

AFRICA'S LARGEST TRANSFRONTIER PARK LAUNCHED

By Bonifacio Antonio

The Southern African Development Community (SADC) recently made history when three of its members, Mozambique, South Africa and Zimbabwe launched one of the world's biggest game parks, the Greater Limpopo Transfrontier Park (GLTP).

Presidents of Mozambique - Joaquim Chissano, South Africa - Thabo Mbeki and Zimbabwe - Robert Mugabe signed a treaty that formally established the GLTP, one of the world's largest biodiversity conservancies.

The park, straddling parts of Mozambique, South Africa and

Zimbabwe, covers an area of 4.4 million square kilometres.

Speaking at the signing ceremony, the Mozambican President said that the establishment of the park is testimony to the regional commitment in implementing the inter-

national and regional conventions on biodiversity conservation and sustainable development.

He described the launch of the vast park as a "a significant step forward in

Continued on page 9

Water Hyacinth continues to haunt southern Africa

By Charles Monda

The water hyacinth has become a regional problem. It has infested the Zambezi, which is shared by eight countries in the Southern African Development Community (SADC).

Much as the weed seems to be under control on Lake Kariba where in 1998, the Zambezi River

Authority (ZRA) sprayed 2,4-D twice and is now using biological control, it is threatening to choke irrigation pipes and also hinder hydroelectric power generation in some of the tributaries to the Zambezi. These include the Shire, Malawi's biggest river and the Kafue in Zambia.

A concerted effort to control the water hyacinth from spreading on Malawi's Shire river is underway. It involves the country's Fisheries Department, the World Bank, the Department

For International Development (DFID) and the Centre for Agriculture and Biosciences International (CABI).

"The weed is causing problems for fishermen and local people who are failing to gain access to the water. The weed has also created tension amongst local people especially in areas infested by crocodiles. The weed is manifesting itself along Lake Malawi from Mangochi to Karonga," Malawi's Deputy Director for Fisheries, Alexander Bulilani said.

Continued on page 4



The Environmental Council of Zambia recently took part in the National Library week exhibition. Books and other materials produced under the State of the Environment Project were part of the display.

Inside...

ZRA takes stock of biodiversity	3
Women weave for a living	5
Sida endorses partnerships	6
Concern over increasing water demand	7
Lançada uma das maiores reservas Internacionais de África	10

The Zambezi

Vol 5 No 1 January - March 2003

The Zambezi is published three times a year by the Southern African Research and Documentation Centre (SARDC) Musokotwane Environment Resource Centre for Southern Africa (IMERCSA) through a partnership with SADC, IUCN, ZRA and Sida and National Collaborating Centres in all SADC States.



The newsletter is published under the Sida-funded 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.

Editorial Team

Leonissah Munjoma (Editor)
Clever Mafuta
Cathrine Mutambirwa

The National Collaborating Centres (NCCs)

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

Design

Tonely Ngwenya

Origination and Printing

DS Print Media

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

The SOE Zambezi partners would like to thank the Swedish International Development Co-operation Agency (Sida) for their support.

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

The Zambezi

IMERCSA, 15 Downie Avenue, Belgravia,
P.O. Box 5690, Harare, Zimbabwe

Tel: 263-4- 791141

Fax: 263-4- 791271

Email: cep@sardc.net

Internet: www.sardc.net/imercsa

© SARDC, 2003

EDITORIAL

The launch of the Great Limpopo Transfrontier Park (GLTP) in December 2002 is one of the great achievements for the Southern African Development Community (SADC). Once again, the SADC member states have demonstrated that without a shared vision in the management of natural resources, the region would be headed for environmental disaster.

Other initiatives already underway are the Four Corners covering the border tips of Zambia, Zimbabwe, Botswana and Namibia and the ZIMBA Transfrontier Conservation Area which borders Zimbabwe, Mozambique and Zambia. The two initiatives are in the Zambezi basin.

The GLTP is a new international game park, the largest in Africa, which brings together some of the most established wildlife areas in southern Africa. The Park is being managed as an integrated unit across unprecedented three international boundaries.

It includes South Africa's world-famous Kruger National Park, the stunning geological splendor of Gonarezhou in Zimbabwe and the superb Cango 16.

When SADC countries signed the Wildlife Protocol in August 1999 in Mozambique it was in recognition of the need to establish a common approach to conservation and sustainable use of resources in the region and assist with the effective enforcement of laws governing those resources.

Development in southern Africa hinges upon the sustainable management of the region's rich natural resources which provide the basis for community involvement in the development and management of the environment.

Most natural resources in southern Africa, such as river systems and wildlife, are shared by more than one country, requiring cooperation if long-term development and use is to be guaranteed. It is imperative that countries in southern Africa adopt and implement mutually beneficial approaches to the management of these resources.

It is with this view that countries in the region are forging alliances in the management of the region's natural resources. These partnerships, apart from helping conserve the region's natural resources, also boost economic development and help raise the standard of living for the local communities.

The GLTP, for example, will allow tourists to drive across international boundaries in Mozambique, South Africa and Zimbabwe with minimal fuss. In addition to the usual game-viewing opportunities, visitors will have a broad range of new attractions including a mix of cultural experiences.

According to the agreement between the three countries, the people from communities surrounding the three parks will be allowed to travel freely in the GLTP as the fence that barricades them will be removed. This is good news for the Mkukele people in South Africa who are closely related through family ties and culturally to the Sange people who live just north of the Limpopo River in Zimbabwe. The two ordinary living along the Limpopo in Mozambique, are Shangaan speaking. They will now be able to visit without much hassle, thus promoting the rich cultural heritage they have always shared.

