



# TERRAVIVA

SADC Fourth Regional Workshop on Strengthening River Basin Organisations - Gaborone, Botswana - April 2010



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# Sharing the Okavango

By Meekaeel Siphambili

**G**ABORONE - Each January, a giant pulse of water from heavy summer rains over the south of Angola enters the Okavango River system and begins a five-month journey through Namibia to a richly biodiverse swamp in Botswana's Kalahari desert. The river is a rarity, scarcely disturbed by human development along its 1,100 kilometre length: shaping its future is the delicate task of the Okavango River Basin Commission.

The Okavango Delta, which expands to three times its permanent size when the water arrives between June and August, is home to a tremendous concentration of wildlife.

There are just under 600,000 people living in the basin's 323,000 square kilometre area, relying on its waters for small-scale agriculture and livestock, fishing, and household use. But aside from evaporation, a few sips drawn off to supply the Namibian town of Rundu and 1100 hectares of irrigation nearby, the water that falls in Angola at the turn of the year arrives in Botswana in mid-winter to recharge the Delta.

"Water usage in Angola and Namibia is minimal, 99.2 percent of the Okavango river water still reaches the delta in Botswana where it is used for tourism," says Chaminda Rajapakse, of the Environmental Protection and Sustainable Management of the Okavango River Basin (GEF-EPSMO) project.

"[It has been] agreed any country that wants to develop their part of the basin have to go through consultation and studies be done to find out if the development will have any effect on the river flow or the ecosystem."

But there is continuous, even growing, pressure on the river. When Namibia faced severe drought in the late 1990s, it considered drawing water off the Okavango to supply its capital, Windhoek, hundreds of kilometres away. Namibia also has a long-standing desire to build a hydroelectric dam

on the river at Popa Falls, 50 kilometres upstream of the border with Botswana.

Further north, the consolidation of peace in Angola means a growing population around the river's headwaters and the government in Luanda - flush with oil wealth - is turning its attention to long-delayed rural development.

But Botswana opposes any additional use of the water, arguing that it will disturb the fragile ecology of the Delta, leading to lost biodiversity and revenue from tourism.

Rajapakse's project is to analyse the potential harmful impacts to the health of the river and draw up a strategic programme for joint management of the river basin's water that will protect its diversity. He works closely with the Okavango River Basin Water Commission (OKACOM), which was set up in 1994 to, in its own words, "anticipate and reduce those unintended, unacceptable and often unnecessary impacts that occur due to uncoordinated resources development."

OKACOM, one of five river basin commissions and joint water authorities that gathered in the Botswanan capital, Gaborone, for the Fourth Annual Regional Workshop on Strengthening River Basin Organisations on April 20-21, is charged with establishing the safe long-term yield of the Okavango basin, estimating demand on its water resources, investigating the feasibility of water infrastructure and recommend measures against pollution, and designing schemes to deal with short-term challenges like temporary droughts.

OKACOM executive secretary Ebenizario Chonguica said the Commission has overcome several obstacles as it mediates potential conflicts between the three countries over water use.

"The challenges are joint fact-finding. The three countries will find trends and opportunities through trans-boundary diagnostic analysis of the

Okavango. There should then be a strategic action plan put in place to address the issues of all the three countries."

Christmas Maheri works on the Regional Strategic Action Plan for the Water Division of the Southern African Development Community. He says language - Angola's documents are in Portuguese, the other two countries' in English - is a simple but serious hindrance to information-sharing; as are the long delays in ratifying agreements that will permit a river basin commission to carry out its work.

In his case study of the Okavango Basin, Rajapakse presented the workshop an assessment that suggested the most advantageous development plan would focus on protection of the Delta's biodiversity and valuable tourism associated with it.

At first glance, this would seem to unfairly restrict use of the water by Angola and Namibia, to the benefit of Botswana alone. But in the context of the benefit-sharing approach that the Gaborone workshop was built around, the idea would be to negotiate over shared water resources in terms of how to optimise and share benefits, rather than simply competing over allocation of limited water. This might include joint investments where all three countries would reap the rewards of productive investments at a basin rather than national level.

The concept is an ambitious one which would require real commitment to regional integration in order to exploit the comparative advantages of each segment of the river, but OKACOM's Chonguica believes the Commission will be equal to the task.

"There have been shortcomings, but we have overcome them by means of complex working arrangements. People are now thinking on a trans-boundary scale. Thinking across borders is a major challenge and encouraging people to be transparent is not an overnight thing."

## TERRAVIVA

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# Southern Africa Must Find Resources to Back the Policy

Nyarai Mudimbu interviews ENOCH DLAMINI  
Programme Manager for Regional Strategic  
Water Infrastructure Southern African Development  
Community secretariat

Adequate funding and capacity are two key challenges to managing water in the Southern Africa region.

