



ZAMBEZI WATERCOURSE COMMISSION



THE ZAMBEZI

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Permanent ZAMCOM Secretariat fully operational

by Leonissah Munjoma

THE PERMANENT Zambezi Watercourse Commission (ZAMCOM) Secretariat is now fully operational in Harare, Zimbabwe.

This follows the appointment of an Executive Secretary who took office in July 2014, and was joined by professional and support staff in January 2015.

ZAMCOM is a river basin organisation set up by the eight countries that share the Zambezi River through an agreement signed in 2004. These are Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe.

The objective of ZAMCOM is to "Promote the equitable and reasonable utilisation of the water resources of the Zambezi watercourse as well as the efficient management and sustainable development thereof".

The Secretariat is one of the three organs of the ZAMCOM as stipulated in the Agreement. The others are the Council of Ministers and the ZAMCOM Technical Committee. The ZAMCOM Secretariat is financially supported by the Riparian states and a number of cooperating partners, including the Danish Government through Danida, the German Government through and other partners GIZ, and the World Bank.

The Secretariat is expected to provide efficient and timely support for cooperation among the Riparian states as well as plan and organise basin-wide activities involving stakeholders at all levels.

The Secretariat is led by Professor Zebediah Phiri, a Zambian and a well-respected water re-

sources engineer who has spent most of his life working on issues around water resources development and management in his country, the region and beyond.

Professor Phiri comes to the Secretariat with a wealth of experience in the transboundary nature of water resources development and management, having been manager for the Zambezi Action Plan Project 6 Phase 2, a SADC project that witnessed the birth of the ZAMCOM Agreement.

He has also served as Dean of the School of Engineering at the University of Zambia. He has sat on boards of various international organisations, including the Global Water Partnership for Southern Africa.

The Secretariat has engaged regional professional staff for its various programmes, which include strategic planning; information, communication and partnerships; the Zambezi Water Information System; and accounts, finance and human resources. It also has support staff in various areas.

As part of its three-year work plan, the Secretariat is expected to develop a strategic plan for the Zambezi Watercourse that will be used as a reliable and acceptable basis for decision-making on investments as well as the prioritisation of programmes and projects.

The Secretariat is also expected to operationalise the key provisions of the ZAMCOM agreement, among them, rules of notification and prior consultation on planned measures/projects and the collection and dissemination of information and data in support of improved planning and decision-making for the sustainable management and development of the basin. □





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EDITORIAL

THIS SPECIAL edition of *The Zambezi* newsletter focuses on ZAMCOM, its meetings and plans, and highlights some key current issues in the Zambezi River Basin, including disaster risk reduction, as this is a matter of great concern to the entire basin community.

Early warnings that are issued without enough community awareness have failed to yield the desired results.

To ensure that people respond to warnings, all the links in the chain, from high-technology meteorology to low-technology warnings and awareness-raising, must be put in place if the impact on people affected by disasters such as floods and droughts is to be reduced.

The SADC 6th River Basin Organisations workshop underscored the need to strengthen early warning systems and information dissemination on climate-related disasters, and noted the need to integrate scientific and local knowledge for forecasting and early warning.

The workshop was held in November 2014 under the theme “Strengthening Regional Cooperation and Resilience in Water-Related Disasters”.

Basin States were urged to promote Indigenous Knowledge Systems (IKS) by strengthening documentation and dissemination, including introducing the subject into the school curriculum.

The Zambezi Basin States have improved their early warning systems since the 2000 Cyclone Eline floods that claimed about 700 lives. During that time former Mozambican President Joaquim Chissano observed that “warnings must be clear and simple and communities at risk must trust those delivering the warnings”.

Communities have over the years relied on indigenous methods for forecasting the seasons and coping with numerous weather-related stresses. For example, one of the short-term weather predictions for rain in Mozambique is that “when the wind blows from the land it is believed it is the husband going to the sea to meet the wife and the result is the rain.”

Communities have also been using the behaviours of birds, animals, insects, and atmospheric elements such as the moon, sun and wind as indicators of weather.

When a bird known as *dzvotsvotsvo* (rain bird) in Zimbabwe starts to call, it warns communities that heavy rains will fall that day. Those herding cattle will start going back home and those who had crossed the rivers would start crossing back before the floods may occur.

As weather hazards continue to increase in frequency, there is need to make greater use of IKS as a response mechanism. Incorporating IKS into early warning systems provides for solutions which come from and are understood by communities.