For the Shangaan, the GLTP has reunited them after political borders had divided them for decades. This same unity has been celebrated in ZIMBA where people from the four districts of Gutu in Zimbabwe, Iwanga in Zambia, Mago and Zimbo in Mozambique freely cross the Zambezi river without any customs and immigration formalities to do business on either side of the borders.

The ZIMBA transboundary natural resources management initiative was launched in 1999 with the aim of providing a collaborative framework for the management of natural resources in the four districts. These were chosen because they share a common border and ecosystem in an area that lies along the African Rift Valley and has a rich biodiversity of international importance.

Like the GLTP and ZIMBA, the Four Corners initiative in the upper Zambezi region, illustrates the need for ecological systems that straddle national borders to be managed in a holistic manner. The Zambezi basin with its diverse ecosystem requires cooperation by states, communities, the private sector and other stakeholders in managing it.

These initiatives in the SADC region should be commended as they enhance a country's ability to take care of its natural resources. However, there is need to seriously consider harmonising activities to avoid conflict. If one country is off-season in one activity, for example, the others must do the same because they share the same resources.

It would be unfair for anyone to conserve wildlife that is being killed on the other side.

ZRA to take stock of the Zambezi Biodiversity

The Zambezi River Authority (ZRA) is to undertake a biological monitoring initiative in the Zambezi basin. The initiative, to be implemented through a commissioned consultancy aims at bringing out the important features of the ecology of the Zambezi river and its tributaries.

This is the first time a unique opportunity to simultaneously collect long-term, physical, chemical, and biological data, using standardised methods and techniques will be undertaken on the Zambezi.

The ZRA is jointly owned by the Zambian and Zimbabwean governments with a mandate to monitor activities in the Zambezi basin.

The Zambezi river basin is home to more than 40 million people from eight southern African countries of Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe.

The initiative is designed to complement the ongoing Water Quality Monitoring Programme and is based on interdisciplinary collaboration.

The biological monitoring initiative received support from all stakeholders consulted during a review of existing activities on the Zambezi in relation to environmental management.

The stakeholders emphasised the importance of having access to general data about the state of the wetlands, information on trophic-level interactions and, in particular, information on the fish species, which are not included in the regular monitoring exercises.

Data collected during the biological

and all data that contributes towards a sustainable transboundary natural resources management programme.

It has been pointed out, however, that the water quality and the ecology of the lake, is also determined by processes occurring outside the lake itself. It is for this reason that a shared water vision for the management of the Zambezi river system is important.

"Similarly, impacts to the river downstream of the dam are, in part, the result of processes occurring in the lake or processes related to the dam operations. It is therefore, essential that catchment management be an integral part of the Lake Kariba management, including both the upstream and downstream areas of the lake," the proposal says.

The study will quantify the relationships between the factors regulating lake productivity and the different groups of organisms.

In a proposal tabled during the ZRA's Environmental Monitoring Programme (EMP) for the Zambezi river concluding stakeholders workshop, B. Marshall pointed out that the major sources of polluting activities in the Zambezi river basin with the potential of causing negative impacts on the water quality and consequently on the aquatic communities and human populations who depend on them, have been identified in a number of earlier studies.

"The overall consensus is, however, that the assessment of eutrophication risks and the resulting adverse effects should be the major focus of the biological monitoring efforts," the proposal says. □



Birds are part of the ecosystem and they depend on water too.

monitoring will be used in landscape and transboundary planning by stakeholders; improve fisheries management and fish abundance predictions; help in environmental management, community welfare and in interpretation and guidance to management and sustainable use of natural resources through institutions with mandates for promoting conservation in the riparian countries.

Some of the information gaps that the project will fill include information on biomass of producers and consumers; information on nutrients, metals and other water quality parameters; drinking water quality data including microbiological data and information on possible algal toxins;

Water hyacinth continues to haunt southern Africa

Continued from page 1

Apart from affecting major economic activities, the water hyacinth, which originates from South America and found its way into the region via a flowerpot in a plane, has also impinged on communities that derive their livelihood from rivers through fishing and other activities.

The weed covers the water surface like a carpet, shutting out aquatic life from oxygen, leading to death in fish.

In Malawi, a Fisheries Department survey conducted in the Lower Shire revealed that fish production had declined from an average of between 5,000 and 10,000 metric tonnes from 1983–1991 to an average of between 1,000 and 2,000 metric tonnes from 1992–1996.

The water hyacinth has been cited as the major contributor to this drop.

The survey also revealed that women were unable to fetch water and wash up in places infested by the water hyacinth.

In a paper entitled *Economic Impact of Water Hyacinth on Local Communities of the Lower Shire*, presented at the Water Hyacinth Workshop for Youth in Zomba recently, Enert Nyando from Malawi's Fisheries Department laments the fact that communities in the riparian states who have for a long time depended on fish for their protein and income have to look elsewhere.

A World Bank funded initiative, Environmental Management Project (EMP), which started three years ago aims to reduce the weed in Malawi's water systems.

Dr Steve Dondo, Desk Officer for the water hyacinth project in the Fisheries Department said: "The initial objective was to sensitise the communities in all the areas where the hyacinth is present. There had been ignorance among the local people about the dangers of the weed and how it spreads".

Under the project, beach village committees have been established to broaden participation in water hyacinth control.

Apart from the awareness campaign, efforts to prevent the

spread of the weed include biological, chemical and mechanical control.

Rearing tanks for biological control agents have been established in all fisheries department offices along Lake Malawi in Salima, Mangochi, Nkhata Bay and Karonga. When released onto the weed, the pests disturb the water hyacinth capacity to spread further.

