Communicating integrated water resources management: From global discourse to local practice – Chronicling an experience from the Boteti River sub-Basin, Botswana

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ABSTRACT

The Boteti River is an ephemeral outflow of the Okavango River. It lies in the north western part of Botswana where about 25,000 people reside across a number of widely scattered villages and informal settlements. The river, with its seasonal springs and pans, is vital to the livelihoods of these people, their livestock, and the wildlife that share this physical space. A combination of factors has led to widespread degradation of the physical resource base – both in the river bed itself and in the wider environment. As part of its outreach role, the Harry Oppenheimer Okavango Research Centre has undertaken a multi-year project along the Boteti River to assist people there with the rehabilitation of their resource base. The globally influential concept of integrated water resources management (IWRM) provides the analytical framework, in particular its emphasis on dialogue and stakeholder participation. The project has three primary aspects: facilitation of a dialogue platform; action-research; outreach and information dissemination. After two years of implementation, the project has collected a good deal of data and established a River Basin forum with a common vision. However, the project continues to face difficulties in implementation: participation is limited; myths regarding resource degradation are difficult to dispel; meaningful communication among differently empowered actors is hard to achieve; and there are numerous human, financial and technological limitations. The primary researchers continue to alter their methods in the hope of achieving a functioning River Basin Committee (RBC), but observe that the globalized ideals of IWRM are, in this particular case at least, of limited use when attempting to alter local management practices in basins with deeply embedded social and cultural practices.

Keywords:
Project management
IWRM
River Basin
Botswana
Ngamiland
Boteti River

1. Introduction

In order to effectively conserve, protect, develop, manage and utilize this vital resource (water) it is essential to encourage and strengthen multi-stakeholder, multi-disciplinary and cross-sectoral exchange and dialogue… [All perspectives need to be considered in on-going reflection and debate to ensure a water-secure future for the world.]


We don’t seem to grasp the issues very well. We don’t know whether we are going to have water. How are we going to improve livelihoods here without water? … It seems we are going to say the same things. We don’t understand the issues of natural resources very well.

- Botshoko Motomemo and Diphpoo Ndoanyana (Makalamabedi Central kgotla meeting, 21/2/2007)

Over the course of the last 35 years – i.e. since the 1972 United Nations Conference on the Human Environment held at Stockholm – concerns regarding water resources use and management have steadily risen up global development and security agendas. A steady stream of media reports concerning floods and droughts, abnormal and irregular weather events (cyclones, hurricanes, el nino, la Nina), rising seas, and global ice melt – some or all of which are linked to fears over climate change and global warming – have seeped into popular consciousness such that ‘water wars’ are considered real possibilities and a ‘world water crisis’ is widely accepted as fact.

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1 A Damara word (in official language of Namibia) meaning ‘formal community gathering’.
Such fears and perspectives have helped mobilize human, technical, and financial resources worldwide, perhaps best symbolized by the creation of the multi-stakeholder World Water Council and the Global Water Partnership in 1993, and the holding of the biennial World Water Forums, but held in Mexico City in 2003.

As the opening paragraph attests, it is generally agreed upon that the world’s water sector faces a multitude of pressures, including climate change, population growth, and the need for more efficient and equitable water management. The Global Water Partnership, for example, was established in 2000 to facilitate the creation of a River Basin Forum (RBF) and, ultimately, an empowered and effective River Basin Committee (RBC) in the Boteti River Basin of Botswana (see Fig. 1). The project has been underway for more than two years and is slated to end in December 2009.

The project combines action research (i.e., research undertaken in direct response to perceived local needs) and participatory research that seeks to facilitate decision-making by the communities involved.

2. Methodology

This paper undertakes a critical and reflective exercise in project analysis. It demonstrates the role of participatory and action research in the process of attempting to facilitate the creation of a River Basin Forum (RBF) and, ultimately, an empowered and effective River Basin Committee (RBC) in the Boteti River Basin of Botswana (see Fig. 1). The project has been underway for more than two years and is slated to end in December 2009. The project combines action research (i.e., research undertaken in direct response to perceived local needs) and participatory research that seeks to facilitate decision-making by the communities involved.

