



FIRST CALL FOR ABSTRACTS

26th WaterNet/WARFSA/GWP-SA Symposium on

Accelerating Implementation of Integrated Water Resources
Management in order to Close the Water Investment Gap
by 2030 and Beyond in Eastern & Southern Africa

A Blended Event to be held
virtually and at the
Ciela Resort, Lusaka, Zambia

29 - 31
OCTOBER 2025

JOINTLY CONVENED WITH

International Association of Hydrological
Sciences (IAHS), Water Research
Commission, AU/NEPAD Southern African
Network of Water Centres of Excellence
(AU/NEPAD SANWATCE) and the Local
Organizing Committee led by the Ministry
of Water Development and Sanitation,
Republic of Zambia

*With support from the Government of the
Republic of Zambia*



BACKGROUND

The 26th WaterNet/WARFSA/GWP-SA Symposium will be held in Lusaka, Republic of Zambia at Ciela Resort, 29th – 31st October 2025 under the theme: *Accelerating Implementation of Integrated Water Resources Management in order to Close the Water Investment Gap by 2030 and Beyond in Eastern & Southern Africa*. The 26th Symposium will be hosted by the Ministry of Water Development and Sanitation in collaboration with other partners.

The Symposia have been held annually in the Eastern and Southern African regions for the past 25 years to promote interaction among policymakers, academics, practitioners from water and related sectors, and cooperating partners. Together, they identify regional issues, gaps and priorities that require further research and support. Great emphasis has been placed on integration of knowledge, particularly involving scholars from the natural and social sciences.

This year's symposium sub-themes have been aligned to the of closing of the water investment gap, achievement of Sustainable Development Goals (SDGs) and the SADC Water Research Agenda under the Regional Strategic Action Plan (RSAP) on Integrated Water Resources Development and Management Phase V, whose main objective is:

- Promoting evidence-based implementation of SADC water programmes and projects through multi- and inter-disciplinary research, and synthesis of existing and new information, which will lead to a realization of SADC developmental goals.


SUB-THEMES

Policymakers, academics, practitioners from water and related sectors, and cooperating partners are invited to register for and attend the symposium and make use of this opportunity to listen to and debate findings from presentations focused on the different sub-themes. Authors are now being invited to submit abstracts of their research papers for consideration by the Scientific Committee targeting the sub-themes below.

Water–Land–Energy–Agriculture NEXUS for Sustainable Development

The Water-land-Energy-Agriculture (WLEA) Nexus is a critical framework for understanding the complex interconnections between these essential resources. As the world grapples with the challenges of sustainable development, it is increasingly recognized that critical resources such as water, land, energy, and agriculture are inextricably linked, and that management decisions in one sector can have far-reaching impacts on others. The WLEA Nexus approach seeks to promote integrated management and governance of critical resources, recognizing the trade-offs and synergies that exist between and among them. By adopting a nexus approach, policymakers, practitioners, and researchers can work together to identify solutions that optimize benefits across multiple





sectors, while minimizing negative impacts. In this regard, under this Sub-theme, abstracts are invited that explore the application of WLEA Nexus approach to achieve sustainable development goals, including reducing poverty, promoting economic growth, and protecting the environment.

While it is acknowledged that water, land, energy and agriculture are key for socio-economic development, it is, however, important to stress the need for investments in this nexus in eastern and southern Africa. Investments in the WLEA nexus are critical for achieving sustainable development as the interconnectedness of these sectors means that investments in one area can have cascading benefits across the others. There is, therefore, a need for strategic funding directed towards projects and initiatives that consider the interconnectedness of these four crucial resources, aiming to optimize their use and management of trade-offs between them to achieve sustainable development, particularly in areas facing resource scarcity and climate change challenges.

Submissions are welcome from diverse disciplines, including water resources management, energy studies, land and agriculture to mention but a few. Abstracts may focus on theoretical frameworks, case studies, policy analysis, or innovative solutions that demonstrate the potential of WLEA Nexus approach to drive sustainable development. By sharing knowledge and experiences, the aim is to advance the state-of-the-art in nexus thinking and practice, and to identify new opportunities for collaboration and innovation.


Abstracts for this sub-theme should address and of the following or related topics:

- Strategies for aligning policies across water, land, energy, agriculture sectors.
- Best practices and case studies on multi-sectoral governance frameworks.
- Technological Innovations for Sustainable WLEA Nexus Management.
- Impacts of climate change on interconnected resource systems.
- Adaptive strategies and mitigation measures to bolster system resilience.
- Balancing competing demands among WLEA sectors in integrated systems.
- Analyzing the economic, social, and environmental costs and benefits of WLEA resource management decisions.
- Community-Based and Indigenous Approaches to the WLEA Nexus
- Incorporating traditional knowledge and local practices in sustainable WLEA resource management.
- Case studies of community-led initiatives and participatory governance in enhancing WLEA nexus sustainability.
- Investments in the WLEA Nexus implementation and operationalization.

