international. As highlighted in Table 2, each of these main actors brings different conceptions of the value of water and the resource base generally to bargaining tables. Each wields power differently and unequally. For example, riverine communities generally lack power vis-à-vis both the central state and the international community. Their primary power is 'negative', that is, as those residing within the resource base, they have the power to disrupt various extra-basin initiated interventions as well as to hold other interested actors to ransom via the threat of resource degradation. Often, these groups will enter into smart partnerships with international donors to their mutual advantage and sometimes against the wishes of central state organisations. A good example of this is the way in which the ERHIP project, funded by SIDA, has provided to local communities through the language of 'participation' a voice within the inter-state, expert-dominated institution OKACOM.

Sustainability, benefit-sharing and equity are the core concepts framing discussions of appropriate governance structures in the ORB. As with 'sustainable development' generally, and 'IWRM' specifically, there is no general agreement regarding the ways and means of realising these ideals. Donor states, conservation IGOs and IFIs interested in 'ecological best practice' seek to influence basin-specific decision-making through a mix of conditional capital, technical expertise, and scientific and moral argument. Their efforts have

overwhelmingly focused on the creation of new institutions and in facilitating the rewriting of riparian state laws and policies in line with norms, rules and procedures generally adhered to by Western states and espoused in global forums. In the ORB, examples of this include *inter alia* Natural Heritage Institute support for ORB-specific decision-support tools, USAID support for the development of an OKACOM Secretariat, SIDA support for ERHIP, as well as SIDA/IUCN support for the ODMP project.

Basin states, however, may or may not accept these interventions as delivered, choosing instead to engage in elaborate stakeholder forums, consultations, commissions and the like before 'buying in' to, rejecting, or altering the proposed regime form (ODMP, 2005; Conca, 2005). Each state frames its interests differently. For example, Botswana derives large amounts of revenue from non-consumptive tourism activities. This revenue is dependent in part on the state of the resource base. The government, in 1997, chose to list the Okavango Delta as a wetland of international importance and to sign and ratify the Ramsar Convention. It has also managed to have the Delta listed as a World Heritage Site. In this way, the government pursues state-centric interests by appealing to wider international communities (Swatuk, 2003). This is not to suggest that the government of Botswana is solely interested in non-consumptive use of the waters of the ORB. Rather, it suggests the creation of an ecological benchmark for consumptive use. Given the symbolic appeal of post-industrial development in the lower ORB, few outside observers ask questions regarding the benefits deriving to riverine communities from such policy positions. These benefits, I would argue, are very small, and the negative outcomes (e.g. population influx to tourism bases such as Maun in search of elusive jobs, resource-raiding by Gaborone-based and international companies) are large indeed.

In stark contrast, the government of Namibia has chosen to frame its interests in terms of state sovereignty and the moral imperative to harness ORB resources for developmental purposes in a water-scarce region (Heyns et al., 1998). Government has stated unequivocally that it will use these resources and that it is its sovereign right to do so. Recently, the Department of Water Affairs was directed by former President Nujoma to conduct a feasibility study of shifting water from the headstream of the Congo River to the Cubango/Cuito system for transfer not only to Namibia's central plateau, but to the Okavango Delta and the south-western Kalahari as well. Nujoma was confident that he could get this project to 'green the desert' endorsed by SADC as a regional good (Heyns, personal communication). Whatever one thinks of such a plan, it is clear that in the state houses of the region, the hydraulic mission is considered far from complete.

The government of Angola is less forthright in its interests which, it seems to me, are minimal at best. As shown in Table 2, there were colonial and post-colonial plans to harness some of these waters for hydropower use. However, in the post-war era the government is clearly Luanda-centric, with roughly one-sixth of the entire population residing in the greater Luanda area, much of it in dismal 'musseques' or shanty towns. As highlighted in Moyo et al (1993: 26), the government is pre-occupied with economic and political survival. It will therefore exploit oil with little consideration of other resources. Recent multi-billion dollar deals struck with China add testimony to this fact. The Central Highlands of Angola were its pre-war 'breadbasket', but given its well-watered character, if large-scale food and cash cropping resumes, this will be rain-fed. Modelling by Wolski (2004) and evidence provided by Ashton and Neal (2003) suggest that these activities will have minimal impact on the character of the river. In the basin, de-mining will be the central concern of provincial government as well as land rehabilitation around war-devastated Huambo and Bié. Will de-mining lead to a huge influx of peasants in the basin? This is unlikely – it is not only because of the war that less

than two per cent of Angola's population reside in Cuando Cubango province, it is an extremely inhospitable environment with poor soils (Mendelsohn and Obeid, 2004).