Zambezi Basin States have established Early Warning Centres (EWC). In Zambia, for example, the EWC responds to priorities and actions identified in the National Adaptation Plan of Action of Zambia, which articulates the need for securing, transferring and installing critical technologies, as well as developing the necessary systems for climate change-related information to inform decision-making processes.

The technologies required to achieve these aims will increase the capacity of the national early warning network to forewarn and rapidly respond to extreme climate events.

At basin level, the Zambezi Watercourse Commission (ZAMCOM) Secretariat has started monitoring floods in the basin from space using an open source software tool known as Water Observation and Information System (WOIS).

The system converts satellite images into maps showing the development and current extent of the floods.

The system will further be developed and integrated into the Zambezi Water Information System (ZAMWIS) to predict floods and water levels.

Professor Zebediah Phiri, the Executive Secretary of ZAMCOM Secretariat explains that, “Disaster risk reduction and management is a cornerstone of the ZAMCOM agreement and the flood maps derived from WOIS make an important contribution to the current enhancement of the ZAMWIS and towards the implementation of a fully operational Decision Support System that incorporates for flood forecasting and early warning in the Zambezi River Basin.”

It is expected that as climate change increases, the frequency and intensity of climate-related shocks will increase. The improvement of early warning systems integrated with local knowledge is one way to adapt to a changing climate.

The Zambezi /O Zambeze

Volume 10.1 for April 2015, produced in English and Portuguese, highlights key issues in the basin, noting opportunities and challenges to the environment and humanity.





ZAMCOM Council of Ministers meets

by Leonissah Munjoma

THE ZAMBEZI Watercourse Commission (ZAMCOM) is set to hold the second meeting of its top most governing body, the ZAMCOM Council of Ministers.

Water Ministers from the eight Basin States, Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe, are expected to attend the meeting to be held in Harare, Zimbabwe, the host for the Permanent ZAMCOM Secretariat.

As part of its agenda, the Council of Ministers, constituted in May 2013 in Angola, is expected to consider progress of ZAMCOM so far.

The meeting will consider the adoption of ZAMCOM guidelines and procedures as well as discuss the financial sustainability of ZAMCOM. It is expected to consider recommendations of ZAMTEC on matters related to the ZAMCOM work plan and budget.

The Council will also elect the country that will be its next chairperson for a period of one year, according to the provisions of the ZAMCOM Agreement.

The Council of Ministers is the apex of the three governing organs of ZAMCOM. It is the decision-making arm while ZAMTEC is a technical advisory body. The ZAMCOM Secretariat provides overall management, supported by the Project Implementation Units and working groups.

Specific tasks of the ZAMCOM Council include adopting policies and decisions, providing guidance, approving and overseeing the implementation of the commissions plans, programmes and projects.

The Council is also responsible for determining the annual contribution of each Member State towards the budget.

The first meeting held in Angola deliberated on many issues including choosing Zimbabwe as the host for the permanent Secretariat of ZAMCOM.

This meeting is a landmark event for ZAMCOM as it is the first Council of Ministers meeting after the Permanent ZAMCOM Secretariat has been established. The first was held under the Interim ZAMCOM Secretariat. □

The ZAMCOM process, a worthwhile journey

by Eglina Tauya

THE PROCESS that led to the formation of the Zambezi Watercourse Commission (ZAMCOM) is unique and the first of its kind for river basin organisations and for the SADC region. Though the process took nearly three decades for ZAMCOM to be established, the journey was worthwhile as it had major developments which took place along the way.

The developments included negotiations on the management of water resources resulting in the signing, ratification and entering into force of the regional legal and institutional tool, the SADC Revised Protocol on Shared Watercourses in 2003; formulation of the SADC Regional Strategic Action Plan (RSAP) for Integrated Water Resources Management (IWRM); the Regional Water Policy and Strategy of 2005; and establishment of other river basin organisations.

The negotiations to establish ZAMCOM date back to the late 1980s. These were suspended in the early 1990s to allow for discussions on the establishment of the regional framework, the SADC Protocol on Shared Watercourses that was initially signed in 1995.

The Protocol was revised in 2000 and came into force in 2003 upon ratification by the required two-thirds majority. This instrument was renamed the Revised Protocol on Shared Watercourses.