The Southern African Development Community (SADC) has an elaborate framework of policy and best practice concerning water resources, appropriate in a region that faces growing water stress. But this framework for water management will only succeed if adequate funding and trained personnel can be found to implement it.

**Q: What are the key issues facing the water sector in Southern Africa?**

A: For the effective implementation of integrated water resource management, water infrastructure like dams, irrigation systems and sanitation have to be available. But provision for these remains a challenge because the region does not have the capacity to prepare project plans that easily convince financial and other money lending institutions to release funds.

While the failure to prepare business plans may seem trivial, this indeed has had serious negative implications on the provision of water infrastructure. Because of this failure to prepare convincing business plans, the region has lost potential financing leading to us lagging behind in the provision of water infrastructure.

Because member states are seriously resource-constrained that has meant limited funding for the secretariat itself, resulting in failure to retain highly skilled and competent officials.

The issue of funding has also been a thorny one as we have sometimes failed to conduct even feasibility studies, a simple financial requirement before funds can be released. National governments consider feasibility studies expensive and not a priority and that has in the end cost the region.

**Q: What is your organisation doing to overcome these problems?**

Answer: Specific strategic water infrastructure development programmes have been set up with regards to capacity building.

A separate fund has also been set up with contributions from the members and development partners for feasibility studies on any major programme. Once the feasibility studies are conducted, the secretariat assists countries with marketing to potential investors.

Investment opportunities have also been created through soccer tournaments like the Africa Cup of Nations recently held in Angola and the World Cup in South Africa in June offers another opportunity.

The secretariat also hosted an investment conference in Zambia last year; this year we participated in the Germany investment conference.

**Q: Who is most at risk if these challenges are not addressed?**

A: The cholera and typhoid outbreaks that killed thousands in Zimbabwe in 2008 remain the best example of what happens if we do not address water infrastructure issues on time.

It is the poorest people who bear the brunt of this failure but we can't continue to risk the lives of ordinary citizens.



Kids gather to collect water at the local water supply in Kayelekera, Malawi.

Credit: Jessie Boylan

**Q: How do you involve ordinary citizens?**

A: The very nature of water infrastructure provision demands community involvement.

If you are to construct a dam or develop irrigation systems in any area, one needs community buy-in otherwise there will be resistance.

We have no choice but to include the people. Usually this is done through community political leaders who in most cases are their representatives in parliament.

In some cases there is direct dialogue with communities through meetings conducted by officials.

**Q: How do you communicate on these issues with policy makers?**

A: We have policy dialogues with policy makers and deliberate on these. There are platforms created specifically for this. Resolutions or concerns from meetings like (the annual river basin organisation workshop in Gaborone) are also factored into national governments' planning.

Governments have open door policies where such concerns and issues can be brought up.

**Q: And with the ordinary citizens?**

A: Again communication is usually done through political and other such representatives. Because of the hierarchical order we work through, it is easier for citizens to communicate through their governments.

**Q: What media do you use to communicate?**

A: Various media is at our disposal. We have communication desks manned by communication experts. We also use multi-media like radio, televisions, newspapers, flyers compact discs, etc.

We also have awareness kits that we distribute in fora such as this one.

# Co-existing With Floods

Credit: Jessie Boylan



Communities along river basins use water for many basic household chores such as washing cooking and cleaning.

By Marshall Patsanza

**G**ABORONE - April signals the tail end of the flood season in Mozambique. The country's water managers will soon be able to appraise the effects of changing policies.

Each year, the many major rivers that flow through Mozambique on their way to the Indian Ocean - the Pungwe, the Limpopo, the Zambezi - swell with rain and burst their banks during the November-April rainy season. In 2001, the flooding killed around 700 people and displaced up to 500,000 others.

Mozambican water and disaster management experts attending a workshop for river basin organisations in Gaborone on April 20-21, told IPS that they have begun shifting their approach to the annual flooding in terms of helping those in low-lying areas to find a profitable co-existence with the water.

"Floods will always be there and it is time we start living with them and looking for ways in which they can benefit us," said Olinda Costa Sousa, director of the government's water management agency for the southern part of the country, ARA-SUL (Administração Regional de Águas do Sul).

Flood management has traditionally focused on reducing the occurrence or severity of floods in settled areas but Mozambique's regional water bodies are exploring alternatives. But the high waters also spread nutrients across flood plains, and recharge

wetlands in which fish thrive. This attracts people to live near rivers where their homes may be in danger.

"Realising that floods are dangerous is important for the local inhabitants, but at the same time educating them on how to utilise the positive attributes such as good fertile soil and rich fishing resources are some of the things the government is trying to impart on the river basin inhabitants," said Sousa. Sergio Siteo, from the Limpopo Basin Commission's Interim Secretariat explains further. "As a measure trying to balance between harnessing the positive effects of flooding and managing the effects of floods the Department of water in Mozambique is trying to initiate plans to allow local river basin inhabitants to co-exist with floods since the issue of flooding is perennial."