Innovative Approaches, Practices and Technologies for Affordable Water Supply and Sanitation Services

The provision of affordable sustainable water supply and sanitation is critical for building resilient communities, particularly in the face of growing challenges such as climate change, urbanization, and water scarcity.

Access to safe and reliable water and sanitation services is essential for human health, economic development, and environmental sustainability. However, many communities worldwide continue to struggle with inadequate water and sanitation infrastructure, compromising their well-being and resilience. For adequate sustainable water supply and sanitation to be achieved, substantial investments are required. It is important for countries in eastern and southern Africa to come up with innovative financing mechanisms for this sector. Therefore, research, policy and development to showcase innovative solutions, and



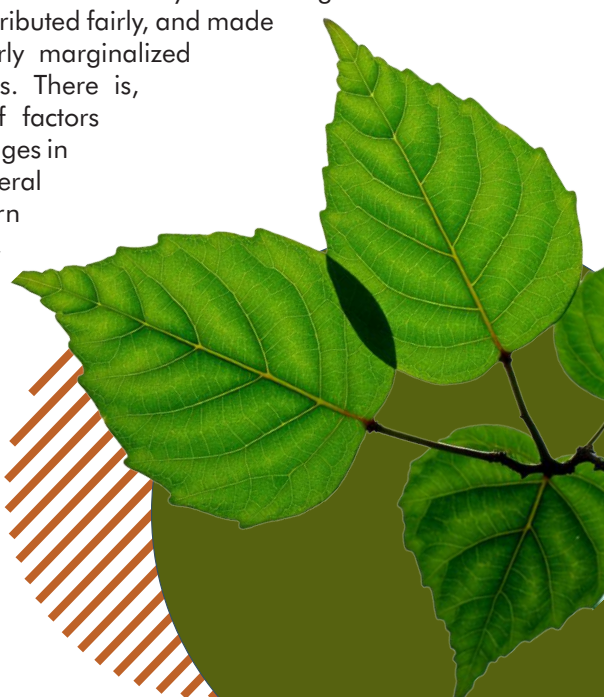
practices that promote sustainable water supply and sanitation for community resilience are being invited. There is need for initiatives that address the technical, social, economic, and environmental dimensions of water and sanitation management, including decentralized systems, water conservation, wastewater treatment, and sanitation technologies are welcome. Eastern and southern Africa also require more focus on policy and governance frameworks, community engagement and participation, and financing mechanisms that support sustainable water and sanitation service provision. Through sharing of knowledge and experiences during the 26th Symposium, the aim is to identify effective strategies for enhancing community resilience through sustainable water supply and sanitation.

Abstracts for this sub-theme may address any of the topics listed below of those closely related to them:

- Exploring decentralized and low-energy water treatment methods.
- Advances in water reuse and recycling to ensure reliable supply.
- Best practices for involving local communities in water supply and sanitation decision-making.
- Empowering residents to enhance resilience through grassroots initiatives in water supply and sanitation service provision.
- Strategies to design water and sanitation systems that can withstand extreme weather events.
- Integrating climate risk assessments into water and sanitation infrastructure planning and policy development.
- Developing policies that bridge water management, public health, and urban planning.
- Exploring public-private partnerships and sustainable financing models for resilient systems.
- Assessing how improved sanitation contributes to community health and productivity.
- Evaluating the socioeconomic benefits of sustainable water supply in urban and rural settings.
- Financing mechanisms for water supply and sanitation systems.

Water Governance and Investments for Sustainable, Equitable and Affordable Water Services

Access to sustainable, equitable, and affordable water services is a cornerstone of human development, public health, and economic growth. However, many regions, particularly in developing countries, face significant challenges in achieving this goal due to poor water governance, inadequate infrastructure, and limited financial resources. The eastern and southern African regions are grappling with challenges for effective water governance and strategic investments that are necessary for ensuring that water services are managed efficiently, distributed fairly, and made accessible to all, particularly marginalized and vulnerable populations. There is, however, an interaction of factors contributing to water challenges in Sub-Saharan Africa in general and eastern and southern African regions in particular, weak water governance stands out as a major contributor hindering the effective management of water resources and the delivery of water services.





The current state of water governance in Sub-Saharan Africa is characterized by the following:

- Institutional fragmentation as multiple institutions and stakeholders are involved in water management, resulting in poor coordination and overlapping responsibilities.
- Limited capacity in terms of technical, financial, and human resources hindering the effective governance of water resources and the delivery of water services.
- Lack of transparency and accountability mechanisms leading to corruption, inefficiency, and unequal access to water services.
- Inequitable distribution of water resources with marginalized communities facing significant challenges in accessing safe and affordable water.

