

THE ZAMBEZI

Volume 7 no 2

Benefit Sharing in Integrated Water Resources Management

by Leonissah Munjoma

Water Experts have been urged to adopt a different approach in water resources development and management if they are to increase effective stakeholder participation at community level.

They need to discuss benefits with the stakeholders, be this for agriculture, mining or any field of the environment.

"Water resources development and management is about benefits. We need to be different cadres to impact positively on the communities," said Jeffer Sakupwanya, Water Resources Expert for the Zambezi Action Plan Project 6, Phase II (ZACPRO 6.2).

It is important to highlight what benefits the communities will derive from their participation in Integrated Water Resources Management (IWRM). It is also important to appreciate the community benefits as these were different from those usually identified by the technocrats.

"Unless the benefits of participation are clear and evident, people will not participate. That's the critical thing. We must make sure that we

preach benefits of IWRM to agriculture, environment and to mining. The bottom line is what is in it for the communities," Sakupwanya said.

As IWRM is gaining popularity in the coordination and development of water resources in the Zambezi River Basin, the focus is also shifting towards discussion around sharing the benefits derived from the same resources.

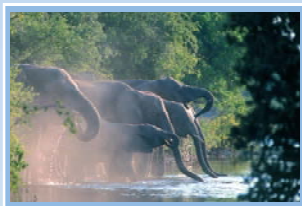
This has brought about confusion among some stakeholders who see the two - IWRM and benefit sharing - as different concepts with one having advantages over the other. This is not the case.

IWRM is about promoting the coordinated development and management of water and related resources in order to maximise social and economic welfare in an equitable manner. Three key elements of IWRM are equity, environment and efficiency.

continued on page 4

The Zambezi

Vol 7 No 2



The Zambezi is published three times a year by the Southern African Research and Documentation Centre (SARDC) Musokotwane Environmental Resource Centre for Southern Africa (IMERCSA) through a partnership with SADC, IUCN, ZRA, Sida and national collaborating centres in all basin states.

The newsletter is published under the State of the Environment Zambezi Basin (SOE Zambezi) project. The aim is to inform people on the state of the environment in the basin and promote good environmental stewardship in the SADC region.

The SOE Zambezi partners would like to thank the Zambezi Action Plan, Project 6 Phase II (ZACPRO 6.2) for supporting this issue.

Editorial Team

Leonissah Munjoma, Clever Mafuta,
Bayano Vally, Figueiredo Araujo, Phyllis Johnson,
Egline Tauya, Wilson Yule, Patricia Munemo,
Tigere Chagutah, Admire Ndhlovu, Sandra Ziswa

The National Collaborating Centres (NCCs)

Development Workshop, Angola;
Forum for Sustainable Agriculture, Botswana;
Coordination Unit for the Rehabilitation of the
Environment, Malawi;
Gabinete do Plano de Desenvolvimento da Região
do Zambeze (GPZ), Mozambique; Integrated Rural
Development and Nature Conservation, Namibia;
National Environment Management Council, and
Tanzania Gender Networking Programme, Tanzania;
Environment Council of Zambia; and
Campfire Association, Zimbabwe.

Design

Tonely Ngwenya

Production Coordination

Enunice Kadiki

Photos and Illustrations

All ZRA except p4 (left),
CEP; p4 (right), Africa Wildlife Foundation and p7,
Water Policy International Ltd.

Origination and Printing

DS Print Media

SARDC, 2006

Contributions are welcome from individuals and organisations within and outside the SADC region in the form of articles, news items and comments. The editors reserve the right to select or reject items and edit for available space.

Correspondence, letters to the editor and other materials should be addressed to:

The Zambezi

Email cep@sardc.net
SARDC IMERCSA,
15 Downie Avenue, Belgravia,
P.O. Box 5690, Harare, Zimbabwe
Tel 263 4 791141/3 Fax 263 4 791271
SARDC Mozambique,
Rua D. Afonso Henriques, 141, Maputo
sardc@maputo.sardc.net
Tel 258 21 490831 Fax 258 21 491178

EDITORIAL

After years of featuring prominently in international debate on trans-boundary water resources management the move towards increased benefit-sharing has gained momentum in the Zambezi Basin.

The concept of benefit-sharing emphasises the potential of sharing the environmental and socio-economic benefits rather than simple equal allocation of the water in transboundary watercourses.

The push towards increased benefit-sharing is built on the premise that adoption of the concept in transboundary water resources management will promote regional cooperation in other spheres.