To ensure that people settled on floodplains the river basin are aware of the pros and cons of their location, the country has set up disaster management committees at local level to help educate people on how to protect themselves while taking advantage of the benefits.

## Solutions

This includes encouraging villagers to have two homes - one near farms or fishing on the river's edge, and another settlement on higher ground that will remain above the water line even in wet years.

In other areas where the flooding is not as severe, the inhabitants are encouraged to build elevated houses which will allow water to flow beneath them without being swept away.

"If we encourage people to stay on flood plains we have to educate them on how to react to warning systems and to locate the escape routes in which they can use to evacuate to safe ground when the water levels rise in the rivers," said Helio Banze, director of Umbeluzi-Maputo basins.

There is no single recipe for organising effective community participation for flood management and it is also up to the inhabitants to realise that their safety is paramount and that the floods are very dangerous.

Although this might seem obvious, there are many people who refuse to move away from flood-prone areas due to cultural reasons and beliefs. "These are the people who are often killed by the floods because they completely ignore the warning systems," Siteo said.

"Another obstacle to effective flood management is that most of the settlers view their livestock as a symbol of economic wealth, and they will not move to higher ground because their animals will not be able climb the steep slopes," said Banze.

But the biggest challenge are the inhabitants who have lived in flood plains and have survived floods, explained Cacilda Machava, director of the water management agency for the Zambezi in Mozambique.

"These people believe that they have become resilient to floods and will not react to any warning systems and the biggest fear the disaster management teams have is that the next flood will be bigger and could destroy them."

# Transboundary Water Management Working Well For Botswana

**Alma Balopi interviews BOGADI MATHANGWANE  
project technical coordinator International Water Office  
Botswana Ministry of Minerals, Energy and Water Resources**

Botswana is experiencing water stress due to a number of factors such as rapidly increasing population, low and variable rainfall, warmer temperatures leading to higher rates of evaporation, and the continuing high cost of exploiting existing water resources.

Ninety-four percent of Botswana's water originates from outside its borders, contained in the four river basins it shares with its neighbours. This makes water resource management highly complex: transboundary coordination and sharing plays a major role in securing sustainable access to this precious resource.

**Q: What are the key issues that your ministry's International Water Office are facing ?**

A: There is a shortage of water in Botswana and different sectors are competing for it. There is no adequate water supply, which poses a challenge.

**Q: What is your ministry doing to overcome those challenges?**

A: There are different for other water supply that we could introduce in the country like the using wastewater for agriculture. We need to educate them to use all the water available efficiently. They are being educated that they should not use clean water for example watering their garden, they can use the wastewater. Water demands management should also be promoted.

**Q: Who is most at risk if these challenges are not addressed?**

A: Every user is at risk of not having enough water to use, we cannot just say it is only the farmers who would be affected but everyone in the country.

**Q: Where has the country fallen short in addressing the challenges?**

A: To date we do not have many shortcomings. When we talk about capacity on resources that we have, we do not have funding to implement transboundary transactions. We have to rely on cooperating partners to be able to implement those.

**Q: What are the successes that you have achieved so far?**

A: Botswana is not sharing badly as compared to other countries in that we share only four RBOs.

We have been able to demonstrate and convince our neighbouring riparian countries that we needed to build dams and they gave us a green light to construct them. So far we have constructed about four dams namely the Ntimbale, Dikgatlong, Tuli and Lotsane dams.

We have an agreement with South Africa to get water supply into Gaborone dam from their Molatedi dam. We have also signed an agreement for South Africa to release water to the farmers in the southern Kgalagadi areas, which we signed in October 2008.

These are the successes of our transboundary negotiations. We still have more that we are still negotiating and would not reveal at this point.

**Q: How can ordinary citizens contribute to sustainable management of water resources in Botswana?**

A: It is critical that we actively involve people in participating in the decision-making of some of the projects that we make. We have committees involved in the water supply in the form of village development committees, teachers, government sector, private sector and so forth.

We have started to try and appraise them into taking part and disseminating the information to their communities. Some of the projects that we undertake, we involve them to have a sense of ownership. We know government has been doing things alone, but this time around we are taking the communities on board. Even the government masterplan has recommended that we establish a water resource council with a widespread variety of members.

**Q: How do you communicate these issues to policy makers and to ordinary people?**

A: We do that through education and awareness plan that we have implemented. We also involve the communities where we celebrate annual water day.

**Q: What is the role of the media?**

A: The media is very crucial in disseminating the information of whatever that we might be doing and it is very crucial that they report it as it is.

Once they report something out of context then it will defeat what government had intended to do. We work very closely with the Kalahari Conservation Society who are represented in most of our committees at government level to disseminate information and they also advise us on what to and how to disseminate the information.