"The biological control agents are released in areas where people cannot go," Dr Dondo said. "The vulnerable areas are confluences and places where the rivers enter the lake."

Roger Day of CABI Africa Regional Centre in Nairobi, in his book entitled *Water Hyacinth A threat to Malawi rivers and lakes*, says that Integrated Pest Management (IPM) which includes physical, chemical and biological control can be an effective way of reducing the problem in different situations.

While biological control is the most appropriate long-term solution, situations arise where rapid control is necessary. For example says Day, if a hydroelectric power dam gets clogged, immediate removal of the weed may be necessary, for which mechanical or chemical measures could be considered. The best management strategy for water hyacinth is integrated pest management based on biological control with occasional use of physical or chemical control.

Day suggested that stakeholders should work together to ensure effective implementation of the control measures.

David Bauleni, Environmental Officer for Electricity Supply Corporation (ESCOM) said: "The presence of the weed has caused problems as the weed grows fast and



The water hyacinth can choke waterways and inhibit water activities

it's roots lead to the fast sedimentation of reservoirs apart from depleting oxygen from the water. The loss to the nation is not just electrical power production but also biodiversity in reduced stocks."

Bauleni explained that siltation due to deforestation has led to proliferation of floating weeds like the water hyacinth that interfere with the operations of the Liwonde barrage.

Dr. Aggrey Ambali, Associate Professor of Fisheries Biology at the Chancellor College, one of the constituent colleges of the University of Malawi in his *Biology for Water Hyacinth* book says the weed quickly blocks waterways, beaches and landing sites.

The weed has the capacity to interfere with navigation on lakes and rivers. Areas infested with water hyacinth have coincidentally proved to be breeding grounds for mosquitoes thereby increasing the risk of malarial attacks to surrounding communities.

The water hyacinth is the world's worst waterweed. It has the enormous potential for growth and production of huge quantities of biomass. It normally floats on water and it can survive a wide range of temperatures and nutrient levels and also a wide range of acidity and alkalinity enabling it to colonise many habitats. □

Women turn to weaving for a living in Caprivi

By Carol Murphy

A study by the Wildlife for Livelihood Diversification (WILD) project of the Namibian Ministry of Environment and Tourism has revealed that more women in Caprivi are engaged in weaving crafts for a living.

This practice was unheard of 10 years ago, when all women did with the palm leaves was to weave one basket a year for use in their homes. Today, thanks to the support of local NGOs, there is a thriving trade in woven products and some women are earning as much as US\$1,500 a year from high quality crafts that are retailed locally, in Windhoek and even overseas.

The project revealed that women who live near the Kwandu, Chobe and Zambezi rivers in Caprivi can also harvest papyrus reeds, another wetland plant that is useful for craft. They weave them into sleeping mats or table mats. Some producers have made enough money and have invested in livestock.

Weaving is an activity accessible to all including poor women in many parts of southern Africa. In Namibia, raw plant materials are available to producers for free.

The project also found out that weaving fits in well with other chores the women are engaged in including farming and household.

The Caprivi project is a research partnership with NGOs supporting crafts, Integrated Rural Development and Nature Conservation (IRDNC) and the Rössing Foundation.

Weaving is benefiting the women in terms of being able to buy food and to pay for the children's educational needs. The incomes have helped alleviate poverty in the remote rural areas of Caprivi.

The crafts have also increased a sense of pride, confidence and achievement in the women in the strongly patriarchal society.

Getting cash from basket sales has increased the value of the Makalani palm (*Hyphaene petersiana*) in people's eyes, the research project revealed.

To ensure the sustainability of the palm trees, the weavers are taught harvesting techniques. Conservancy Community Resource Monitors (CRMs) teach weavers to use the least damaging methods of harvesting palm. For



The handcrafts are well designed

example, using a sharp knife to cut the base of the closed new palm fronds. New leaves from the hearts of mature palm trees are selected, leaving some to allow for continued growth.

The craftwork has helped strengthen the role of women in community-based natural resource management in Namibia and has provided a role for conservancy staff in supporting the craft industry and monitoring natural resource use by encouraging weavers to work together in producer groups.

A strong feature of craft sales in Caprivi is the development of local outlets. The largest is the producer-managed Mashi Craft Market at Kongola that serves about 120 producers.

Two of the biggest challenges to these groups are the long distance they travel to harvest palm and the low price for the products.

Unfortunately, an appreciation of hand-woven products made from sustainably harvested indigenous resources is still low among customers who consider imported goods better.

This means that the prices for baskets are relatively low. There is thus a need to explore other income-generating activities that women can do. □



The baskets made from palm leaves on sale at a market in Windhoek, Namibia

Sida endorses partnerships as key to development

The signing of a peace agreement between the Angolan government and the former rebel movement, the Movement for the Total Independence of Angola (UNITA) and the positive political developments in the Democratic Republic of Congo (DRC) are two related developments that have ushered in a new era of peace and stability in southern Africa.

Non-Governmental Organisations should, therefore, not view funding organisations as simply funders but also as providers of general expertise in various areas.

In a paper that addressed the issue of partnerships, Kumbulani Murenga, a Sida Projects Officer said his organisation's keen interest in working in southern Africa was enhanced by the fact that governments in the region have been very supportive of initiatives related to water resources management and they understand the need for partnerships.

It is for this reason that Sida is supporting the State of the Environment Zambezi Basin (SoE) project, a partnership of SADC, ZRA, IUCN, the World Conservation Union, Regional Office for Southern Africa (ROSA), SARDC and Sida.

He pointed out that Sida's wish is to generate a shared value through information generation, and the SoE Zambezi project is based on that. Furthermore, the SoE Zambezi has received support from political and other organisations making it a project that has grown due to demand.