These spheres include hydropower generation, environmental stewardship and trade and development, among others.

Benefits could be realised in terms of increased production, job creation, and in savings, for example, reduced spending on financing separate national security measures for shared watercourses.

Proponents also argue that increased sharing of benefits would act as a conflict prevention mechanism as cooperating states collaborate on economic and political levels.

Although isolated cases of benefit-sharing exist in the Zambezi River Basin, more needs to be done to promote basin-wide economic cooperation and development strategies along the same principles.

This approach within the Zambezi River Basin would, for example, enable players in the tourism sector to strategically position themselves ahead of the World Cup to be held in South Africa in 2010.

The Zambezi Basin boasts a wide range of tourist spectacles and thus benefit-sharing would enable the basin states to benefit from the global soccer showcase as each country utilises its comparative advantage while collaborating with others to optimise gains from the expected increase in tourist arrivals.

While such activities could generate considerable national economic benefits, the secret to successful implementation and basin-wide adoption lies in its acceptance at the local level.

The Zambezi River Basin has a vast network of rivers from which the majority of the more than 40 million inhabitants derive their livelihoods.

Despite its huge potential, not much has been realised at the local level in terms of sharing the benefits.

Perhaps the most glaring example is the impact that construction of the expansive Kariba Dam had on the local communities in the Zambezi Valley.

The dam, from which Zambia and Zimbabwe derive major economic benefits such as electricity supplies, tourism inflows and fisheries, displaced 57,000 people when it was built between 1955 and 1959.

Ironically, many of those who were displaced still do not have access to electricity or running water up to today.

Among the major challenges to basin-wide adoption of benefit-sharing will be to ensure that even when cooperation generates massive gains for national actors, inequalities in distribution of these gains to the local level are avoided.

There will also be a need to consider the links between, and coordinated use of, both surface and ground water bodies, which have not been subject to much scrutiny.

Along with sharing benefits comes sharing of responsibilities and costs. Consequently, there is a need for the strengthening of mechanisms that will lead to mutual trust and confidence among basin states.

All the Zambezi River Basin states are signatories to the SADC Revised Protocol on Shared Watercourses which came into force in 2003.

The protocol seeks to facilitate cooperation in the utilisation of the resources of shared watercourses and to promote SADC integration.

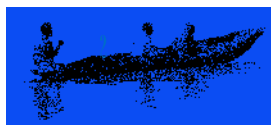
In addition, seven of the eight states that share the Zambezi River Basin signed the Zambezi Watercourse Commission Agreement in 2004.

In doing so, they set up a commission mandated to ensure balanced and harmonious development of the Zambezi River Basin water resources, with a view to preventing potential conflicts and ensuring adequate and effective benefit-sharing among all basin states in particular, and the SADC region at large.

As benefit-sharing gradually becomes a more established reality in the basin, there will be a need to situate it firmly within the Integrated Water Resources Management strategy for the Zambezi River Basin, beginning with its adoption for local-level water resource management in the basin states.

Highlights...

Benefit sharing - myth or reality?	3
The source of the Zambezi River	5
Basin states progress towards target	6



Benefit sharing in the Zambezi River Basin – myth or reality?

by Clever Mafuta

As the most shared resource in the Southern African Development Community, the Zambezi River Basin is a good test case for benefit-sharing. The basin is shared by eight of the 14 Member States of SADC.

As part of efforts to facilitate benefit-sharing, political trans-boundary agreements have been put in place, with the aim of promoting development initiatives, collaboration and investment.

The Zambezi Watercourse Management Commission (ZamCom) agreement provides an overarching framework around which the eight countries of the Zambezi River Basin seek to jointly benefit from the basin's vast resources.

The ZamCom agreement was signed by seven of the eight Zambezi River Basin countries in 2004. Zambia needed to consult its stakeholders before signing the agreement.

Other initiatives that are supportive of benefit-sharing in the basin include trans-boundary conservation initiatives, such as the Four Corners Project involving Botswana, Namibia, Zambia and Zimbabwe, and the ZiMoZa trans-frontier conservation initiative which brings together Zimbabwe, Mozambique and Zambia.

Through the trans-frontier conservation initiatives, participating countries jointly benefit from tourism, safari hunting and infrastructural development.

Despite its huge potential, the Zambezi River Basin boasts very little in terms of local level benefit sharing. This is particularly the case with some hydropower initiatives that have displaced and disadvantaged local people and their communities.