# Benefits of Working To

By Terna Gyuse

**G**ABORONE - Southern Africa faces water scarcity which is expected to grow more acute as the effects of climate change manifest. Almost all of the fresh water in the region is found in shared water courses - across Africa, 93 percent of surface water is found in rivers that spill over national boundaries.

The Fourth Regional Workshop on Strengthening River Basin Organisations, held in the Botswanan capital, Gaborone on Apr. 20-21, was part of a process of developing clear guidelines for the Southern African Development Community's strategy on transboundary waters. The annual workshops, supported by GTZ, InWent, UKAID and USAID, bring together researchers and water policy makers from across the region.

"Benefit sharing" is a key concept being applied by river basin organisations charged with the difficult task of

managing the equitable sharing of water by users in shared watercourses..

Growing economies and populations mean growing pressure on water resources; competing demands for water are a potential source of conflict between - and within - states.

"Sharing freshwater resources equitably and reasonably is of the utmost importance in the African continent," says Namibia-based David Phillips, managing director of water consulting firm Phillips Robinson Associates.

Phillips is a leading exponent of the idea of benefit-sharing, which avoids deadlock over allocations of water to competing users in a river system. Instead of seeing it as a struggle over a fixed volume of water, benefit-sharing sets up negotiations over a broad range of direct and indirect benefits arising from water use.

A tidy example is found in West Africa, where in 1972 three countries along the Senegal River agreed that the best way to achieve common aims of economic growth, food self-sufficiency, and resilience against drought was to collaborate on a development programme.

Mauritania, Mali and Senegal split the costs of dams based on the benefits each could receive in terms of hydro power, irrigation and enhanced navigation of the river.

Credit: Zukiswa Zimela/IPS



Traditional Batswana dancers welcome the delegates to the Fourth Regional Workshop on Strengthening River Basin Organisations, in Gaborone



Delegates who attended the workshop came from all 15 SADC member

# Together on Water

The formula was not simply bear half the cost, receive half the benefits. The agreement attempted to account for the different needs and characteristics of each country, its riverine populations, and the changing possibilities of the river itself as it flowed through the region.

Senegal put up 42 percent of the cost of the dams, but was assigned 33 percent of the hydropower benefit and 58 percent of the irrigation benefit. Mali contributed 35 percent of the cost of the dams, but received 52 percent of the benefit of the hydropower, 80 percent of the navigation benefit.

The disruption of seasonal flooding by the Manantali and Diama dams has severely undermined previous agricultural practice (and the costs of water from the new irrigation have proved too high for many) while increasing incidence of disease like schistosomiasis, but despite the flaws in design and implementation of the projects themselves, the basin-wide agreement still offers a promising model of how to approach negotiating shared water resources.

It can be contrasted with the situation on the Nile River, where a fifty-year old treaty rigidly defines the beginning and end of a closed argument over how many cubic metres per second of water the downstream countries are entitled to. The 1959 terms that guarantee Sudan and Egypt a set allocation of water are constricting water use by the eight other countries upstream. The benefit-sharing approach adopted on the Senegal River allowed the parties additional room to negotiate mutually acceptable

development of the river, in ways intended to serve the specific and various needs and interests of each. The construction of a dam in one location was not on the table simply as the deprivation of users elsewhere of water.

Dr Nicholas Azza, a water policy specialist with the Nile Basin Initiative, points out that benefit sharing has to be attractive in order to get off the ground. "The sum of benefits to be gained from cooperation needs to be greater than the sum of benefits available to countries acting unilaterally."

The Southern African Development Community's ongoing effort to establish and strengthen river basin organisations is already working along these lines, says Dr Kenneth Msibi, from SADC's Water Division.

Outlining how optimal, sustainable use of water might be achieved, he outlined several essential ingredients. These include expert study to provide a knowledge base for effective development; consultations with water users ranging from mining and industry to municipalities and small-scale farmers; basin-wide cooperation (shaped by recognition of common interests and the shared nature of the resource, as well as political will).

Assemble these, he suggested, with the "trigger" of the region's sharpening water scarcity to bind negotiations together and move them along, and Southern Africa may have the recipe for the effective and cooperative use of its shared water.



Member states.



SADC Deputy Executive Director-Regional Integration Dr Joao Samuel Caholo receives the SADC Guidelines for Strengthening River Basin Organisations RBO from Phela Ramoeli.

# Involving Communities in Managing Water Resources

**Davison Makanga interviews ALLOICE KAPONDA  
Basin Water Officer, Ruvuma and Southern Coast Region  
Tanzania Ministry of Water**

The Ruvuma region in Tanzania was a buffer zone for Mozambican soldiers during the liberation war.

The end of Mozambique's civil war in the early 1990s created conditions for a large population influx into the Ruvuma river basin, which stretches across the borders of Tanzania and Mozambique.