The need for such a protocol, came about during the developmental discussions of the Zambezi River Basin when it was realized that the regional instrument would guide the establishment of various river basin organizations, including that of the Zambezi and serve as a “modus operandi” for the management of shared watercourses in southern Africa.

Fresh negotiations related to ZAMCOM resumed in 2002. An agreement was later concluded and signed in Kasane, Botswana on 13 July 2004 by the majority of the Member States.

The ZAMCOM Agreement came into force seven years later, in June 2011, after six of the eight Riparian States successfully ratified the Agreement and deposited instruments of ratification at the SADC Secretariat.

The long time it took to finalise the ZAMCOM Agreement has resulted in a powerful, comprehensive and much more complex pact than other agreements signed earlier.

The ZAMCOM negotiation process projected trans-boundary water issues to the top of the political agenda in the SADC region.

Following the original Protocol on Shared Watercourses, a specialised regional water sector unit was established in SADC while the first Regional Strategic Action Plan on Integrated Water Resources Management was approved by SADC Summit in 1998.

This action plan facilitated the establishment of other river basin institutions in the SADC region including the Orange-Senqu River Commission and the Limpopo Watercourse Commission.

Associated key influencing factors behind the ZAMCOM Agreement include the recognition and consciousness by the Member States of the scarcity and the value of water resources in southern African and the need to provide people in the region with access to sufficient and safe water supplies.

The significance of the Zambezi watercourse as a major water source in the region has been realised, as well as the need to conserve, protect and sustainably utilize its resources.

ZAMCOM is expected to play a critical role in ensuring balanced and harmonious development of the Zambezi basin water resources.

The ZAMCOM Agreement is a testimony to SADC’s commitment to regional integration and promotion of effective cooperation in the management and development of water resources. □



ZAMCOM kicks off activities

by Evans Kaseke and Admire Ndhlovu

THE ZAMBEZI Watercourse Commission (ZAMCOM) Secretariat has started implementing activities that will focus on strengthening the ability of the commission to better coordinate and discharge its responsibilities.

The initial one-year work plan was approved by the Zambezi Watercourse Commission Technical Committee (ZAMTEC) at their meeting in July 2014 in Harare, Zimbabwe. A three-year work plan from July 2015 to 2018 is expected to be considered and approved during the upcoming ZAMTEC meeting set for end of March 2015.

In the short term, the work plan seeks to ensure that “ZAMCOM is established and operationalised, functioning as a river basin organisation providing efficient and timely support to the cooperation among the Riparian states and capable of planning and organising basin-wide activities.”

In the long term, it is expected to ensure “equitable and reasonable utilisation of the water resources of the Zambezi watercourse as well as their efficient management and sustainable development.”

To this end, a lean and sustainable ZAMCOM Secretariat was established, with regional professional staff for its various programmes which include Strategic Planning; Information, Communication and Partnerships; the Zambezi Water Information System (ZAMWIS); Accounts, Finance and Human Resources; and Information Technology.

Key outcomes will include strengthening the ZAMCOM Secretariat for it to provide efficient and timely support to Riparian States and be able to plan and organise basin-wide activities.



The Secretariat’s work plan also seeks to establish operational, effective and financially stable ZAMCOM institutional arrangements including both top-down and bottom-up processes.

The plan will result in strengthening of useful biophysical, social and economic data, information and knowledge to enable strategies, assessments, studies and plans for sustainable management and development of water and related resources in the Zambezi River Basin to be put in place.

The plan will see the rolling out of a river basin management planning process delivering a Zambezi River Basin Strategic Plan (ZSP) that identifies, categorises and prioritises investment projects and programmes for management and development of water and related resources in the basin.

Another priority issue has to do with the further development of ZAMWIS through incorporation of a Decision Support System (DSS) for scenario and impact analysis of development projects, water balance studies and water allocation. The plan will provide an opportunity to demonstrate to key stakeholders in the Riparian States that ZAMCOM is able to deliver prioritised recommendations