In the midst of the above challenges, good and appropriate water governance is as a panacea to the current water governance challenges as this is a critical factor for adequate and sustained progress towards achieving Sustainable Development Goal (SDG) 6. Good water governance is enhanced by the adoption and implementation of particular approaches and frameworks such as IWRM, ICM, WEF nexus and nature-based solutions. The implementation of these approaches will need to be underpinned by substantial investments. Good water governance can only be achieved through the involvement of key stakeholders that include governments, private sector, academic institutions and the development sector. These stakeholders will need to craft and implement an innovative financing mechanism aimed at supporting good water governance approaches.


Effective water governance requires consideration of the social dimensions of water management, ensuring that the needs and rights of all stakeholders, particularly marginalized and vulnerable groups, are considered. Social inclusion is critical for achieving equitable and sustainable water management outcomes. Under this Sub-theme, abstracts are invited that explore the intersection of IWRM and social inclusion, examining how water management policies and practices can promote social justice, reduce inequality, and enhance the well-being of all communities.

This sub-theme invites abstracts that address the following:

- Appropriate water governance arrangements at different levels (regional, national, transboundary and local).
- The adoption of different water governance frameworks including their operationalization and implementation.
- The role of artificial intelligence and machine learning in water governance.
- Legal and policy frameworks for water management as well as their efficiency.
- Models used for the delivery of water services, as well as differentiated pricing, subsidization, and incentives, as well as the human right to water.
- Financial water investments required for improving water governance.
 - Community Engagement in Water Governance.
 - Social Equity and Access to Water Resources.
 - Participatory Decision-Making in IWRM.
 - Gender Perspectives and Policy Frameworks Promoting Social Inclusion in Water Management

Changing Hydro-Climatic Regimes and Planning Tools for Climate Resilient Development Pathways

The world in general and the eastern and southern African regions in particular are experiencing significant shifts in hydro-climatic



patterns due to climate change, posing profound challenges to water resources, ecosystems, and socio-economic development. Rising temperatures, altered precipitation patterns, and increased frequency of extreme weather events, such as droughts and floods, are disrupting hydrological cycles, leading to water scarcity, reduced agricultural productivity, and heightened vulnerability among communities. These changes threaten the achievement of sustainable development goals (SDGs) and exacerbate existing inequalities, particularly in rural and marginalized areas. Climate change is projected to have a substantial macroeconomic impact on Eastern and Southern African countries, potentially resulting in a 5-15% loss of GDP by 2050. To address these challenges, there is an urgent need for robust planning tools, strategies and investments that support climate-resilient development pathways.

Given the impacts of climate change on hydro-climatic regimes in eastern and southern Africa, there is a need for research to focus on the impacts on both surface and ground water availability. Traditional approaches to water management are no longer sufficient as climate change is altering hydrological cycles, impacting water availability and quality, and threatening the health and livelihoods of communities worldwide. The use of a combination of climate models and hydrological data will have to be done in order to have proper knowledge regarding variability in rainfall, river flows, and the shrinking of critical water sources such as lakes and aquifers.

To navigate these challenges, there is a need for exploring innovative planning tools and frameworks that can enhance climate resilience and support sustainable development. These include integrated water resources management (IWRM), which promotes coordinated, and ecosystems and inclusive decision-making across sectors, integrated catchment management (ICM), which considers the entire catchment as a single system, recognizing the interdependence of land, water, and nature-based solutions (NBS), such as wetland restoration and reforestation, which enhance ecosystem services and buffer against climate impacts. Emphasis and investments have to be put on climate information services (CIS) and early warning systems (EWS) in improving preparedness and reducing risks associated with hydro-climatic extremes.

Discussions around this issue will have to focus on how key barriers to implementing climate-resilient pathways, including limited financial resources and investments, inadequate technical expertise, and fragmented governance structures can be tackled. Some of the solutions lie in increased investment in climate adaptation (e.g. sustainable water management practices, climate-smart agriculture techniques, and resilient infrastructure design), capacity-building programs, and multi-stakeholder partnerships that leverage local knowledge and global expertise.

This sub-theme invites abstracts that focus on:

- Understanding and addressing the challenges posed by changing hydro-climatic conditions.
- The impacts of climate change on hydrological processes including groundwater.
 - Complex relationships between hydrology, water security, climate change, and the environment.
 - Innovative water management approaches and planning tools.
 - Implementation of adaptive strategies, good

governance, and harnessing technology to navigate these challenges and create a sustainable and resilient future.

- Investments in climate adaptation and capacity building programmes for effective management of freshwater resources.