As shown below, the project involves several steps to be successful, with success being described variously as the creation of a functioning River Basin Committee (the ideal outcome), and as a process that fosters sustained, fruitful discussion among relevant stakeholders, the outcome of which will be determined by the actors themselves (a more realistic outcome given the human resource, time, and financial limitations of the project).

To adequately reflect on the progress of the project, it is helpful to go through several detailed steps. The paper proceeds as follows: the third section describes the analytical framework – integrated water resource management (IWRM) – underlying the project. The fourth section briefly describes the project. Section 5 outlines the project area, i.e., the Boteti River Basin in Botswana. Section 6 provides a critical reflection on the project methodology, focusing on the social, cultural, and institutional aspects of communication. The final section links the practice of the project to its analytical framework and makes several suggestions regarding improved performance.

3. IWRM: Dominant Paradigm, Discursive Space

In a recent discussion paper, Allan (2003) suggested that IWRM – integrated water resources management – had become a new orthodoxy. IWRM, as defined by the Global Water Partnership, aims to ensure the coordinated development and management of water, land, and related resources by maximizing economic and social benefits while minimizing environmental impacts. This is achieved through an inclusive process where all stakeholders are consulted and their interests meaningfully considered.

As a result of working with the Boteti River Basin, the project has identified several key issues that need to be considered. These include the need for better communication among the various stakeholders, the importance of understanding the local context, and the need for a more participatory approach to decision-making.

In conclusion, the Boteti River Basin project provides a valuable case study of IWRM in practice. The project has demonstrated the importance of a participatory approach to decision-making and has identified several key issues that need to be considered in future projects.

Fig. 1. Map of Botswana, with the Boteti River in North-Central Botswana.
developments in science and technology, gave shape to the 'hydraulic mission' (i.e. harnessing water resources for human needs as typified by the era of big dam building). Allan argues that the core of these paradigms evolved from society-wide skepticism in the North regarding the ability of science to find solutions to problems deriving from human activity, an era Beck (1995) and others have labeled 'techno-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 attention of water users in the North to the economic value of water and its importance as a scarce economic input (Allan, 2003, p. 4). The environmental and economic phases are still in train ... (They are being supplemented by a new fifth paradigm, which is based on the notion that water allocation and management are political processes' (Allan, 2003, p. 11).

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. An important observation made by Allan (2003, p. 15) is that, whereas the 'semi-arid plural North' can be seen to have accepted most of the ideas of the reflective modern period, in 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, '[the water policy discourses in the North and South are different. These "outsiders" from the North who insist on preaching the environmental and economic values of water have little impact on the "insiders" Southern water management discourses'.

This paper directly addresses this claim. Unlike Kuhn's distinction between normal and revolutionary scientific paradigms, approaches to water resources management at the level of the resource (as opposed to the level of conceptualization) reflect the uneasy coexistence of each of Allan's five so-called paradigms (perhaps better termed 'preferences'), with high-modern management approaches continuing to dominate approaches to water. This is why, for example, there has been so little impact of IWRM specifically on inter-state water sharing agreements where high political interests (e.g. water for hydro-power, cities or irrigated cash crops) often sideline IWRM-style considerations (Conca and Ken, 2006; Gupta and van der Zaag, 2006).

4. The project

Our project, formally titled 'Sharing Temporary Flood Waters in Southern Africa: Ephemeral River Basin-SADC (ERB)' (henceforth, ERB), is a multi-year activity designed to see whether river basin management committees are feasible in ephemeral river basins, where surface waters are extremely limited, where blue water may flow for only a few days per year in only part of the basin, and where the vast majority of people are dependent upon relatively accessible groundwater (either through boreholes or shallow wells) for their household needs and livelihood practices. Partner institutions are located in three different Southern African Development Community (SADC) countries - the Desert Research Foundation (DRF, Namibia), the Harry Oppenheimer Okavango Research Centre (HOPREC, Botswana), and a consortium from South Africa - the Sutliff Peoples Project (SIP), the University of Cape Town (UCT), and the Agricultural Research Council (ARC) of the Western Cape.