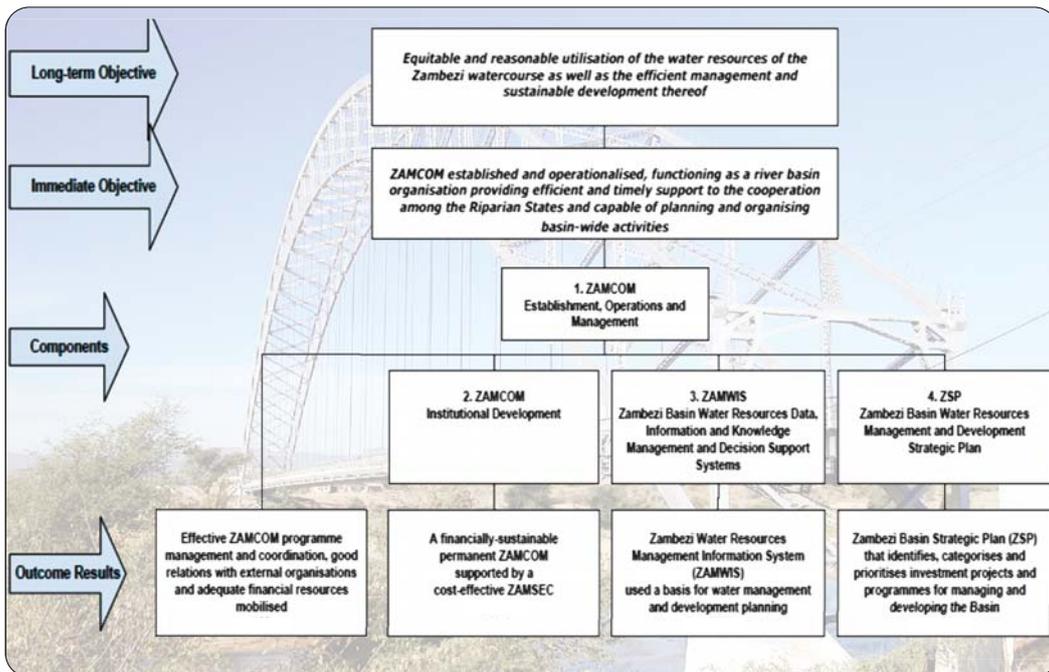
on key investments in water management and development in the basin, that are mutually beneficial to the governments and the peoples in the basin.

Key stakeholders include government departments, non-governmental and civil society organisations, as well as the general public.

The plan will enable decision-makers in the basin, notably ministers of water, environment, finance and planning, to make informed decisions on key investments in water management.

Another expected outcome is the attraction of potential investors from government, international financing institutions, and the private sector to invest in sustainable water management and development programmes and projects. □

Summary work breakdown structure



Unpacking the Zambezi IWRM strategy

by Admire Ndhlovu

THE ESTABLISHMENT of the permanent Zambezi Watercourse Commission (ZAMCOM) Secretariat (ZAMSEC), with a full complement of professional and support staff is a springboard to the implementation of the Zambezi River Basin Integrated Water Resources Management Strategy (ZAMSTRAT).

Developed in 2008 under the Zambezi Action Plan Project 6 Phase 2 (ZACPRO 6.2), ZAMSTRAT provides strategic directions on how the ZAMCOM objective “to promote the equitable and reasonable utilisation of the water resources of the Zambezi watercourse as well as the efficient management and sustainable development thereof” is to be achieved.

The ZAMSTRAT identifies four strategic objectives. These are to:

- develop and manage water resources to serve social and economic development in the basin;
- mainstream environment in the development and management of water resources;
- adapt water resources management to current and future climate variability and change; and,
- operationalise the institutional frameworks in support of basin-wide water resources development and management.

Activities and projects are listed and prioritised in terms of short, medium and long-term implementation timing over a 10 to 15 year period.

Activities for developing and managing water resources include addressing high demand for new water infrastructure to meet regional energy security, agricultural development and regional food security, as well as water supply and sanitation.

As part of mainstreaming environment in development and management of water resources, the IWRM strategy seeks to control water pollution particularly from point sources such as industries and mining areas to address the challenge of deteriorating water quality.

The strategy addresses the challenge of invasive aquatic weeds which have affected water resources in the basin. Activities will involve setting up national focal points on aquatic weed control as well as initiating joint monitoring and survey of aquatic weeds.

ZAMSTRAT will promote sustainable fishery management as a contribution to regional food security. This involves integrating fisheries development with water resources development.

The strategy will ensure that water resource development and management does not harm tourism potential as it is a major income earner in the basin. This involves development of catchment management plans incorporating areas of tourism value such as game management areas and wetlands.

ZAMSTRAT envisages to adapt water resources management to current and future climate variability and change by improving the knowledge base of impacts on water resources, improving flood and drought management and mitigation mechanisms at national and regional scale, as well as developing regional capacity to adapt to climate change and make

use of the development opportunities associated with global climate change mitigation.