He said Sida decided to work with the Communicating the Environment Programme (CEP) partners because of the trust that has been built between them since phase one of the SoE Zambezi which was concluded in 2000.

He said development in Africa needs partnerships and that technological provision enhances that process. He pointed out that the process of development in southern Africa had seen numerous initiatives including the establishment of partnerships.

He noted that development practitioners need a broader understanding of issues. Two things that are important in partnerships, he highlighted were the generation of a shared value and generation of information.

He said Sweden broadened its approach to water management support during the 1990s following the

The SoE Zambezi network held a five-day workshop hosted by SARDC on communicating the Zambezi Basin. Representatives from National Collaborating Centres and Partners attended the meeting. These are some of the key presentations.

- *Compiled by Leonissah Munjoma and Tafadzwa Sekeso*

developments then. These developments were demand driven, and they led to the launch of the Regional Water Initiative in 1996.

Sida supports Integrated Water Resources Management (IWRM) because they believe which has

changed a lot of mindsets among governments and practitioners. Some of the support in IWRM has gone to shared watercourse projects "but we believe in building capacity at all levels throughout the basin."

Sida is supporting a number of projects in other basins including the Pungwe, Nkomati and elsewhere in Africa, the Nile and worldwide.

Kumbulani said in shifting its focus, Sida considers the following issues as needing recognition:

- F increased collaboration and coordination;
- F recognising that regional water issues include aspects of international cooperation; and
- F working to build trust and confidence in the region. □

Southern Africa Experiences Peace

The signing of a peace agreement between the Angolan government and former rebels, the Movement for the Total Independence of Angola (UNITA), and positive political developments in the Democratic Republic of Congo (DRC) have ushered in a new era of peace and stability in southern Africa.

The Southern African Research and Documentation Centre (SARDC) Deputy Director, Munetsi Madakufamba said it is this peace that prompted the then Southern African Development Community (SADC) chairperson, Malawi President, Bakili Muluzi to declare at the August 2002, SADC Summit in Angola that "the guns have fallen silent".

Madakufamba who was making a keynote address during a SARDC workshop pointed out how for the first time in nearly three decades, the SADC region was finally enjoying peace.

The signing of the peace agreement between the Angolan government and former rebel movement, the Movement for the Total Independence of Angola (UNITA) and the positive political developments in the DRC are two related developments that have made this peace and stability complete, he said.

Madakufamba based his paper on the need for development practitioners, particularly those in natural resource management, to be well versed with regional developments to ensure they deal with issues in a broad and holistic manner.

He gave an overview of the developments taking place in the region. These included the New Partnership for Africa's Development (NEPAD) and the restructuring of SADC. He pointed out that there is a link between these developments in that they are all aimed at eradicating poverty in Africa.

He said southern Africa was experiencing challenges at national, regional, continental and global levels and with the "fallen guns", the hope was that these remained permanently silent to allow for regional economic growth.

Madakufamba said the peace in the region was beneficial to natural resources management as it meant the resources are saved from plunder and exploitation.

On socio-economic issues, the emerging markets in the region look very promising he said. The region is rich in minerals but undergoing enormous challenges that impede development, for example HIV/AIDS, food insecurity and poverty.

Continued on page 7

Southern Africa Experiences Peace

Continued from page 6

Poverty has made people seek shortcuts and as a result damage the environment. About 200 million of the SADC population are poor, he said.

He pointed out that during the World Summit on Sustainable Development (WSSD) in September 2002 in South Africa, poverty was the highlight and was made a key focus in Africa. In fact these social problems are the reason that the world's attention has shifted from political struggles to economic emancipation. The WSSD saw the leaders adopting a development agenda that is environmentally sustainable and aimed at ending poverty on the continent and the world over.

Madakufumba talked about the African Union and NEPAD. He described NEPAD as a development framework. However, he pointed out that NEPAD was increasingly receiving more attention from outside Africa as opposed to from within the continent. He warned: "If we are slow to act on it we run the risk of having this indigenous initiative returned to us as an exotic dish."

He highlighted the fact that there had been a lot of controversy surrounding NEPAD with some people suggesting that it is not African. He advised that the question to ask is whether one should buy into this school of thought and not take part or to be part of it. It's important to take part in shaping NEPAD.

"As development practitioners, we need to come on board and improve the shortcomings," he said.

He noted that transformation at continental level was taking place concurrently with changes in some regional organisations such as SADC. SADC was transforming its institutions by phasing out coordination units and introducing directorates. Although this process of transforming coordination units was scheduled to end in December 2002, it has been extended to December 2003.

Madakufumba advised that it was important for development practitioners to understand what is going on and to play their role reminding them they had a mandate to influence the process of development either at national or regional level.

Apart from the IMERCESA programme, SARDC has four other programmes whose major activity is information dissemination and awareness raising. He listed the other four as Women in Development Southern Africa Awareness (WIDSAA), Sustainable Democracy (SD), Regional Economic Development Information (REDI), and SARDC Mozambique office which coordinates the Human Development Report for Mozambique, works on related national and regional issues and helps with Portuguese language support.

He pointed out that the task of providing information for development was not an easy one. For this reason, partnerships such as the one that SARDC was engaged in with SADC's Water Sector and Environment and Land Management Sector (ELMS); IUCN - the World Conservation Union, Regional Office for Southern Africa (ROSA); the Zambezi River Authority (ZRA); the Swedish International Development Cooperation Agency (Sida) and the National Collaborating Centres (NCC) network, should be valued. The workshop was an opportunity to strengthen the partnership.