The Zambezi River Basin has two major hydropower schemes at the Kariba and Cahora Bassa Dams.

A World Commission on Dams study noted that the Kariba Dam initiative lacked benefit-sharing with the 57,000 people who were displaced by the reservoir.

While the Kariba Dam is vital for regional electricity supply and has brought many economic benefits, the displaced people have no access to electricity or running water.

In 1996 the Zambezi River Authority (ZRA) acknowledged the need for reparations as part of efforts towards benefit-sharing with the communities that were displaced by the Kariba Dam.

While not accepting any liability for the forced relocation, the ZRA recognised that the resettlement did not take into account the needs and concerns of the affected people.

The ZRA further acknowledged that compensation was not provided at all in the case of those displaced in Zimbabwe, or was grossly insufficient in the case of those displaced in Zambia.

On the basis of its own assessment of the lack of benefit-sharing around the Kariba Dam project, the ZRA established the Zambezi Valley Development Fund in 2000, and made recommendations to both the Zambian and Zimbabwean governments for the implementation of development projects to address basic needs in the area.

The Zambezi Valley Development Fund is being used to support the displaced communities through borehole drilling, livestock farming and provision of grinding mill facilities.

A workshop convened by the Stockholm International Water Institute (SIWI) noted that the best way to facilitate trans-boundary development is to share the benefits between all the parties.

The SIWI further noted that benefit-sharing is not just about the physical allocation of water resources but also sharing the environmental and socio-economic benefits which are based upon regional economic development and integration.

IWRM awareness initiative for SADC Water Division

by Hastings Chikoko

The Water Division of SADC has developed an awareness creation initiative targeted at senior decision-makers in all sectors and the media in southern Africa.

The initiative on Integrated Water Resources Management (IWRM), supported by Denmark under the Regional Water Sector Programme, plans to raise awareness of key aspects of the IWRM concept and its relevance to social and economic development in the SADC region.

A recent global survey on IWRM revealed that many SADC Member States have initiated the process for the development of national IWRM strategies.

The report, released by the Global Water Partnership (GWP) in February 2006, shows the status of water management reform in southern Africa since the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg.

At the time of the WSSD, three of the 14 Member States - Namibia, South Africa and Zimbabwe - were already advanced in their preparation of water resources management strategies and had enacted legislation that is consistent with IWRM principles.

Today, seven more countries are in the process of preparing national strategies or plans but require additional work to live up to requirements of the IWRM approach.

Zambia and Malawi are developing national plans scheduled for completion by September 2007, thus increasing the number of basin states that have fully embraced IWRM.

At the Johannesburg Summit, it was agreed that IWRM principles are fundamental to sustainable development.

To this end, Article 25 of the WSSD Plan of Implementation called on all countries to "develop Integrated Water Resources Management and water efficient plans by 2005."

The GWP report states that preparation of IWRM policies, strategies and plans has been hampered by a lack of financial and human resources.

Urgent support is therefore needed to assist SADC Member States in the implementation of IWRM plans and strategies, especially in those countries that have not made much progress in formulating their plans.

"GWP has continued to support and add value to national IWRM processes throughout the Zambezi Basin and SADC region as a whole, to ensure that IWRM is being integrated into the national development frameworks," says Ruth Beukman, the Executive Secretary of GWP in southern Africa.

SADC is providing an effective strategic framework for IWRM through the Regional Strategic Action Plan (RSAP).

The RSAP was approved by Member States to ensure that water resources management and development adequately contributes to poverty eradication, regional integration and socio-economic development in a sustainable manner.

"Our regional IWRM strategic plan - the RSAP - focuses on water resources development planning and management, infrastructure development, water governance and capacity building," says Phera Ramoeli, Senior Water Programme Manager in the SADC Water Division.



Benefit sharing in IWRM

continued from page 1

Within equity, access is a key element that embraces benefit sharing. This is a shift from the previous focus of simply sharing the water equally. There has been a realisation on the need to share benefits that accrue from IWRM.

"This is because when people realise benefits, they participate. There are many benefits including hydro, tourism, fisheries, wetlands for flood mitigation, agricultural production, and general water supply," said Sakupwanya.

Zebediah Phiri, ZACPRO 6.2 Project Manager, said IWRM is about maximising benefits and sharing them equitably, making benefit-sharing inherent in the definition of IWRM.