ZAMSTRAT calls for strengthening of organisational, financial and human resource capacities of water management institutions at regional, national and local levels.

This involves development and implementation of performance based training programmes on water resources management based on institutional development assessments, as well as implementation of a well-designed plan to harmonise water resources management policies, legislation and strategies of the basin states.

The strategy recognises the need to improve and expand basin-wide water resources data collection, processing and information transfer systems.

There are plans to formulate and implement a data and information-sharing protocol for further operationalisation of the Zambezi Water Information System (ZAMWIS), a database initiated under ZACPRO 6.2. This includes harmonising data measurement and storage methods in the basin, improving basin-wide data collection systems as well as improving data and knowledge base on groundwater resources.

The strategy will promote broad-based stakeholder participation in water resources development and management.

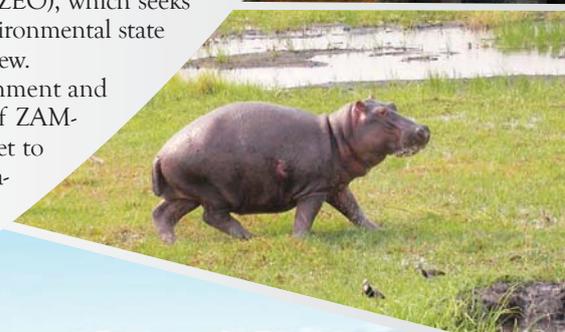
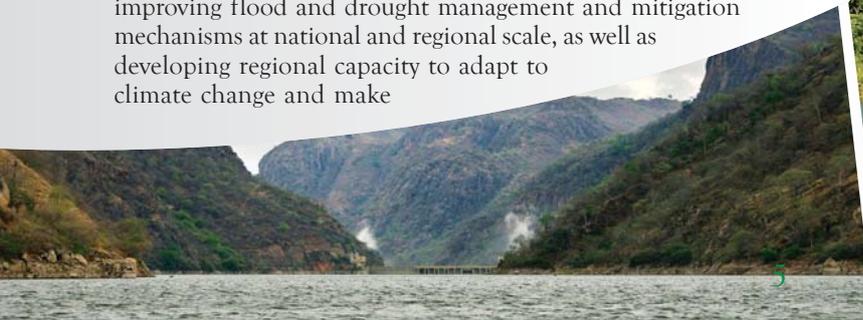
This involves promoting review of policy and legislation regarding stakeholder participation, formulating and implementing a public information programme to raise awareness among a broad range of stakeholders as well as strengthening and sustaining annual basin forums that provide a platform for information-sharing among basin states.

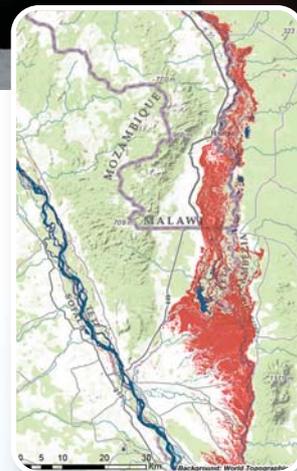
The potential outcomes envisaged over the next 10 to 15 years under the Zambezi IWRM Strategy through cooperation include poverty reduction, energy security, agricultural production and increased employment.

Already, several projects are being implemented as part of ZAMSTRAT.

These include Zambezi Water Information System (ZAMWIS), whose essential role is to provide the overarching information system for the Zambezi River Basin required to support the ZAMCOM in fulfilling obligations conferred under the ZAMCOM Agreement and the Zambezi Environment Outlook (ZEO), which seeks to keep the basin environmental state and trends under review.

The full establishment and operationalisation of ZAMCOM, therefore, is set to fast-track implementation of ZAMSTRAT. □





Zambezi basin countries strengthen flood preparedness mechanisms

RECENT FLOODS that affected parts of the Zambezi basin have once again put the regional disaster management strategies under focus.

Each time floods occur in the region, there is loss of life, and destruction of property and infrastructure such as roads and rail.

Floods have also caused increased health hazards as water sources are contaminated and waterborne diseases spread easily, including diarrhoea and malaria.

Tens of thousands of people in Malawi, Mozambique and Zimbabwe have been severely affected by floods caused by Tropical Storm Chedza, which started in December and continued throughout February.

Malawi has been hard hit by the current floods. More than 200 people have died and 500,000 more displaced, according to media reports from that country.