ERB is funded by the Government of Norway through its embassy in Pretoria. Effective communication is at the heart of the project, as stated in the project document:

The active participation of local communities in shaping their own development agenda is key to effective and sustainable management of natural resources. Service delivery by government institutions, international and local service organisations, non-governmental organisations (NGOs) and donors will be more efficient and effective if channelled through an organised local forum according to identified needs. A forum constituted by all parties involved and/or interested in the resources will further facilitate integrated planning and management of both natural and financial resources in the community.

Such a framework for river basin management draws directly on the stated preferred participatory and democratic methodologies of powerful 'water bodies' such as the World Water Council (through its Water World Vision), the European Union (through its Water Directive), and the Global Water Partnership. All SADC member states have, either in principle or in practice, adopted this new water architecture (Svarts and Rahman, 2004). In the case of Namibia, a functioning, empowered, multi-stakeholder River Basin Committee has been put in place in the Kusib River Basin. The ERB project seeks to replicate this recent success (see Botes et al., 2003; Manning and Seely, 2005 for details). It is a methodology flexible and a key question asked.

The project, steeped in fifth paradigm' IWRM values, is being implemented in a setting where 'participating stakeholders' hold a wide variety of (differing, competing) values reflecting their particular socio-economic, political, geographical and cultural settings. As may be expected, these differing values mirror vastly different actor capabilities. While these capabilities are often a consequence of power relations within a specific socio-political economy (e.g. government bureaucrats; semi-autonomous scientists; peasant farmers), it is important to note that actors wield different sorts of power - none is therefore 'powerless' not even those with the fewest material resources.

Also, following from Reck and Sikkink (1998) explication of 'norm localisation', our experience shows Allen's dichotomy of 'Northern outsider' and 'Southern insider' to be too hard and fast. Clearly, most state-makers, particularly those in the low-consumption global South, continue to view water through a 2nd paradigm/high-modern lens: dams, pipelines, multiple uses with minimal concern for the poor or the environment. They therefore make particularly good partners with high-consumption Northern donors, banks and engineering companies. Water experts outside the bank-governments-business nexus, however, are more inclined toward 3rd or 4th or 5th paradigm frameworks. And, in areas such as the Boteti River Basin, people at the level of the resource at best aspire to 2nd paradigm practice: the deliberate and systematic use of technology to deliver more water for a better life. Those involved in our project often hold simultaneously two or more of these perspectives (see Svarts, 2005a for details).

5. Project area

5.1. The Boteti River sub-Basin

The Boteti River is a distributary of the Okavango River Basin. It begins at the Thamalakane River in the southernmost fringe of the Okavango Delta and stretches over a distance of about 300 km creating a sub-basin covering an area of more than 29,000 km² (Republic of Botswana, 2002; see Fig. 2).2 Historical trends for Lake Ngami and associated rivers, documented by Shaw (1983), indicate that the Boteti River used to flow perennially with intermediate periods of drying lasting only a few years except in the late 1920-1940s. Currently the Boteti appears to be going through a long dry span and has not received any flow through its entire length since the early 1990s. It currently has a wetter or perennial upstream up to 50 km
from its source and a drier or ephemeral downstream spanning approximately 250 km. Overall the Boteti River has since "been flowing at different occasions", such flow being described as "sporadic and unreliable" (Republic of Botswana, 2001: 10).

The Boteti River sub-Basin receives average annual rainfall of about 354-450 mm/year and it is highly unreliable with frequent periods of drought (Republic of Botswana, 2001; Vanderpost, 1995; Amtenzen et al., 1994). Given the extremely high evaporative demand of the region, approximately 85-90% of all rainfall is either lost to evaporation or transpired by existing vegetation. The area is mainly covered by the Kalahari sands with associated woody vegetation of acacia and open grasslands with strips of riparian vegetation (Republic of Botswana, 2001).