IWRM is a concept that has been embraced by most SADC countries including the Zambezi River Basin states. The countries have adopted IWRM friendly policies, laws, plans and institutions to win the support of the wider stakeholders, noted Phiri.

He said benefit-sharing should also be a key ingredient of water management and development at local and national levels.

Looked at that way, it will be easy for basin states to appreciate the concept and relate to the many examples of benefit-



Communities enjoying the benefits of natural resources.

sharing that already exist at the local level, within and between states in the Zambezi Basin.

Both Phiri and Sakupwanya noted that the challenge is in operationalising the benefit-sharing concept. While the benefits may be apparent at national and transboundary levels and are often realised, they may not trickle down to the communities.

Sakupwanya noted that few people benefit from some big national projects such as hydropower stations. For example, when the Kariba dam was built, the Tonga people in that area could have benefited from rural electrification.

"There should be deliberate government policy to target the affected communities."

From experience, community needs are modest. They expect facilities such as boreholes that help to reduce the distance walked to fetch water, and small irrigation schemes to grow crops for domestic consumption or for sale. These make a huge difference in their lives.

"Once they see the benefits, they will guard the resources jealously. They will set up structures to guard against exploitation. It is about benefits," said Sakupwanya.

He gave examples of where this has been done by Chief Mukuni near Zambia's resort town of Livingstone and Zimbabwe's Campfire project where communities enjoy benefits from local natural resources such as wildlife and water.

He said ZACPRO 6.2's IWRM Strategy, currently being formulated, should address issues related to benefit-sharing. The Project should sensitise governments on the importance of sharing the benefits of the Zambezi River Basin's resources among communities. But it is important that it is captured in the Strategy.

One of ZACPRO 6.2's outputs is the formulation of an IWRM Strategy for the Zambezi River Basin. The process that has been going on since inception of the project has now reached an advanced stage with the engagement of consultants to assist stakeholders to define the Strategy.

Phiri warned that benefit-sharing has become a "buzzword" but does not mean the same thing to everybody. This should not be the case because benefit-sharing should be seen as "a new name for old things".

"The outlook is encouraging but as always the real challenge is in follow-through and implementation. Since IWRM is a process, the process appears to be in motion, but how soon will the benefits begin to be seen to flow ...equitably?" he asked.

Consultants to formulate IWRM Strategy for Zambezi River Basin

The Zambezi River Authority has engaged consultants to formulate an Integrated Water Resources Management (IWRM) Strategy for the Zambezi River Basin.

Arcadis Euroconsult were selected following a protracted procurement process that began in April this year. They started in September and are expected to work on the formulation of the strategy over the next 18 months.

ZRA is the implementing agency for the Zambezi Action Plan Project 6, Phase II (ZACPRO 6.2), and the strategy is one of the major outputs of the project.

The overall aim of the IWRM Strategy is to define a set of medium- to long-term measures that support the realisation of equitable and sustainable utilisation of the shared Zambezi water resources for social and environmental justice, regional integration and economic benefit for present and future generations.

The overall aim of the strategy is supported by two objectives:

To carry out the management of the Zambezi River Basin; and
To develop, analyse and recommend strategic options for addressing prioritised water resources management issues for the Zambezi River Basin.



The deceiving Zambezi River source

by Leonissah Munjoma

The source of the mighty Zambezi River, whose basin supports more than 40 million people in southern Africa, is nothing as dramatic as one could imagine.

It is so deceiving and mysterious but very symbolic, nestled within 30 ha of pristine forest. It starts with a trickle.

When I took a trip to the Zambezi river source, I was convinced I would see more than I had seen on some pictures.

I was certain the photographers had missed their target.

I had imagined the source to have water either gushing out of the ground or a large pool that would eventually drain into the 2,700-km, serpent-like river that flows through eight countries in southern Africa on its journey to the Zambezi delta in Mozambique and the Indian Ocean.

Instead, what we saw, with two colleagues from the Zambezi Action Plan Project 6, Phase II (ZACPRO 6.2), was a damp patch just below an uprooted tree very close to where Zambia and the Democratic Republic of Congo borders meet at the international beacon number 43.

It is below this damp patch that the river bubbles into life but remains dormant until a few metres down the hill when it hits the surface.

The Zambezi River is the most shared in the region and yet it sets off on its journey to the other seven countries in such an insignificant manner.

One would find it difficult to believe that this is the beginning of the gigantic waterway that provides hydropower, food, economic sustenance, transport and leisure for millions of people.