This transboundary river is vital to local economies on both sides of the border, supporting both agriculture and mining.

Now the Tanzania government wants local communities to take a greater role in managing water resources.

**Q: What is the background of the Ruvuma River basin?**

A: Ruvuma Basin is a trans-boundary basin shared by Tanzania and Mozambique. In 2006, the two countries agreed to form a new water commission to manage it.

In this project we have five components: development and strategy; enhanced information systems; community development; capacity building; and infrastructure development.

**Q: Are you working with local communities in the project?**

A: Yes, so far in Tanzania, we have started to establish water users association of which we shall be further developing to catchment committees. Our colleagues in Mozambique are doing the same. These committees will be meeting to discuss strategy issues.

Government facilitates the formation of the committees, but the communities manage their structures.

**Q: What is the responsibility of these committees?**

AK : They will be responsible for the protection of water sources and the environment in their areas because now there

is a lot of human activity along the river. There is agriculture, mining - and a lot of pollution from mining so these people will be responsible for protecting their rivers by formulating by-laws that will be taken to the authorities and accepted as laws in their areas and enforced.

**Q: Will they be recognised and enforced by the government?**

A: Yes. This is stipulated by the Water Resources Management Act which was passed in 2009. It empowers local people to make these laws that will be enforced by the general government.

**Q: What's your vision for this basin and associating catchment areas?**

A: There are a lot of benefits to share when the programme is up and running. People will be able to plan for their future uses of water, to plan development projects on their own, so people are really excited by the prospect of having the autonomy.

The government cannot manage water at these lower levels - so by using the community it will be cheaper also for the government. As government we have so far pumped in \$80,000 to get the water committees running.

What is also important to note is that the communities will be responsible to manage their water affairs by agreeing on tariffs and the way forward.



Credit: Zukiswa Zimela/IPS

**Alloice Kaponda, the Basin Water Officer, Ruvuma and Southern Coast Region, Tanzania Ministry of Water talks to IPS about the key issues facing the water sector in Southern Africa**

# Some For You, Some For Me: Sharing the Inkomati River

By Mantoe Phakathi

MBABANE, Swaziland - At Ekuvinjelweni village, in South Africa's Mpumalanga Province, the Komati River flows clear and fast through the mountains.

Along its banks here are commercial farms with intensive irrigation works, mixed with subsistence farmers who rely on rain for their fields and livestock - a tricky proposition in an area that has endured severe droughts in the past.

The water in the Inkomati River Basin, which stretches across South Africa, Swaziland and Mozambique, is fully accounted for. There are an estimated two million people in the basin, but domestic use accounts for only a small proportion of water use.

Agriculture and forestry are the two leading consumers, followed by transfers of water outside the basin, some to water sugar cane plantations in other catchment areas, but mostly to cool coal-fired electricity plants in the nearby Limpopo Basin.

The 1992 Komati Accord between Swaziland and South Africa precisely quantified allocations of water to each party, also reserving a share for Mozambique further downstream. Despite the fact that apartheid South Africa supported Renamo rebels against Mozambique's post-liberation government, all three countries had consulted over water management of the basin from the early 1980s, when the Tripartite Permanent Technical Committee was formed.

Mozambique eventually joined the Accord in 2002.

The drought that hit the area between 1989 and 1994 caused very low water levels in the river by the time it reached Mozambique, provoking bitter complaints from those furthest downstream that their needs were not being respected by farmers upriver. Even at time of lower water stress, farmers regularly complain about their allocations.

"Historically we used to have conflicts with our neighbours (South Africa) with regards to the water use along the Komati basin because that's where we have a lot of farmers," said Sakhiwe Nkomo, the senior water engineer at the Swazi Ministry of Natural Resources and Energy.

The Agreement on the Development and Utilisation of the Komati River Basin of 1992 agreed to the construction of the Maguga Dam in Swaziland and Driekoppies dam in South Africa.

"The idea was improve reliability of water use among existing and new farmers," said Nkomo.

According to district manager for Emandla Ekuphila Water District, Anne Kruger, water users previously had to use their allocations as the water flowed by, whether they needed it at that particular moment or not.

"The volume-per-unit-time allocation allocated water at a fixed rate without considering the seasonal crop demands and allowance for banking during wet season or equipment breakdown," said Kruger, who represents sugarcane farmers.

The Komati Basin Water Authority (KOBWA) now uses a Fractional Water Allocation and Reservoir Capacity Sharing (FWRCS) system. The two dams, said Kruger, enable farmers to store their allocated water and only use it as and when the need arises.

Each week they place an order, and - within the limits of their allocations and the basin's management plan - a corresponding amount of water is released into the river.

"With the current system (FWRCS), which is volume-based allocation, water users are in control of their entitlements as it allows them to decide when and how much of their allocated volume they want to utilise," explained Kruger.