5.1.2. Settlement distribution

The entire Boteti sub-district has 15 main settlements or villages, and numerous other smaller settlements. Each village is made up of numerous smaller settlements or associated localities, of arable lands and cattle posts for livestock keeping (Republic of Botswana, 2001). Most settlements are found along the Boteti River from Makalamabedi (Central) in the north to the sub-district capital, Letlhakane, in the southern part of the district. Of the 15 main settlements 14 are found in the project area. Fig. 2 below shows the extent of the study area, settlements and location of the Boteti River sub-Basin.

5.1.2. Population

The Boteti sub-district of the Central District has a population of about 48,000 people, 2.5% of national population, sparsely settled with a density of 1 person per km² (Central Statistics Office, 2002; Republic of Botswana, 2002). Settlement along the river itself constitutes a population density of five persons per km² (Amtenzen et al., 1994). The population of this sub-district has doubled in the 20 year inter-censal period 1971-1991 (Amtenzen et al., 1994), while the mid-Boteti (part of the project area) population was reported to have increased by 5% in the same period (Vanderpost, 1995). According to Amtenzen et al. (1994) there is a long history of settlement along the Boteti River possibly dating back to AD 700, mostly Kalanga, Batele, Hereri, Basarwa and other ethnic groups. Of the total sub-district population more than half is found in the project area, i.e., 25,872 (Central Statistics Office, 2002). Table 1 below shows the population of Boteti sub-districts, percentage annual growth rate and the percentage contribution of the sub-district population to Botswana rural in the period 1971–2001 (the date of the last census).

Past studies have documented general dispersal of population in the Boteti sub-districts, and away from the Boteti River in the 1970s, and a reversal of this trend in 1980s and 1990s (Amtenzen et al., 1994; Vanderpost, 1995). In the latter studies the authors noted that the dispersal may have been due to availability of water away from the river due to good rains as well as the introduction of
Table 1

Population of Boteti sub-district as percentage of "Botswana rural" in the period 1971–2001

<table>
<thead>
<tr>
<th>Year</th>
<th>Botswana rural</th>
<th>Boteti</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>531,225</td>
<td>16,000</td>
<td>3.0</td>
</tr>
<tr>
<td>1981</td>
<td>781,418</td>
<td>26,406</td>
<td>4.0</td>
</tr>
<tr>
<td>1991</td>
<td>724,928</td>
<td>35,059</td>
<td>4.9</td>
</tr>
<tr>
<td>2001</td>
<td>797,306</td>
<td>40,907</td>
<td>5.2</td>
</tr>
<tr>
<td>Growth rate: 1971–2001</td>
<td>2.4</td>
<td>3.0</td>
<td>–</td>
</tr>
</tbody>
</table>

*Source: Central Statistics Office (2001).*  
**Amsten et al. (1994).**

borehole technology. The population concentration in the 1980s was exploited by the prolonged drought and related drought relief programmes, as well as the availability of social services, including village water supply in the major villages of Bakopa, Mafapi and Lethakane (Amsten et al., 1994; Vanderpost, 1995). The effects of this concentration were the increased pressure on local resources, due to overstocking, overgrazing and over-harvesting, reductions in wildlife numbers, denudation of vegetation and the resultant exposure of the soil to wind erosion (Vanderpost, 1995). By the 1990s, out-migration was noted as resulting from lack of opportunities that resulted from the above environmental challenges. Worthy to note regarding water resources use at the household level, is that the sex ratio for the mid-Boteti declined in the 1990s due to out-migration and this led to a rise in the number of female-headed households.