Taking a canoe trip on the lower Zambezi sends you into strong winds and waves that nearly capsize your dugout vessel. The dangers that you face are glaring.

You do not get the same feeling at the source of this river, it is so peaceful and quiet.

Before reaching the source, we saw areas where the water seeps out of the ground and trickles down forming the stream that eventually becomes the mighty Zambezi.

"A lot of people have published this as the source, but it is not, there is no water on the surface at the actual source of the Zambezi River. This is just where the water comes to the surface," said Ford Sambundu, our tour guide.

It was quite a long walk up hill, bearing in mind our anxiety.

On our way up, Sambundu told us what he could, showing amazing knowledge of the biodiversity found around the mainly Miombo woodlands forest.

He showed us some medicinal plants, taking extra care not to divulge names of the trees and what they cure.

"We have to be careful not to give away all our secrets to avoid exploitation of the knowledge," he said.

He explained the breathtaking décor along the newly constructed path to the source. The décor depicts some of the values of the local Lunda people in northwestern Zambia.

When we finally got to the point of the source, which does not have water at the surface, we were all excited but had so many questions on how this could have been identified as the source.

Sambundu tried his best to give a geographical explanation on the formation of the river.

"The water is from a rock formation. This is found where two rocks, one from the Kalene hills and another from the Congo basin meet and they have a big opening between them with a collection of water that flows underneath till it reaches the surface and forms the river," he said.

The name Zambezi, from which the name Zambia was drawn, is from a local word yambezi, which means the "heart of all."

This name is a tribute by the local people to a river that has played and continues to play a major role in their lives.

The Zambezi River has many tributaries with the first one, the Kangwadi, joining it roughly 1.6 kms from the source.

At this point, the river starts to widen. The second tributary, the Matonji, joins 5 kms downstream while still in Zambia.

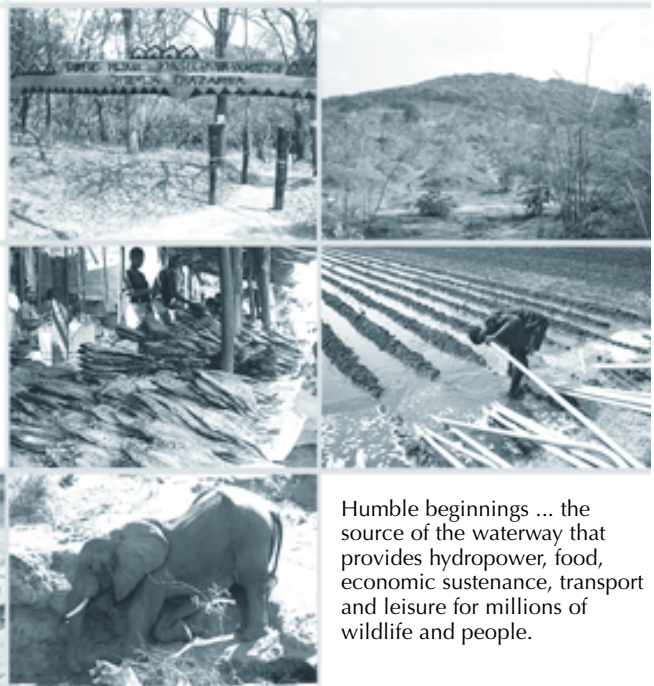
We would have wanted to walk the 5 kms to see the river develop, but the area is impassable due to vegetation and trees.

This is what makes it feel so mysterious because you don't see much further than the spot you may be standing. It leaves you wondering and imagining.

The ground feels like a spring. One that could open up any time and swallow you into the water beneath.

Taking a trip to the source of the mighty Zambezi could be equated to taking a trip to find one's spirit and probably not finding it.

It remains as mysterious as it feels when one tries to imagine what it looks like before taking the trip. You want to see something big and dramatic but it just does not happen.



Humble beginnings ... the source of the waterway that provides hydropower, food, economic sustenance, transport and leisure for millions of wildlife and people.



Millennium Development Goals

Basin states progress towards water and sanitation target

by Egline Tauya

Zambezi Basin states have registered significant progress in meeting the safe drinking water and sanitation target set out in the Millennium Development Goals (MDGs).

In adopting the MDGs, the basin states, like the rest of the world, pledged to reduce by half, the proportion of people without access to safe drinking water and basic sanitation, between 1990 and 2015.