Extensive damage to crops, livestock and infrastructure has occurred in southern districts of Nsanje, Chikwawa, Phalombe and Zomba.

As a response measure, President Peter Mutharika declared a state of disaster in 15 districts.

"I am deeply concerned with the situation at hand, houses have collapsed, other people have lost their lives due these floods that have affected fifteen districts in our country, a situation that has never happened before in the history of our country," he said after visiting affected people in the Lake Malawi district of Mangochi.

The Malawian government has urged people living in flood-prone areas to urgently relocate to upland areas to avoid losing more lives.

Mozambique is also facing similar challenges.

"The floods have killed 117 people, an increase from the last balance of at least 84 dead a week ago," said Mozambican deputy health minister, Mouzinho Saide.

A majority of the deaths occurred in the central coastal region of Zambezia, he said.

"The deaths were caused by drowning, lightning and collapsed houses."

More than 150,000 people have been affected.

In the Licungo basin, bridges were destroyed and the transmission line carrying power from the Cahora Bassa dam to the northern provinces of Nampula, Niassa and Cabo Delgado destroyed.

As for agriculture, 27,838 households have suffered crop losses over an area of 33,648 hectares.

The Council of Ministers of Mozambique declared an institutional red alert on 12 January for the Central and Northern parts of the country after heavy rains resulted in severe flooding.

Zimbabwe has reported flooding across the country, with the worst affected provinces being Manicaland, Mashonaland Central, Mashonaland East, Mashonaland West and Midlands.

According to preliminary assessments, approximately 6,000 people (1,200 households) have been affected, of which 2,500 people (500 households) are in urgent need of assistance. The flood-affected population has moved to higher ground, with some seeking refuge in schools.

The Zambezi Watercourse Commission (ZAMCOM) Secretariat closely monitored the flood situation in Malawi and Mozambique from space in order to facilitate the on-going development of early warning tools.

"This was done through the use of the Water Observation and Information System (WOIS) where free radar satellite images from the Copernicus Sentinel-1 mission were converted into maps showing the development and extent of the floods," ZAMCOM said in a statement.

"The information gathered is important to better assess the flood situation in Malawi and the development of an operational flood forecasting tool for ZAMCOM. With this tool, ZAMCOM will be able to demonstrate the extent of floods and water levels through state-of-the-art modeling tools."

The increasing intensity and frequency of floods in SADC has been linked to climate variability change.

According to the 5th Intergovernmental Panel on Climate Change report released in March 2014, land surface temperatures across the Zambezi basin and the rest of southern Africa increased by 0.5°C or more during the last 50 to 100 years, while global sea level rose by 19 centimetres between 1901 and 2010. Such weather conditions are ideal for tropical storms.

Although Africa contributes relatively little to global warming, the region may suffer from its effects.

With increasing impacts of climate variability and change, there is need to deepen response efforts at national and regional level.

Mozambique, for example, has put in place a vibrant response mechanism since the devastating floods of 2000 that claimed over 700 lives.

The government, through the National Institute for Disaster Management, set aside an estimated US\$275 million towards reducing risks of flooding.

Fewer people are being killed by flooding as early warning systems have improved.

At regional level, the SADC Secretariat and the United Nations signed a Memorandum of Understanding (MoU) in 2014 to establish a framework for cooperation to strengthen regional disaster response mechanisms in southern Africa.

The MoU seeks to improve the capabilities of SADC and Member States in disaster risk management, as well as advocate for the rights of poor people affected by social conflicts and natural disasters.

As a long term measure, African countries are pushing for adaptation to be at level footing with mitigation in the new climate agreement to be finalised later this year in Paris.

African countries are also pressing for a climate fund of US\$100 billion a year by 2020 to be made available to support adaptation efforts. □



Beyond the Zambezi Environment Outlook project

by Danai Matowanyika

PLANS FOR the next phase of the Zambezi Environment Outlook project are underway, to keep pace with the fast-changing environment of the river basin.

The current phase of the project started in 2012 and responds to the need to keep the state, trends and outlook of the environment under continuous review.

Implementation of the Zambezi Environment Outlook project consists of an outlook report, a series of Zambezi newsletters and a status report on integrated flood and drought mapping, brought new experiences, strengthened partnerships, and advanced knowledge of the basin.

The *Zambezi Environment Outlook* tracks environmental trends for the past 15 years, identifies emerging issues, and envisages potential opportunities and risks.