He expressed SARDC's appreciation for Sida's financial support to the SoE Zambezi project and hoped the workshop would find ways of sharing information at regional level. □

Increasing water demand, a concern to the region

There is growing concern over increasing demand for water resources due to population growth and the high urbanisation rate. This is likely to increase stress on the limited water resources, and increase competition and conflict between and among sectoral users.

Clever Mafuta, Head of the SARDC I. Musokotwane Environment Resource Centre for Southern Africa (IMERCESA) told participants at a "Communicating the Zambezi Basin" workshop that apart from being an essential resource, water was a limited and fragile resource in southern Africa as its availability underpins the social and economic fabric of society in a region that is

characterised broadly as a developing one with widespread poverty.

Basing his talk on the book: "Defining and Mainstreaming Environmental Sustainability in Water Resources Management in Southern Africa," published jointly by SADC, IUCN, SARDC, Sida and the World Bank, Mafuta spoke on key water issues in the region pointing out that available data on demographics and renewable water supplies shows that Malawi and South Africa will face absolute water scarcity by 2025, while Lesotho, Mauritius, Tanzania and Zimbabwe will be water stressed.

Angola, Botswana, the Democratic Republic of Congo (DRC), Mozambique, Swaziland and Zambia

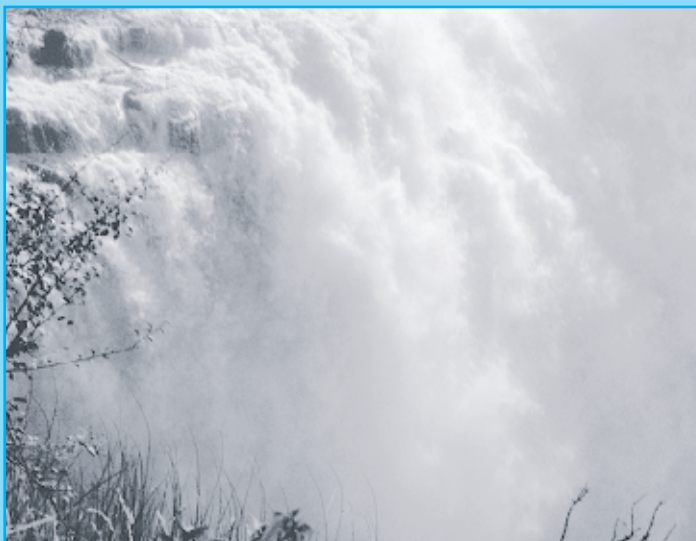
will have water quality problems during dry seasons, during the same years. However, Namibia, despite being covered by a desert, will have enough water but not well located.

He listed some of the water resources issues in the region as:

- F low coverage of water supply and sanitation facilities for the rural and urban poor which has a significant impact on public health;
- F extreme climate variability, and emerging climate change;
- F increasing degradation of water resources due to unsustainable water and land use practices such as over-abstraction of surface water, over-pumping of groundwater, pollution, watershed

Continued on page 8

Increasing water demand, a concern to the region



The mighty Zambezi may cease to be this powerful due to increased water demand and unsustainable use

Continued from page 7

degradation, loss of and encroachment on wetlands, and proliferation of aquatic weeds; and

- F numerous transboundary waters in the region, with complex water rights issues, contributing to the insecurity of downstream uses and nations.

Another challenge for water resources management was the transboundary nature of much of the water. An important feature of the SADC region, especially mainland SADC countries, he said, is the presence of 15 shared rivers and consequential groundwater resources. The combined drainage of these international rivers covers over 78 percent of the region's continental land area.

He noted that as populations grow and their demands increase, the need to coordinate the development and management of shared watercourses is becoming a real regional priority without which there could be substantial economic losses and potential for conflict.

"Disasters could be worsened due to lack of preparedness to manage floods and droughts on a basin-wide basis," he said.

Almost all SADC countries have more than half of their total land area in international basins. The shared river basins in the SADC region

include Zambezi, Orange, Okavango, Limpopo, Congo, Nile, Sabi/Save, Buzi, Pungwe/Pungue, Umbeluzi, Incomati/Nkomati, Maputo, Ruvuma/Rovuma, Cunene and Etosha-Cuvelai

Mafuta, gave emerging water policies in the region a thumbs up saying they enhance effective management of water resources resulting in poverty alleviation and improved human health, food security, environmental sustainability, overall economic development and regional security.

He noted that factors such as recurrent droughts, occasional floods, increasing demand for water, possibility of conflicts over access to water, increasing pollution and heightened awareness among SADC member states of the importance of Integrated Water Resources develop-

ment and management, have led to the realisation of the importance of a regional coordination mechanism for water resources.

He said the framework for establishing and developing joint management arrangements in the region is in place through the SADC Protocol on Shared Watercourses. The protocol was ratified by member states in 1998, and was further reviewed between 1999 and 2000.

To this effect, the SADC Water Sector Coordination Unit has prepared a Regional Strategic Action Plan (RSAP) for Integrated Water Resources Development and Management (1999-2004), which is being used as a basis for developing particular projects and programmes.

He highlighted the fact that the major objective of the RSAP is to provide a framework for the region to successfully meet the challenge of developing a comprehensive and integrated approach to water resources development and management.

Mafuta outlined how SADC with its partners came up with the SoE Zambezi project under the Communicating the Environment Programme with the aim of raising awareness on issues affecting the basin.

The fact that the Zambezi river basin is the most shared in the region also contributed to conceptualisation of the project as the partners realised the importance of the basin resources to the people of the region. □



Wildlife including elephants depend on water for survival too

Africa's largest Transfrontier Park launched

Continued from page 1

strengthening regional cooperation in managing cross-border ecosystems."