According to 2006 report of the WHO/UNICEF Joint Monitoring Programme (JMP), Angola has made huge strides in expanding its drinking water coverage, but needs to raise basic sanitation levels.

In the period 1990 to 2004, the proportion of people with access to drinking water increased from 36 to 53 percent of Angola's total population.

During the same period, Angola's access to basic sanitation dropped from 62 to 56 percent in urban communities, and from 19 to just 16 percent in rural areas.

Aurora Jeremias, a mother of five living in Angola's Mavinga district, has noticed a sharp improvement in her family's quality of life.

"Children used to die here, but nobody really realised that it was because of water. They had diarrhoea or scabies. We had a lot of these diseases, but not any more," she said in a report carried by the Angola Press Agency, *Angop*.

The Botswana Press Agency reports that Botswana, as it celebrates 40 years of independence, is also on course to ensuring universal access to safe drinking water.

The proportion increased from 77 percent of the country's population in 1990 to nearly 98 percent in 2004, while sanitation in the same period increased from 38 to 42 percent.

Access to safe drinking water in Malawi increased from 40 percent in 1990 to 73 percent in 2004.

In an effort to reach the safe drinking water target, the government of Malawi is planning to increase the number of boreholes and water schemes, and to intensify the maintenance of existing boreholes and water schemes through active involvement of communities in water management.

Malawi is among the best performers in the region for improving access to basic sanitation with an increase from 41 percent in 1990 to 61 percent in 2002.

Floods experienced in early 2006 in Malawi however reduced the level of sanitation as many children under 5 years were affected by diarrhoea.

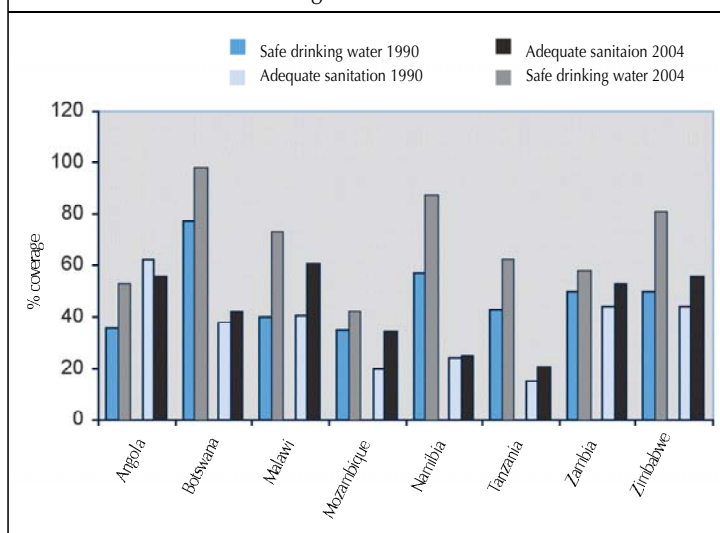
According to the *Mozambique National Human Development Report 2005*, the national average for safe drinking water increased from 35 percent in 1990 to about 42 percent in 2005, whilst sanitation increased from 20 to 34 percent in the same period.

The great majority of the population is served by "onsite" solutions, improved latrines or septic tanks, or by hybrid solutions, built essentially by private initiatives and not effectively listed, the report noted.

In the United Republic of Tanzania, 43 percent of the rural population had access to clean safe water in 1990.

Since then the government has improved water supply to rural communities through the provision of new boreholes and rehabilitation of existing ones, and the development of pipelines.

Water and sanitation coverage in Zambezi Basin States



As a result the proportion of the population in rural areas with access to safe water has almost doubled. In urban areas access to safe water is almost universal.

Progress in provision of basic sanitation has however been slow. In 1990, 15 percent of the rural population had access to basic sanitation such as flush toilets or a ventilated improved pit latrine. In 2004 that share increased to 21 percent.

At least 56 percent of Zambians have no access to safe water supply, and as much as 90 percent have no access to satisfactory sanitation facilities, according to the Ministry of Finance and National Planning.

Access to safe water supplies is estimated at 86 percent of the population in urban areas and 37 percent in rural areas.

Zambia continues to struggle with an outbreak of cholera, which has so far affected 5,526 people and claimed 137 lives during the 2005-2006 rainy season.

Lack of safe drinking water and unhygienic street vending of fruit and vegetables have been identified as the main causes for the spread of cholera.