The newsletters feature key environmental issues taking place in the basin providing continuous updates which keeps stakeholders informed of important regional developments.

The *Status Report on Integrated Floods and Drought Mapping* combined spatial data with community views to identify hazardous areas and probe further the dynamics of these natural hazards.

The Zambezi Environment Outlook project holds vital and reliable information for future initiatives, especially in support of the Zambezi Watercourse Commission (ZAMCOM)'s three-year work plan.

Environmental indicators identified in the outlook will inform the work of the Zambezi Water Resources Information System (ZAMWIS) taking the initiative forward.

Looking beyond the current phase which comes to an end in September 2015, many new opportunities for knowledge enhancement are on the horizon.

Regional discussions, most recently at the SADC Water Division 6th River Basin Organisation Workshop held in October 2014, recognised the growing need for reliable and relevant climate models in southern Africa as most of the predictions being used to inform policies are derived from global climate models.

The next phase of the project is an opportunity to strengthen capacity of climate models and build on current initiatives being developed such as the ZAMWIS Decision Support System.

Strengthening climate models will provide the necessary tools needed for climate-smart designs and effective adaptation and resilience strategies within the basin.

Regional experts who attended the review workshop for the project in May 2014 had earlier on raised the need for reliable water modelling tools.

Expanding decision-making tools will allow policy and decision makers to adequately address environmental challenges and prevent loss of lives.

Considering the current trend of increased online reporting, the next phase seeks to build on ZAMWIS and create an online reporting tool where strategic indicators are consistently updated in a timely fashion.

These initiatives will consolidate the utilisation of the new ZAMWIS keeping it relevant as well as broadening access to vital information.

The next phase of the project will support the implementation of the new SADC Protocol on Environmental Management for Sustainable Development approved by Heads of State and Government in 2014, and other ongoing efforts directed towards creating climate change policies in the region, both of which will greatly benefit from up-to-date and reliable information.

Activities for the next phase of the Zambezi Environment Outlook project will provide a platform for ZAMCOM and partners to engage various communities across the basin.

Community outreach has the potential to spark long-lasting partnerships, encourage knowledge sharing and raise awareness of water resources issues.

The next phase is an opportune platform to progress sustainable development and advance efficient management of the Zambezi and its water resources.

The Zambezi Environment Outlook project is an initiative by ZAMCOM and SADC, being implemented by SARDC's I. Musokotwane Environment Resource Centre for Southern Africa (IMERCSA), with support from GIZ, UK Aid and Australian Aid. □



Highlights of the Status Report on Integrated Floods and Drought Mapping

THE STATUS report captures changes in frequency and severity of floods and droughts, graphically and through maps, providing evidence that can be used as a basis for intervention at local, national and regional level. It presents an analysis of elements essential to mapping floods and droughts including population, land cover and use, soils, topography, hydrology, as well as temperature and rainfall patterns, and identifies flood-prone areas in the basin.

The report integrates scientific research with community experiences of floods and droughts in selected sites. Discussions with communities revealed that short dry spells of as short as two weeks during the October to November period, or the late onset of rainfall in previous seasons negatively affects crop yields and household food security. Through indigenous knowledge and local observations, communities have noticed long-term changes in environmental and the climatic patterns, further strengthening the case for such information to be included in national adaptation strategies and policies.

The report notes that real-time data is crucial for effective early warning systems and will enhance local knowledge. Harmonisation of such data will portray a more accurate image of water resources in the basin. The report notes the need to strengthen preparedness and pro-active measures as most strategies are focused on responsive measures. The status report is expected to raise awareness among stakeholders and to aide policy makers in making informed decisions as it provides convincing visual and scientific evidence of changes in floods and drought patterns in southern Africa. □



The Zambezi River

- Is the longest river in southern Africa and fourth longest in Africa after the Nile, the Congo and the Niger.
- Rises on the Central African Plateau in the Kalene Hills in north-western Zambia and flows 3,000 km to its delta in Mozambique at 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 hydro electric dams and their lakes.

The Zambezi Basin

- Is the largest and most shared river basin wholly within southern Africa.
- Covers about 25 percent of the total geographic area of the eight riparian states.
- Is home to more than 40 million people, projected to reach 51 million by 2025.
- Has many different ethnic groups and cultures with a proud history stretching back thousands of years.
- 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 areas 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 the third deepest in the world.