5.1.3. Livelihoods

Livelihood activities along the Boteti River include livestock farming, drying, and mopopo (flood recession) arable agriculture, weft products collection, fishing, formal and elementary employment and tourism related activities (Amsten et al., 1994; Vanderpost, 1995; Republic of Botswana, 2001, 2002). Other supporting livelihood activities include beer brewing, remittances and social protection schemes.

Livestock farming is the predominant economic activity along and further away from the Boteti River (Republic of Botswana, 2002). The most dominant animals kept are cattle followed by goats, donkeys and horses. In 2005, the number of cattle was estimated at 125,279, a number much more than other types of livestock (Republic of Botswana, 2001).

The perennial and seasonal availability of surface water in the river results in higher concentrations along the river, while the availability of ground water sources, mainly from boreholes, has resulted in expansion of livestock eating away from the river area to areas never before reached by settlements (Amsten et al., 1994; Vanderpost, 1995; Republic of Botswana, 2002). Some cattle posts are found even deeper into the Tabiru wards near the Central Kgalagadi Game Reserve. Livestock farming has had an impact on traditional hunting and gathering, through its impact on vegetation, as well as increased competition with wildlife, for grazing pastures (Vanderpost, 1995; Republic of Botswana, 2002). Other key challenges to livestock farming include animal diseases, drought, predation by wildlife, saline water and limited livestock markets.

Dryland arable farming is another useful activity in the Boteti area. It is practiced mainly away from the river where open fields are made by the removal of vegetation. It relies on the availability of rainfall. However, rainfall in the Basin is often unreliable (Amsten et al., 1994; Vanderpost, 1995; Republic of Botswana, 2002, 2005, 2006). Groups or flood recession cultivation or crops are conducted along the flood plains and is reliant on the availability of flood water. Both types of crop farming serve as complements for livestock farming in a "diversified subsistence package" (Vanderpost, 1995). In the agricultural lands areas, farmers depend on shallow wells, boreholes and village water supplies, for their potable water.

5.1.4. Use of river water

The main economic activities in the sub-Basin are livestock farming, arable agriculture and tourism. The river, and its associated pools and pans, is the main source of surface water used to water livestock, wildlife and in some parts mopopo cultivation. Mopopo farming and fishing are found mainly in the wetter parts of the sub-Basin, closer to the Okavango Delta. River water is in some cases used for construction purposes as in the case of major construction or roads such as the Koppies-Bakoos road. Water from the river also recharges ground water aquifers making it possible to obtain water from shallow wells and boreholes. Groundwater available from boreholes and wells is also used for the same purpose except mopopo farming and fishing. Additionally, groundwater is used for domestic purposes.

A study on ground water resources conducted by Hydrogeo (Pty.) Ltd. and Water Surveys (Botswana) consultants, in 2001, estimated that there were about 450 boreholes in the Boteti area (Republic of Botswana, 2001). However, this number may be higher since it excludes the area between Samutse and Xama which fall in the neighbouring North West District. The same study estimated domestic water demand at 250,000 m³/year and supply at 684,000 m³/year, and that it exceeded supply by 66,000 m³/year (180 m³/day). Livestock and wildlife water demand were estimated by the Ministry of Agriculture at 435,000 m³/year and 190 m³/day, respectively (Republic of Botswana, 2001).

A decade ago, the main environmental and socio-economic challenges facing the residents of the sub-basin were found to be overstocking, overgrazing, deforestation and denudation of vegetation, wind erosion, drought, drying of wells, prolonged drying of the Boteti River, and widespread poverty (Vanderpost, 1995; Amsten et al., 1994; Vanderpost, 1995). Key drivers leading to some of these problems, such as population growth, inappropriate management and commercialization of resource exploitation, have only gotten worse in the intervening years (IDDP, 2005). Local people are only too well aware of these problems, hence the perceived relevance of our project.

6. Reflection on project implementation methodology

6.1. Implementation

As stated above, the project goal is to assist in the creation of a River Basin management committee. Short of that goal, it is hoped that the process toward formation of this committee will enable more equitable, efficient and sustainable resource management in the area (i.e. IWMA as defined above). Toward this goal, the project is structured around three primary practices:

- Facilitation of committee formation.
- Action-research (information gathering).
- Outreach and feedback (information dissemination).