In Zimbabwe, the movement of people under the land reform programme has disturbed progress. However, the national MDGs progress report for 2004 states that 81 percent of the total population has safe drinking water while 56 percent has access to safe sanitation.

These figures represent a rise from the 1990 figures of 50 percent and 44 percent for safe water and sanitation coverage, respectively.

The target for Zimbabwe is to reach 100 percent for households with access to safe water and sanitation by 2015.

For almost all the basin states, the rapid urbanisation, resulting in informal settlements, has reduced the level of sanitation.

Other challenges include lack of involvement of users in the design and implementation of the water and sanitation projects; lack of empowerment of women as powerful agents of change in hygiene practices; and low priority given to water and sanitation.



Normal rainfall season forecast

by Tigere Chagutah

Weather experts in the region have forecast normal rainfall for the 2006/07 season.

The outlook was prepared by climate scientists from national meteorological and hydrological services within the SADC region, as well as the SADC Drought Monitoring Centre in Harare, and the International Research Institute for Climate and Society.

According to 10th Southern Africa Regional Climate Outlook Forum (SARCOF-10), which met in Botswana in September, the season will have two parts - October-December 2006 and January-March 2007.

October-December 2006

In the first half of the season, the northern parts of SADC have an increased chance of receiving normal to above-normal rainfall - Democratic Republic of Congo (DRC), northeastern Angola, the northern part of the United Republic of Tanzania, most of northern Zambia, southern Malawi, and part of northern Mozambique.

Also forecast to have above-normal rainfall are most parts of South Africa, Namibia, Madagascar, Botswana, Swaziland, Angola and the whole of Lesotho.

Elsewhere in the region, during the first part of the season, should receive normal to below-normal rainfall.

This covers other parts of Tanzania, most of Mozambique, northern Malawi, southern and extreme north-eastern part of Zambia, Zimbabwe, northern parts of South Africa and Swaziland, most of Botswana, most of Angola, Namibia, the southern flank of South Africa, northwestern part of Madagascar and Mauritius.

January-March 2007

Most SADC countries have increased chances of receiving normal to above-normal rainfall during January-March 2007. Northern Tanzania has a greater chance of receiving above-normal rainfall.

However, some places may receive normal to below-normal rainfall - the southwestern part of DRC, greater part of Angola, western Zambia, extreme western part of Zimbabwe, Botswana, most of Namibia, greater part of South Africa, Lesotho, and most of Swaziland.

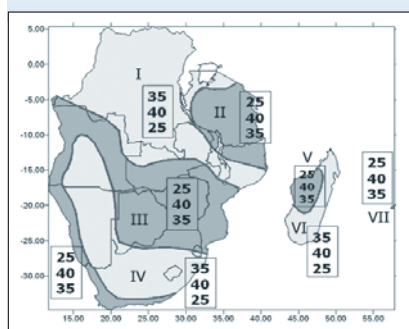
The SARCOF forecast comes at a time when international weather experts have warned of developing El Niño conditions across the Pacific Ocean, a development that could dampen prospects of another good agricultural season in southern Africa.

In an El Niño update issued at the end of September, the World Meteorological Organisation (WMO) said the development of "a weak to moderate basin-wide El Niño is now likely and that such an event would persist into early 2007," noting that the situation is likely to become clearer by December.

Sea-surface temperatures in the eastern equatorial Pacific close to the South American coast became warm towards the end of July, while oceanic and atmospheric patterns in the central and western equatorial Pacific also began to resemble conditions typical of an early stage of an El Niño event in August.

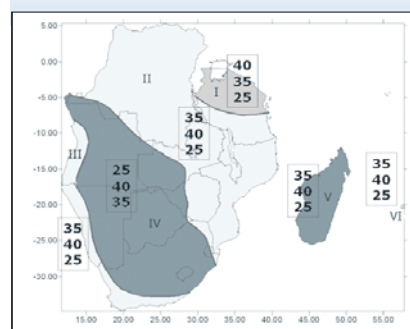
The El Niño effect has been associated with previous drought periods in southern Africa. The phenomenon causes the sea temperature to rise significantly and the air to become dry, affecting the rain-formation process.

Normal rainfall season forecast October – December 2006



The numbers for each zone indicate the probabilities of rainfall. The top number indicates the probability of rainfall occurring in the above-normal category, the middle number is for normal and the bottom number is for below normal

Normal rainfall season forecast January – March 2007



Mozambique takes majority ownership of Cahora Bassa

Mozambican President Armando Guebuza and Portuguese Prime Minister Jose Socrates have signed an agreement for the transfer of ownership of the Cahora Bassa dam to Mozambique.