"The park we are now creating is one of the largest in the world, and the main objective to be achieved is the integrated social, economic and environmental development of the three countries signatory to the treaty", he said.

In Mozambique the park is in Gaza province and covers the districts of Massingir, Mabalane and Chicualacuala, where a large number of animals and plant species, some of them endangered, are found. In South Africa, the GLTP encompasses the Kruger National Park and the area of Makuleke, while in Zimbabwe it consumes the Gonarezhou National Park, the sanctuary of Manjiji and the Malipati region.

The area covered by the park is semi-arid, with mostly infertile soils, which are unsuitable for agriculture. The communities living within the park eke out a living from subsistence agriculture, a practice that threatens the environment and exacerbates poverty.

President Mbeki described the project as "an important contribution by Mozambique, Zimbabwe and South Africa to the achievement of the global target to reverse the loss of biodiversity by the year 2010, as adopted at the Johannesburg World Summit on Sustainable Development in August 2002."

He said the park is a world without frontiers whose creation shows that nothing is impossible in the relationship between the different states.

Mbeki said that the Transfrontier Park "will become one of the most sought-after wildernesses in the world. I am confident that it will feature on the list of must-see destinations for global travellers."

The park would increase southern Africa's share of the global travel and tourism market, thus creating many job opportunities and encourage infra-

structure investment in roads, bridges, lodges, hotels, upgrading of border facilities and game fences.

"As one of the world's most ambitious conservation efforts, the Park will restore the integrity of an ecosystem artificially segmented by colonial boundaries. It will open up the natural migratory routes of the great herds of African elephants and other animals", said President Mbeki.

In his address, President Mugabe said the birth of the new park "shows

that what unites us is much greater than what divides us. We are a single people, we have a shared history, a shared vision."

The German Development Bank will in May this year make available six million euros (about 5.5 million US dollars) to help finance the Great Limpopo Transfrontier Park. The money will be used to support all the activities needed to set up infrastructure in Mozambique, including the drafting of a management plan. □

Greater Limpopo Park Resettlement worries local population

By Bonifacio Antonio

More than 6,000 people living in buffer areas of the recently launched Great Limpopo Transfrontier Park (GLTP) in Massingir, in Mozambique's southern province of Gaza, were the centre of discussion at a consultative meeting on management plans for the park's natural resources, recently held in the capital Maputo.

The GLTP is one of the world's largest conservancies, straddling parts of Mozambique, South Africa and Zimbabwe. About 20,000 people currently inhabit the park.

Presidents Thabo Mbeki of South Africa, Robert Mugabe of Zimbabwe and Joaquim Chissano of Mozambique launched the park that covers 4.4 million square kilometres in the three countries in December 2002.

In Mozambique the park covers about 40,000 square kilometres, and it extends partially over three districts of Massingir, Mabalane and Chicualacuala, where a large number of animals and plant species, some of them endangered, are found.

The park is regarded as fundamental for the development of tourism and the conservation of biodiversity in southern Africa.

During a consultative meeting held before the launch of the park and attended by representatives of civil society and residents from surrounding areas, the Mozambican government assured the affected families that resettlement will take place in the low-lying areas along the Chimuedze, Limpopo and Elephants rivers within the park.

According to Afonso Madope, the National Director of Conservation Areas in the Ministry of Tourism, the government will provide housing, and ensure that the population can generate income through sustainable employment in the resettlement areas.

"We'll create social infrastructure such as roads, hospitals, houses, schools, and allocate plots for farming and grazing," he stressed. But the relocation of the population can only take place after all the infrastructure is in place, he said.

The population currently lives on riverbanks, which offer the best conditions for agriculture and livestock rearing, but pose a serious threat to the environment. The same areas also offer the best potential for tourism.

"Consequently, there's a great need to find a way to take advantage of those areas without creating conflicts with the communities," Madope said.

Currently, the technical committee for implementation is drafting the management plan which will determine the buffer areas, the activities to be undertaken by the communities, and will advise if there is a need to transfer the population living in the buffer zones.

Inadequate fencing and inspection are regarded as the major constraints that may hamper the establishment of the park. This view prompted the population to propose that in case of damages to their property caused by wild animals, they should be compensated, a situation that is not provided for in the country's Law on Forests and Wild Fauna.

Lançada uma das maiores reservas Internacionais de África

Por Bonifácio António

A Comunidade para o Desenvolvimento da África Austral (SADC) fez recentemente história quando três dos seus estados, África do sul, Moçambique e Zimbabwe, lançaram uma das maiores reservas mundiais, o Grande Parque Transfronteiriço do Limpopo (GLTP).

Os Presidentes de Moçambique, Joaquim Chissano, da África do sul, Thabo Mbeki, e do Zimbabwe, Robert Mugabe, assinaram o tratado que cria formalmente o GLTP, uma das maiores áreas mundiais de conservação da biodiversidade.

O parque, abrangendo partes de Moçambique, África do sul e Zimbabwe, cobre uma área de cerca de 4.4 milhões de quilómetros quadrados.

Falando na cerimónia de assinatura do tratado, o Presidente Moçambicano sublinhou que a criação deste parque testemunha, para a região, a vontade de implementar as convenções regionais e internacionais sobre a conservação da biodiversidade e desenvolvimento sustentável.

Descreveu o lançamento como "passo significativo no processo de fortalecimento das nossas relações de cooperação regional sobre a gestão dos ecossistemas além fronteira".

"O parque que estamos a criar aqui é um dos maiores do mundo, cujo objectivo principal a ser alcançado é o desenvolvimento social, económico, e ambiental integrado entre os três países signatários deste tratado", disse.