The project team is composed of three primary researchers and one full-time research assistant and others drawn in on a needs-basis. The partners in Namibia, Botswana and South Africa meet twice yearly to review work-plans, gauge progress, compare notes, brainstorm and trouble-shoot.

6.1.1. Facilitation

The method for facilitation combines direct one-on-one visits to all key stakeholders in the project area and in the capital city,
Gaborone, where all key decision-makers are located), the organization of workshops (to establish a common vision; to constitute a basin-wide forum; to determine needs; to build consensus), the setting of field visits (to facilitate learning) and stakeholder exchange visits (to further build consensus and determine needs). The project works with gazetted villages within the basin and works through two nominated persons from each village. These persons attend workshops, field- and exchange- visits. The project team, however, addresses all stakeholders in the basin regularly at NGO meetings (formal community gatherings).

5.1.2. Action Research
The project authority seems to avoid consuming pure research, though it is clear from the literature reviews conducted by project scientists that there are numerous gaps in knowledge of basin-level nature and social processes and dynamics. At the same time, results of the existing knowledge in out of date. As working at a sustainable resource management structure however, the research team conducted numerous fact-finding and opinion gathering exercises both in the basin and with key decision-makers.

5.1.3. Outreach and Feedback
To build a committed constituency the project generates information about the basin itself and about the activities of the project. These materials are designed also to assist nominated members from each village to inform village and settlement residents regarding the project and the resource base itself.

5.2. Getting ‘buy-in’, building consensus
Typically of development projects in general, implementation is far from a straightforward process. In our case the perceived value of the project itself reflects a consensus among scientists directly involved in its implementation (nine people based in three different countries), the donor (Norway), and support partners in Southern Africa (DFID in Namibia, H400C in Botswana, and SP/UCT/ARC in South Africa). Getting ‘buy-in’ from key stakeholders requires an understanding of their direct interests – be they short, medium, or long term. These interests vary across actors, body of work is not easy – especially as the project seeks to alter settled social practices, specifically how water resources are managed at the local level.

In eliciting government support, and among many other factors, the relevance, form, and effectiveness of communication strategies deployed by project implementers are key to achieving ‘critical mass’ in support of the project. In Namibia, government fully supports interventions with human and financial resources, through progressive legislation – the reformation of water management along IWRM lines (Namibia and Botswana, 2002; 2005; et al., 2002); the government of Botswana, in contrast remains reluctant to broaden the decision-making circle for a resource as critical as water (Swartk and Raham, 2006, Swartk and Rgomsso, 2007). This is not to say that there are no government supports of either the specific project, or the IWRM perspective. Nevertheless, to win the net of support for the project we chose to frame its goals somewhat differently in presenting the project to government officials. Rather than try to sell it as a project seeking to alter or amend legal frameworks for ‘water management’ (thereby heightening government for ‘deficiencies’ and challenging their authority), we instead framed it as a natural resource rehabilitation project (which government, if they so choose, could interpret this to mean the local people’s practices were to be altered, thus shifting ‘blame’, and not challenging authority).

To gain legitimacy for our activities and to build government support for our project we deliberately sought to locate it as a pilot project under the auspices of the government supported, interdepartmental, donor-backed Okavango Delta Management Plan project (see http://www.niu.org/gametplan/documents/ODMP/odmp.pdf). The H400C is a key scientific-backstop in the development and implementation of the ODMP (see http://www.ancub.bw). The ODMP is located within the ambit of the Ministry of Environment, Wildlife and Tourism (MWEW) whereas water resource issues are under the scrutiny of the Ministry of Mines, Energy and Water Resources (MMEWR). MWEW is a new and junior Ministry, in contrast to the senior and powerful MMEWR. In addition MWEW is staffed by people who widely hold to 5th paradigm perspectives on water resources (as demonstrated by the funding of the ODMP project using an ‘in-system approach’); whereas MMEWR is staffed primarily by district general managers and other people who regard water largely as a means to drive mining and energy sectors development (with the multi-billion dollar, national North-South Water Carrier project being a good example of this). In response to global pressures, however, the MMEWR has designated a limited number of staff persons to concentrate on IWRM-style issues (e.g. the water conservation director). Thus our strategy has been to inform all relevant government actors of the project and to build a network of support among like-minded individuals across ministries. Given limited human and financial resources, we also linked with two key local Non-Governmental Organisations (NGOs).