Farmers use the water they save during dry seasons when the level of the river would otherwise be low. Nkomo said during dry seasons KOBWA rations water which also used to cause conflict among farmers.

"When there is scarcity of water farmers ask more questions than usual but now we hardly face that problem," said Nkomo.

There are some farmers who are not satisfied with the water allocation systems. Sabatha Mathonsi, a sugarcane farmer, said water still goes to waste because there are no downstream reservoirs to store the water that farmers order every Tuesday.

"Even under the current system, once you make your weekly order you can't reverse it," said Mathonsi. "Sometimes it rains or equipment



Steady, the Maguga dam wall is 115 metres high: reservoirs and careful coordination help avoid conflict over the Komati River's water.

breaks down and that means you can't irrigate. It becomes sad to see the water running to Mozambique." Mathonsi said government should help farmers build small dams where they can store their water after it has been released from the main reservoir.

Farmers also find it difficult to accept that there needs to be enough flowing water in the river to protect the ecosystems while some of them do not have enough for irrigation.

"Some people feel like the environment is competing with them concerning the water demands, when the reality is that the environment also uses water," said Nkomo.

KOBWA's Dhlamini is aware of such misunderstandings, but stakeholders have repeatedly discussed the issue and now appreciate the need to protect riverine ecosystems. He said KOBWA commissioned a study in 2008 to determine the ecological water requirements, and the impact of meeting these will have on the system yield.

No water resource management solution in Southern Africa can be permanent, not with growing populations, pressing development needs and climatic changes. But cooperation in the Inkomati River Basin, which has survived and even grown stronger through conflicts sparked by drought and politics, is on a firm footing.

"We have to strengthen our compliance monitoring systems among users to make sure that we don't run out of water in the future," said Nkomo.

For now, water is flowing freely along the Komati River.

*\*Alma Balopi in Gaborone contributed to this report.*

# Getting Community Consultation Right

By IPS Correspondent

**G**ABORONE - The Lesotho Highlands Water Project will move into its second phase in 2010. The first phase has been praised as a shining example of transboundary water sharing in Africa, but community dissatisfaction may mean a rough ride for its extension.

The Lesotho Highlands Water Project (LHWP) is the largest on the continent, transferring water from the Malimatso, Mtsoku and Senqunyane rivers to South Africa's industrial heartland in Gauteng province.

Peter Makuta, acting chief executive of the managing utility, the Lesotho Highlands Development Authority, explains that a second phase is needed because of projected water shortages in South Africa.

"It's always been in the plans, now it is the time to realise it by actually implementing hardware on the ground, with a view to collect more water."

Makuta says the second phase will also allow Lesotho to secure its electricity supply through additional hydroelectric generation. "Although we've been able to produce much-needed power, it hasn't been enough. We've had to buy electricity from South Africa, even Mozambique at times, (in order) to meet our needs."

On paper the LHWP has been a success, winning many awards including the World Bank's Environmental Efficiency Award for a project of that magnitude. But Mampiti Matete, senior lecturer at the University of Lesotho, says there's simmering discontent amongst communities.

"My thinking is that it was the first project of its kind, and people did not understand the magnitude of the project and the impact it was going to have on them," says Matete.

"It's only now that the project has happened and people have been compensated that the majority of them realise that the compensation they received is not adequate or does not match the losses that they incurred."

The project's own documents say 321 households were relocated or resettled to make way for the LHWP. Households were offered yearly financial compensation in exchange for lost land, or "green compensation" which provided water and sanitation facilities to allow them to resume farming and herding livestock on new land. Matete says consultation will have to be much better this time around.

"Consultation processes in the next phase have to be intensified to empower local people, so they know what they are negotiating about."

There is every reason to think communities will be heard.

The waters of the LHWP are today part of the responsibility of the Orange-Senqu River Commission (ORASECOM), one of the river basin organisations participating in a workshop in Gaborone on Apr. 20-21. The workshop, the fourth in an annual series designed to strengthen transboundary water organisations in the region, saw the launch of guidelines on several topics, including one on stakeholder participation.

The focus of the workshop was the yet-to-be adopted guideline on benefit-sharing in river systems; during debate and discussion of this, the issue of participation at the grassroots level came up.

Nomathemba Neseni, director of the Institute for Water and Sanitation Development based in Zimbabwe, said that too often discussions of benefits and sharing proceed without an adequate social impact assessment that can qualify and quantify where the benefits - and burdens - fall.

"At what levels are we talking about benefits? At the regional level? At national level? At household level?"

She said she had listened to a full day of conceptualising and case studies without once hearing about gender. Using irrigation for agriculture as an example, she pointed out that failing to recognise that very few women in Southern Africa enjoy secure land tenure could result in unequal benefits within communities targeted for such development, as the profits from increased yields or value of the land would not be shared by all.