Em Moçambique o parque está localizado na província de Gaza e cobre os distritos de Massingir, Mabalane e Chicualacuala, onde um grande número de animais e de espécies de plantas, algumas em perigo, podem ser encontradas. Na África do Sul, o Grande Parque do Limpopo contempla o Parque Nacional do Kruger e a região de Makuleke, enquanto que no Zimbabwe este parque consome o Parque Nacional de Gonarezhou, o santuário de Manjiji e a região de Malipati.

A área coberta pelo parque é semi-árida, com muitos solos não férteis e impróprios para a prática da agricultura. As comunidades que vivem no interior do parque praticam uma agricultura de subsistência, um método que ameaça o ambiente e agrava a pobreza.

O Presidente Mbeki descreveu o

projecto como "uma importante contribuição de Moçambique, Zimbabwe e África do Sul no sentido de atingir o objectivo global de inverter a perda de biodiversidade até o ano 2010, tal como foi decidido na Cimeira Mundial sobre o Desenvolvimento Sustentável realizada em Agosto de 2002 em Johannesburgo."

Disse que o parque é um mundo sem fronteiras, cuja criação mostra que nada é impossível nas relações entre os diferentes estados.

Mbeki disse que o Parque Transfronteiriço "vai tornar-se uma das maiores atracções selvagens do mundo. Estou seguro que este parque vai figurar na lista dos mais procurados destinos turísticos a nível mundial." □

WWF FAZ pesquisa sobre pesca sustentável

A falta de pesquisa sobre as actividades pesqueiras nos rios da África Austral estimulou o Fundo Mundial para a Natureza (WWF) na África Austral a embarcar num projecto com o objectivo principal de promover o uso e gestão sustentável de recursos aquáticos.

O projecto, designado "Gestão de recursos partilhados dos sistemas dos rios Zambeze/Chobe: Práticas actuais e futuras oportunidades", iniciou em Outubro de 2000 através de fundos da Agência Norte Americana para o Desenvolvimento Internacional (USAID) e do WWF, que estão a trabalhar em parceria com o Ministério Namibiano das Pescas e Recursos Marinhos.

Apesar do projecto estar basicamente virado para a região de Caprivi, na Namíbia, as suas actividades foram alargadas para a Zâmbia e Botswana.

O projecto tem três grandes objectivos que são:

- Recolha de dados biofísicos e socio-económicos dos recursos

pesqueiros e das comunidades que dependem deles;

- Explorar as actuais e futuras opções políticas para a gestão e uso sustentável dos recursos pesqueiros; e

- Fortalecer e desenvolver capacidade das institucional a nível governamental e comunitário.

A pesca é um importante recursos alimentar e de rendimento para as pessoas que vivem ao longo das margens do rio Zambeze e em outras partes da região, mesmo assim pouco estudo foi feito para se esclarecer questões como quem se dedica a pesca, como, onde e o que é que acontece com a captura do pescado.

Questões como uso e gestão de recursos pesqueiros no alto Zambeze são extremamente importantes por vários motivos: A proporção de pessoas que depende da pesca, e a quantidade de recursos que dela se retiram está a aumentar devido ao crescimento populacional e também devido a recente crise alimentar

WWF researches into sustainable fishing

Lack of research into fishing activities on southern Africa's rivers has prompted the World Wide Fund for Nature (WWF) Southern Africa to embark on a project whose major aim is to promote sustainable resource use and management.

The project, "Shared Resource Management on the Zambezi/Chobe River Systems: Current Practices and Future Opportunities" was initiated in October 2000 through funding from the United States Agency for International Development (USAID). USAID and WWF are working in conjunction with the Namibian Ministry of Fisheries and Marine Resources.

While the focus of the project is largely within the Caprivi region of Namibia, activities have extended into Zambia and Botswana.

The project has three broad objectives. These are to:

- F collect baseline biophysical and socioeconomic data on the fishery resource and the communities that depend on them;
- F explore present and future policy options for the management and sustainable use of fishery resources; and
- F develop capacity and strengthen institutions at the government and community level.

Fish is important as a source of food and income to people who live along the banks of the Zambezi river and in other parts of the region, yet very little research has been carried out to address issues such as who does the fishing, how and where, as well as what happens to the catch.

Issues like fisheries resource use and management on the Upper Zambezi river are important for several reasons. The proportion of people who depend on fish, and in turn the amount of fishing is almost certainly increasing due to population growth and more recently the food shortages caused by drought in most parts of southern Africa.

The people from communities along the river have revealed that there has been an increase in the number of people fishing and that some use destructive methods, such as drag netting. This may not only lead to the depletion of a valuable resource, but could bring about conflicts between communities, who, while sharing strong cultural ties, live on

different sides of the river and hence different countries.

Under the WWF project, several activities are underway. They include baseline biophysical and socioeconomic data collection every two months; catch/effort and fish market surveys; as well as a household survey on fish consumption.

Between October and November 2002, a frame survey, or village census, was carried out on both sides of the Zambezi river from Katima Mulilo to Impalila Island. The survey was carried out in conjunction with both Namibian and Zambian fisheries officers.

One particular focus of the project has been exploring what role communities and traditional authorities have and could have in fisheries management.

Legislative consultations have been carried out in all parts of the Caprivi floodplains. During these consultations, communities and traditional authorities have been briefed on pending fisheries legislation. This opened dialogue to explore what role these stakeholders could play in future management.

Efforts have also been made to build links between traditional authorities on either side of the river as these share common concerns about ensuring there is enough fish for now and future generations. □

WWF FAZ pesquisa sobre pesca sustentável

Continuação da página 10

causada pela seca que atinge várias regiões da África Austral.