5.3. Reflections
However, very often, a specific project morphs into a discursive space where actors reproduce settled social practices, thereby recreating old habits in new settings (Brock Dux, 2000). Because of this, the actual outcome of the project may differ markedly from that originally intended by those who designed and supported it initially (see Swartk, 2005 for an analysis of one phenomenon in relation to natural resources management). In our case, we have seen little support for the project from those most in need of its intended results, i.e. people resident in the Basin downstream of Okavango, the ‘basotho chief’, (‘blame’ redefined again, i.e. those in the Department of Environmental Affairs (DEA) tasked with implementation of the ODMP and local NGOs; and (ii) traditional allies in conservation research, i.e. the Namibian office of the Department of Wildlife and National Parks (DWNP). These groups were present at the inaugural workshop and together established the Boteti River Forum with the following vision:

- A protected and conserved Boteti River for all
- Empowered knowledgeable communities.
- Sustainable and healthy ecosystems.
- Secure livelihoods for all.

In Setswana, the official African language of Botswana, (English is also an official language), the vision translates as

Nola ya Boteti e balelesekeng go yaboaaeg kae!

However, without government support, such proclamations are hollow. Unfortunately, we have had limited support for the project from those actors with the most at stake locally and nationally, i.e. the two District Councils (North and Central), the Land Boards, and the MMEWR. While willing to meet with us once-once and to listen, their absence from the inaugural workshop
was willing. Silence through absence is a common form of the exercise of power where influential actors either fail to perceive the utility of changing current practices or feel threatened by it. As a steering committee member in the ODM process, one is regularly experienced this type of ‘stone-walling’ by one or more government departments. In the particular case of our project workshop, when an explanation for absence was requested by us of a member of District Council, we were informed: ‘The legislation is in place. There is need for a new committee. If people want to improve their resources, the forms are there for them to make an application to the appropriate authority’ (pers. comm.).

Interpreting the specific meaning of this response is difficult. Taken at face-value, it may be true. However, there are numerous unstated factors at play whose influence should not be underestimated.

- Standard operating procedures (SOPs) are perceived to be sufficient for poor people in remote areas, most of whom are members of subordinate tribal groups.
- Changing SOPs will not affect the economic or political status of dominant actors so incentive is lacking.
- The MOCR is often perceived by government as an organization standing in the way of progress (in Alun’s terms, a 7th paradigm entity seeking to influence 2nd paradigm preferences).

At the same time, the research team itself is hampered by several factors:

- Limited mobility (the basin is small by River basin standards, but the limited road network and availability of project vehicles hinders regular access to key actors; in addition, the most important decision-makers are located far away from the project site, in the capital city Colombo).
- Local preferences for face-to-face communication (as opposed to hard copy and special email networks with government offices, and occasional telephone contact with relevant actors in the highlands).
- Need to use Setsawana as the primary language of meetings (many villagers do not speak English at all, so making all meetings slow and cumbersome).
- Lack of education in the basin limits the utility of specialized scientific language and methods of information dissemination, e.g., graphs, tables, GIS imagery (so making it harder to influence thinking with empirical evidence).