"If poverty reduction is Southern African Development Community strategy, we need to be able to qualify it (down to) the household level," says Neseni.

The guideline on stakeholder participation says community consultation is essential to decision-making. Proper consultation ensures that policy is based on shared knowledge, experience and evidence; is influenced by the experiences and opinions of those affected; and that innovative and creative options are considered in designing and implementing water policy.

These would seem to be precisely the things that passed local villagers in Lesotho by during the planning of the LHWP's first phase.

The guideline offers planners concrete recommendations: starting with identifying stakeholders and classifying them in terms of interests, resources, perceptions, relationships and power. An enabling environment should be created, including clear responsibilities, budgets and deadlines, as well as an outline of the methods of consultation that will be used.

The use of surveys and questionnaires to get detailed knowledge of various users' experience is called for; as are interviews and focus groups with key stakeholders to get in-depth inputs on particular issues, priorities and preferences for what could be done.

Finally, the importance of communication is underlined, with media campaigns, billboards, and merchandise; making analysis and technical information available using fact sheets, newsletters and articles; and using art and entertainment along with posters, school curriculum and other educational materials to bring the information to the widest possible audience in a form that is readily understood.

At the end of this, the guideline says it is essential to act on the results of consultation. Representative advisory groups should map out solutions and a formal framework for implementing projects and addressing issues should be set up.

As the second phase of the LHWP gets under way, planners and communities should make full use of the guidelines to negotiate terms that will benefit everyone.

# Government Has a Responsibility to Provide Water

**Busani Bafana interviews  
NOMATHEMBA NESENI  
executive director, Institute of Water  
and Sanitation Development**

Guaranteeing access to water to all can only be achieved when government and communities work together.

The Institute for Water and Sanitation Development works across the Southern Africa region offering research, technical and capacity-building services on water issues.

**IPS: What are the key water challenges in Zimbabwe?**

NN: Some of the challenges we have faced have been declining standards. Water infrastructure has collapsed. Infrastructure, in my opinion, is relatively easy to replace.

Skills sourced anywhere around the world as long as you have money. We can get the IMF and World Bank to give money and the system can be redesigned and will be up and running.

But the social values and standards are very difficult to replace and inculcate. A child who was born in the past decade was born in a country where sewerage was flowing everywhere; litter was being thrown everywhere and there are mounds of solid waste lying uncollected.

This is the only environment that they know and they will never know anything else. This child who will be the head of a utility or local authority will not be convinced that there is something wrong with poor sanitation and poor water facilities.

It scares me that our future leaders have lost values and standards when it comes to water allocation and sanitation.

**IPS: What is the Institute for Water and Sanitation Development doing to overcome these challenges?**

NN: We are doing a lot of advocacy. We are working with UNICEF in producing

manuals on human rights approaches to water and sanitation programming. We have trained local authorities and NGOs in Zimbabwe on integrated water resource management (IWRM) and sanitation. We are a secretariat to the national sanitation committee and have raised awareness on water and sanitation issues at the highest political level. We are working to get a national buy in on IWRM.

**IPS: How are these issues being tackled through the IWRM?**

NN: We are hosting the Zimbabwe country global water partnership and through this we have developed a business plan. We are working with Umzingwane and Gwayi Catchment areas where we are doing water catchment planning.

We conducted the Lower Manyame River catchment study which was used as pilot study. This became one of the most well known pilot studies in Zimbabwe and has been used globally.

**IPS: What lessons were learned from the Manyame river pilot study?**

NN: We learned that the planning process in IWRM has to be linked to some intervention and stakeholder participation is critical. We had old men and women planning and they understood the concepts very well but when you involve communities, you raise expectations.

Without an intervention strategy, people are left hanging. So IWRM planning on its own does not work, there has to be a practical intervention.

**IPS: Who is at risk if these water challenges are not addressed?**

NN: The community are the first group at risk in terms of depleting water sources and poorly managed resources. Then we the leaders are we will be asked to account, why did things go wrong?

**IPS: Access to water is sometimes spoken of as a right...**

NN: Civil rights have been talked about a lot but I find that one of the rights that have been violated, especially in my country Zimbabwe, is the right to water and the right to sanitation.

In 2008, we had 4,200 deaths from cholera. We had cholera in the urban areas because water systems had collapsed. The infrastructure was obsolete, old and not being maintained.

To further exacerbate this, communities and users were denied information which is a basic human right in making the right choices and decisions.

One of the challenges we are facing is water management and how to implement it from a human rights based perspective. Water management from a human rights-based perspective is different from a needs-based perspective.

From a needs perspective, you see a problem and intervene. And from human rights perspective the claim holder has obligations and responsibilities.

Government as a duty bearer has responsibility to provide water and an enabling environment through which others can operate. At the same time, the community also has an obligation to pay for the services to maintain water properly. This is a two-way process in water management because water is a human right.