6 Governance structures

Actors currently involved in ORB governance reflect the uneasy coexistence of existing structures with proposed, emerging and partially implemented new ones. In the case of the former, central, district/political and traditional mechanisms are integrated hierarchically. Their actions are informed by national vision and policy statements, as well as the terms and conditions of international and regional laws, treaties, conventions and agreements. Riparian states, through OKACOM, are bound by treaty to keep each other informed regarding potential resource use decisions. Though formal approaches to resource governance are changing to accommodate new thinking (in line with Allan's third-to-fifth paradigms), resource use and allocation decisions overwhelmingly reflect historical power relations and inherited values of the resource base. Modernist views and desires translate into water/natural resources as factors of production (Allan's second paradigm). The historical and physical remoteness of the ORB from centres of colonial/post-colonial power means resource use decisions have favoured those with the will to develop/exploit them and governance has proceeded often in an ad hoc/open access fashion.

In terms of the latter, newly emerging structures, these reflect the competing interests of actors based on both old (modernist) and new (late-modern, reflexive era) thinking about the value of water (e.g. the 'environmental reserve') and associated basin resources. For example, OKACOM was initially envisioned as an inter-state dialogue mechanism comprising water sector ministers and expert technical committees to help guide resource exploitation away from potentially conflictful paths (second paradigm). Ten years later, however, it is evolving into an entity based on the central tenets of IWRM, though technical experts continue to worry about the disruptive capacity of local community groups affected by central government decisions (fifth paradigm). Similarly, the ODMP brings together all relevant stakeholders within the boundaries of the Okavango Delta Ramsar site. The draft Final Inception Report frames the project in terms of both wetland management and an ecosystem approach (ODMP, 2005b). However, the proceedings of the Inception Report Workshop (ODMP, 2005a) show, quite clearly, how each of the twelve main components reflect the partial, disintegrated, sometimes fractious and often competing interests of government departments, donors and research associates.

As highlighted by Dovers (2001), institutions reflect the past rather than anticipate the future. Creating new institutions or changing existing ones will meet resistance from those currently benefiting from present structures and past practice. Rather than frame the new resource governance structures as the logical outcomes of epistemic community interaction, it seems to me to be better to regard them as discursive sites where differently empowered actors attempt to shift the discourse – through argument, science, money, threat and action – to their favour. This may or may not result in sustainable development outcomes. Given the high degree of importance placed on the resources of the ORB, it is unlikely that competing actors, particularly those already empowered, will be easily moved from current practice.

7 Conclusion: whose values matter?

Central state interests will continue to have a determining impact on forms of governance in the ORB. Invoking sovereign rights and developmental goals, basin states will continue to pursue their hydraulic missions. International interests will not easily accept this fact. They will continue to invoke various truth claims regarding biodiversity preservation and ecosystem sustainability in the effort to shift government action from second to fifth paradigm thinking and practice. They will also continue to court riverine communities whose knowledge is partial, interests are parochial and power is limited. They will remain recipients of policy at every turn.

Thus inter-state and basin state-international community interactions will continue to frame the discourse and determine the outcome. Emergent structures will reflect this struggle. They will be localised and will operate as weak partners to central state interests. Subsidiarity, therefore, is unlikely; decentralisation, perhaps; devolution of power, definitely not. Basin states will act and invoke sovereign rights when and as they see fit. Historical relations between these actors will mitigate against acute conflict, but there is no direct correlation between inter-state cooperation and ecosystem sustainability. For all those keen to see the death of the second paradigm, it is important to recognise that states are complex, not unified entities, and that interests and values change over time. Thus, those in search of fifth paradigm practices must continue to conduct better science, make better arguments and recognise that moral appeals will fall on deaf ears. For small, weak, developing states seeking survival in an international system of states, arguments must be based on the tangible (political and economic) benefits of certain courses of action. Whose values matter most? Those with the capacity to influence the discourse. Where this leaves riverine communities is at the centre of the resource base but at the bottom of the ladder of power.

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