As populações que vivem ao longo do rio Zambeze revelaram que tem havido um aumento do número de pessoas envolvidas na pesca e que algumas delas usam métodos destrutivos tais como redes de arrasto. Isto não só pode levar ao esgotamento dos recursos vulneráveis, mas pode gerar conflito entre as comunidades que, apesar de partilharem fortes afinidades culturais, vivem em diferentes margens do rio e de países.

A luz do projecto do WWF, estão em

curso várias actividades que incluem a recolha bimensal de dados biofísicos e socio-económicos; pesquisas de mercados de peixe e captura; bem como um estudo sobre o consumo de peixe nos agregados familiares.

Entre Outubro e Novembro de 2002, foi efectuado um estudo ou censo das vilas nas duas margens do rio Zambeze, desde Katima Mulilo a Ilha Impalila. O estudo foi feito conjuntamente pelos departamentos de Pesca da Namíbia e Zâmbia.

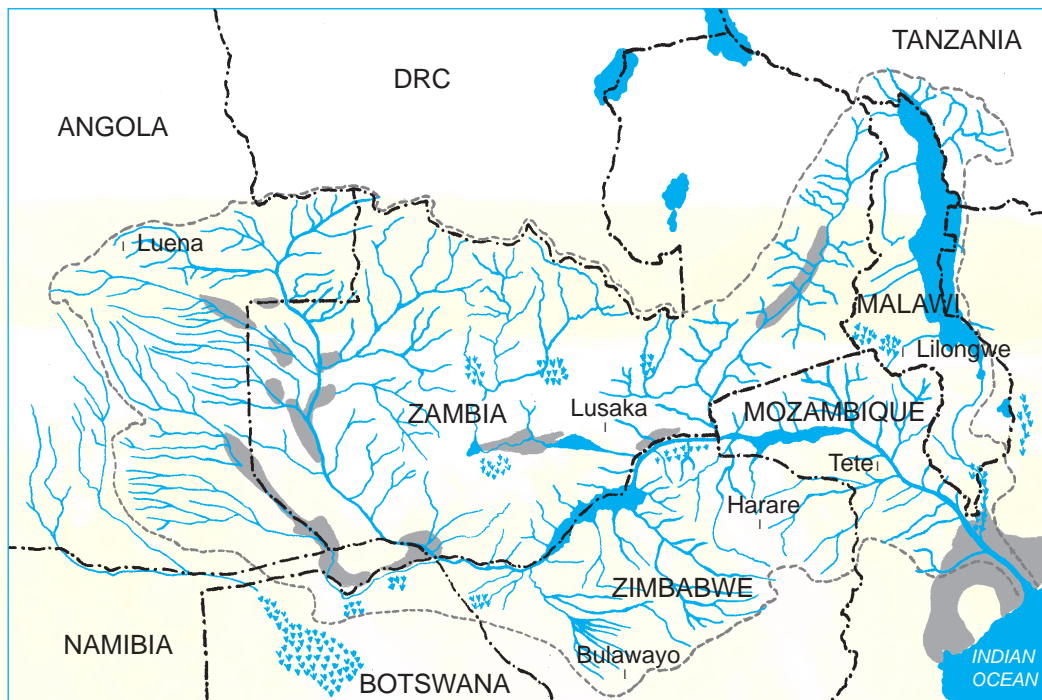
Um dos destaques particulares do projecto tem sido avaliar o papel que

as comunidades e as autoridades tradicionais podem desempenhar na gestão da actividade pesqueira.

Foram efectuadas consultas dos dispositivos legais em todas as partes das planícies de alagamento do Caprivi. Durante essas consultas, houve encontros com as comunidades e autoridades tradicionais nos quais discutiu-se a legislação pesqueira pendente. Este facto permitiu explorar-se o papel que estes actores podem desempenhar em futuras acções de gestão.

Foram efectuados esforços para se estabelecer um relacionamento entre as autoridades tradicionais de cada lado do rio uma vez que estes partilham preocupações comuns sobre as formas de garantir que haja bastante pesca para as actuais e futuras gerações. □

THE ZAMBEZI



THE ZAMBEZI BASIN AT A GLANCE

- The Zambezi basin is the most shared in southern Africa and third largest in Africa after the Congo and the Nile.
- The Zambezi drains a total area of over 1.32 million sq kms., stretching across eight countries - Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe.
- The Zambezi river rises on the Central African Plateau in the Kalene Hills in north-western Zambia to its delta in Mozambique before flowing into the Indian Ocean.
- The basin takes up approximately 25 percent of the total geographic area of the riparian countries, estimated at 5.6 million sq kms.
- At least 38.4 million of SADC's estimated 200 million people live within the basin.
- Some of the major urban areas in the basin include Luena in Angola, Kasane in Botswana, all urban centres in Malawi, Tete in Mozambique, Katima Mulilo in Namibia, virtually all urban areas in Zambia including the capital Lusaka, and most of the cities in Zimbabwe, including Harare.
- Victoria Falls, popularly referred to as one of the seven natural wonders of the world, along with lakes such as Kariba and Cahora Bassa, (which supply electricity to some of the countries in the region), are all located on the Zambezi river.
- The largest natural fresh water lake in the basin is Lake Malawi/Nyasa that covers 28,000 sq kms and is Africa's third largest fresh water lake after Lakes Victoria and Tanganyika.

SARDC IMERCSA, 15 Downie Avenue, Belgravia, PO Box 5690, Harare, Zimbabwe
 Tel: 263-4-791141 Fax: 263-4-791271 Email: cep@sardc.net
 Internet: www.sardc.net/imercsa/zambezi



IUCN
 The World Conservation Union



Sida