Credit: Zukiswa Zimela/IPS

Nomathemba Nesen executive director, Institute of Water and Sanitation Development spoke to IPS about some of the key water challenges in Zimbabwe.

# River Basin Organisations in the SADC region

## Inkomati Tripartite Permanent Technical Committee

The Tripartite Permanent Technical Committee (TPTC) is a collaboration between three SADC member states namely, South Africa, Mozambique and Swaziland. This committee will help to manage the water flow of the Inkomati River and Maputo River specifically during times of drought and flood, additionally the committee will be looking at how to protect and develop these water resources. International Commission of Congo-Oubangui-Sangha (CICOS)

With increasing evidence that climate variability and change are impacting on water and associated resources worldwide, the countries of the region have found it imperative to jointly manage the resources of the basin. As a result, the International Commission for the Congo-Oubangui-Sangha Basin, (CICOS), was created in 1999 by Cameroon, Central African Republic, Democratic Republic of Congo and the Republic of Congo. The immediate objective was to improve cooperation amongst the member states, through improved communication using the Congo River and its tributaries. A future objective is to promote IWRM, in order to enhance development and alleviate poverty in the member states. Website: <http://www.cicos.info/>

## Kunene Permanent Joint Technical Commission (PJTC)

The Permanent Joint Technical Commission (PJTC) is an agreement between Angola and Namibia. The purpose of the commission is to coordinate the development and rehabilitation of infrastructure so as to realize the supply of water and provision of sanitation services for the communities along the common border of Angola and Namibia. Lake Tanganyika Authority

The Lake Tanganyika Authority (LTA) was established by the governments of Burundi, Democratic Republic of Congo, Tanzania, and Zambia. The LTA promotes regional cooperation required for socio-economic development and sustainable management of the natural resources in the Lake Tanganyika basin. Website: <http://lta.iwlearn.org/>

## Limpopo Water Course Commission (LIMCOM)

The Limpopo River is one of the largest river basins in the SADC region, having as co-basin states Botswana, South Africa, Zimbabwe and Mozambique that formed the LIMCOM - Limpopo Water Course Commission. Nile Basin Initiative (NBI)

The Nile Basin Initiative (NBI) is a partnership initiated and led by the riparian states of the Nile River through the Council of Ministers of Water Affairs of the Nile Basin states (Nile Council of Ministers, or NILE-COM). The NBI seeks to develop the river in a cooperative manner, share substantial socioeconomic benefits, and promote regional peace and security. Website: <http://www.nilebasin.org/>

## Orange-Senqu River Commission (ORASECOM)

The Governments of Botswana, Lesotho, Namibia and South Africa formalised the Orange-Senqu River Commission (ORASECOM) through the signing of the "Agreement for the Establishment of the Orange-Senqu Commission" on November 3rd, 2000 in Windhoek, Namibia. ORASECOM was the first commission established following the regional ratification of the SADC Protocol on Shared Water Course Systems. Website: <http://www.orasecom.org/>

## Pangani Basin Water Board

The Pangani River Basin covers about 42,000 km<sup>2</sup> and is shared by Kenya and Tanzania. Both countries established the Pangani Basin Water Board (PBWB) and the Pangani Basin Water Office (PBWO) to jointly manage the water resources in the basin. The PBWO reports to the PBWB. The Board's task is to advise the basin water officer on all matters concerning: the apportionment of water supplies, the determination, diminution or modification of water rights, measures to be taken in case of drought, and on priorities to be given to different uses of water in the basin. Website: <http://www.panganibasins.com/>

## Permanent Okavango River Basin Water Commission (OKACOM)

In response to the acknowledged need to minimize negative impacts on the unique Okavango river system, while assuring satisfaction of the legitimate social and economic needs of the riparian states, the three Okavango Basin states Angola, Botswana and Namibia signed an agreement in 1994 that formed the Permanent Okavango River Basin Commission (OKACOM). Website: <http://www.okacom.org/>

## Ruvuma Joint Water Commission (Ruvuma JWC)

The Governments of the Republic of Mozambique and the United Republic of Tanzania have recently established the Ruvuma Joint Water Commission (Ruvuma JWC) with the principal objective of ensuring sustainable development and equitable utilisation of common water resources of Ruvuma/Ruvuma River basin.

## Zambezi Watercourse Commission (ZAMCOM)

The agreement to establish the Zambezi Watercourse Commission (ZAMCOM) was signed on July 13, 2004 in Kasane, Botswana. Zambia is yet to sign as the country is still consulting its stakeholders. The Commission will only come into force when six out of eight countries ratify the Agreement. As of now four countries have ratified. Meanwhile an interim Secretariat has been established and a draft document prepared to guide the process of operation.

Visit ICP website for more information on SADC river basins  
<http://www.icp-confluence-sadc.org/rbosummary>