These factors, taken together, hinder the ability of the research team to build, strengthen and maintain a consensus among all relevant stakeholders as to the utility of a River Basin Committee (RBC). Popular misconceptions (e.g., regarding the change in the river’s flow regime through time) are difficult to replace with scientific explanations. The persistence of these misconceptions (e.g., that people upstream are taking the water) makes it difficult to overcome abiding prejudices. Local actors from the villages lack time, money, communication technology, and mobility so dialogue among residents in the basin is more difficult than between the research team and individual villagers and settlements. Villagers are also used to being consulted through the ODM process, but have low expectations regarding results because government has a long history of ignoring their expressed interests and using the fees as a means not to discuss but to inform (see Kgnostos and Swatuk, 2006).

Local government officials, based in Maim, are understaffed and over-worked. They therefore have particular preferences for action, among which is not included anything that seeks to alter SOPs. The project, thus, has moved in a start-stop-start fashion through its first two years, and the artificial end-point set out by the donors (external to the region altogether) suggests that time is too short to achieve the ideal outcome of a functioning empowered WFF.

5.3.1 Making necessary adjustments

As an iterative activity with a four-year time frame, the project relies heavily on constraining an approximate dialogue framework. Planned activities include cooperation with the IRE and NGOs to take Exelet River / Rongwe / Exelet River into the upstream Okavango Delta in an effort to displace myths of upstream water and to deliberate flow blockages. Many of the villagers have memory of river flow two or three decades ago and continue to hope that government will dredge the Delta such that river flow again throughout the Exelet River. Given Central Government’s commitment to maintaining the Okavango Delta as a ‘wetland of international importance’ (through reference to the Ramsar Convention), this simply will not happen. People will have to get used to the idea of living better within their resource base and accepting abiding limitations. This means improving the management of the resources that they now have. It is not the intentions of our project to tell them how they must do this; rather, it is the project’s intention to assist them to find their own way forward.

The project continues to pursue action research in the hope that having better information regarding the state of the resource base may lead to better resource management practice. The project will continue to move people around (to twist Coak’s observation regarding managing rivers) in the hope that facilitated dialogue will help build a sense of common purpose throughout the Basin and among all stakeholders (key government actors in Maim and Gabonore included).

7. Conclusions

There remains a powerful dichotomy between the globally-derived and disseminated ideals of IWRM as formulated by a privileged cohort of experts and theorists and the realities of water management at the very local level of the resource itself. The GWF IWRM toolbox offers little guidance for those of us active both at village level, and at the interfaces of competing sites and forms of political economy, cultural, and social power. In moving forward with this particular project, we cannot help but conclude that the ideal of IWRM, hummed out at global level, has been parachuted into and resists lightly upon a complex local setting with nested social practices not easily given to amendment or displacement. It is clear that the globally accepted notion of ‘subsidiarity’ (management at the lowest appropriate level) resonates well with rural people at the level of the resource they aspire to more and better control over their resource base. However, it is not clear how to involve disinterested, and/or overextended and under-resourced regional and national actors where either the town needs are unaffected, or their social status and power is challenged by new practices. Nevertheless, we remain supportive of both IWRM goals and the specific objectives of the project. To move forward we make the following recommendations:

- Project managers must demonstrate adaptive capacity - i.e., an ability to alter methods when and where necessary.
- Rather than adopt an IWRM template, project managers must be ready to pursue IWRM ‘in parts’, moving forward when and where possible (cf. Swatuk, 2002; Furko et al., 2007).
- Funding agencies must be willing to set reasonable short-term goals and provide financial support for the long term – positive change is difficult to achieve in the short term, particularly in remote rural social settings.
Project managers much remain in constant contact with key stakeholders, building trust and coordinating goals.

Project managers must resist the desire to engage in 'interesting research' rather, research should complement the goals of the project and strengthen local peoples' capacity for positive outcome decision-making.

Lastly, Iris project is not unique (see Manning and Amsah, 2002; Amakal and Shiwamani, 2003; Bates et al., 2003); neither are the challenges it faces restricted to the Boboti River. It is the feeling of the authors that the lessons learned in the Boboti will have relevance to similar projects elsewhere throughout river basins in the developing world.

References