The agreement signed on 31 October 2006 puts into operation a Memorandum of Understanding signed by the two governments in Lisbon one year earlier. Implementation of the agreement has been on hold because Eurostat, the statistical agency of the European Union, was investigating whether the deal complied with EU rules on budget deficits.

Portugal held a majority 82 percent ownership of the dam while Mozambique has held only 18 percent since independence in 1975.

The deal states that Portugal will write off more than half of the estimated US\$2 billion which it claimed was owed to its treasury by Hidroelétrica de Cahora Bassa (HCB), the company which operates the dam, and instead collect US\$950 million from Mozambique by selling two-thirds of the dam.

The new ownership structure gives Mozambique 85 percent of the HCB shares, with the remaining 15 percent for Portugal.

Cahora Bassa holds huge development potential for the Zambezi River Basin and the SADC region as a whole.

After the signing ceremony, Guebuza noted that control of the dam is a first step towards "speeding our journey to achieve the wellbeing of Mozambicans."

He said the negotiations over Cahora Bassa "are an example of how, in a peaceful and sincere manner, obstacles can be overcome and mutual benefits derived." HCB, he continued, will now become "a fundamental instrument in pursuing our objectives seeking the eradication of poverty through promoting development and making full use of the potential of the Zambezi Valley."

Local control of the dam is expected to boost rural electrification programmes in the basin.

Further, Guebuza said majority ownership of the dam by Mozambique will open the way for international and regional companies who had been reluctant to invest in the energy sector because of the impasse over Cahora Bassa.



THE ZAMBEZI AT A GLANCE

The Zambezi River

rises on the Central African Plateau in the Kalene Hills in northwestern Zambia and flows through eight countries to its delta in Mozambique and the Indian Ocean.

drains an area of almost 1.4 million sq km, stretching across Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe.

supports the Victoria Falls, popularly identified as one of the seven natural wonders of the world, as well as Kariba and Cahora Bassa hydroelectric dams and their lakes.

The Zambezi Basin

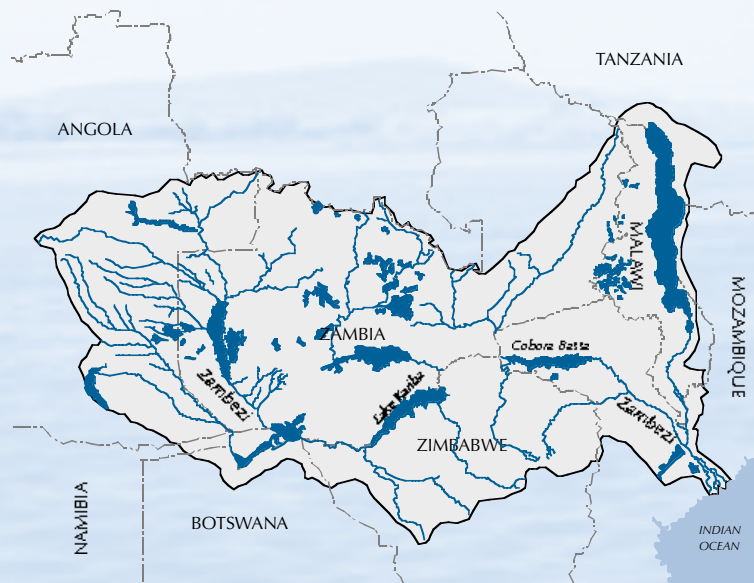
is the most shared in southern Africa and third largest in Africa after the Congo and the Nile.

covers about 25 percent of the total geographic area of the eight riparian countries estimated at 5.6 million sq km.

is home to almost 40 million of SADC's estimated population of more than 200 million people.

hosts urban areas such as Luena in Angola, Kasane in Botswana, Tete in Mozambique, Katima Mulilo in Namibia and Mbeya in Tanzania, almost all urban centres in Zambia including the capital city of Lusaka, all urban centres in Malawi and most in Zimbabwe, including Harare.

contains Lake Malawi/Nyasa/Niassa covering 28,000 sq km, Africa's third largest freshwater lake after Lakes Victoria and Tanganyika and third deepest in the world.



This edition of *The Zambezi* has been supported by SADC's Zambezi Action Programme 6 Phase II (ZACPRO 6.2)