WATER, ECOSYSTEMS AND THE ENVIRONMENT

Water, ecosystems, and the environment are deeply interconnected, forming the foundation for sustainable development in society. Eastern and Southern Africa are home to diverse and fragile ecosystems, which are critical for supporting human well-being, economic development, and environmental sustainability. However, the two regions are confronted by significant challenges related to water scarcity and degradation of ecosystems and environment mainly due to climate change, population growth, and unsustainable resource use. Addressing these challenges require proper planning, strategic investments and capacity building in water resources management, ecosystem restoration, and environmental protection in order to build resilience and ensure sustainable development.

It is important to explore and understand the critical linkages between water, ecosystems, and the environment in eastern and southern Africa, putting an emphasis on the significance of integrated approaches to resource management. The two regions' water resources, including rivers, lakes, aquifers, and wetlands, are under increasing pressure from poor management, over-extraction, pollution, and climate variability. Several pressures are exacerbating these changes, i.e. land-use changes, e.g. deforestation, agricultural expansion, and urbanization, which disrupt hydrological cycles and degrade ecosystems. The loss of ecosystem services, such as water purification, flood regulation, and soil fertility, further undermines the regions' capacity to adapt to environmental changes and achieve development goals.

Investments in water infrastructure, ecosystem restoration, and environmental conservation are essential to address water, ecosystems and environmental challenges in eastern and southern Africa. Innovative financing mechanisms, such as green bonds and payment for ecosystem services (PES) will need to be encouraged and adopted. There is a need to highlight the importance of nature-based solutions (NBS), such as reforestation, wetland restoration, and sustainable land management, which enhance ecosystem resilience while providing multiple co-benefits, including improved water quality, carbon sequestration, and biodiversity conservation. For this to be a success, different stakeholders, need to be involved and these include governments, regional and international organizations, the private sector, civil society and local communities.

The interconnected challenges of water scarcity, ecosystem degradation, and environmental pollution in eastern and southern Africa demand urgent and coordinated action. Strategic investments in water, ecosystems, and the environment can unlock the regions' potential for sustainable development, fostering resilience, equity, and prosperity. By adopting integrated approaches, strengthening governance, and mobilizing resources, the region can safeguard its natural capital and build a sustainable future for generations to come. This study provides a roadmap for policymakers, investors, and practitioners to prioritize and implement investments that address the pressing environmental and developmental challenges of eastern and southern Africa.



The abstracts in this sub-theme should address:

- Innovative and best practices in water ecosystems and environmental management.
- Valuation of ecosystem goods and services
- The tools available to assess ecosystem goods and services and how to select the best tools for different contexts
- Engagement of stakeholders for input and feedback in ecosystem service assessment
- Plant–water relations and influence on the water cycle and the ecosystems in general.
- Including ecosystem goods and services in the development of water resources
- Integrated catchment management
- Pollution prevention and treatment
- Wise use of water-linked ecosystems and people's livelihoods
- Sustainable use of blue resources for economic development and other related topics.
- Investments in water, ecosystems and environment.

SUBMISSION OF ABSTRACTS

Authors are invited to submit their abstracts for presentation at the symposium for oral, poster or special session presentations. Abstracts should be:

- A paced.
- The title maximum of 350 words (Do not exceed the number of words as the system will not accept more than 350 words).
- The format for all text should be font size 12, Times New Roman and single-s should be no more than 16 words in title case.
- Authors' names should be written in such a way that the initials appear first followed by the last name.
- The authors names should indicate one corresponding author* (with an asterisk) and the email of the corresponding author.
- The affiliations of authors should be shown through letter superscripts (such as a, b, c).
- Five keywords should be included in alphabetical order.
- The abstract should include a clear statement of the theoretical issue to be addressed, the research methodology to be presented, and a concise summary of the findings and conclusion.
- Work must be unpublished at time of presentation.
- Maximum of 3 submissions per author, either as single author or joint co-author are allowed.

Abstracts Submission Platform

All abstracts will be handled and reviewed electronically via the conference's EasyChair submission

<https://easychair.org/conferences/?conf=26wnsymp>. Note that you will

need to set up an EasyChair account (if you do not already have one) before you login for your submission.

Several roles have been set on the platform for the 26thWaterNet/

WAFSA / GWP Symposium, kindly register as an author, all other roles will be done through invitation. When completing the



submission form on EasyChair, you will see a space which asks for an abstract to be typed in or

The Submission Form in Easy Chair also asks you:

- Your theme, your preferred presentation type/paper or a poster (note that the final decision will be taken by the programme committee).
- Whether you are under 35 years old.
- Any keywords that do not appear in the topics list that may facilitate the review process.

Selection Criteria

All abstracts submitted for oral/poster presentation will undergo a peer review process and the results will be communicated to the corresponding author. By accepting an invitation to present a paper, the author or at least one co-author commits to attending the conference.

ELSEVIER JOURNAL OF PHYSICS AND CHEMISTRY OF THE EARTH (JPCE) AND PROCEEDINGS OF INTERNATIONAL ASSOCIATION OF HYDROLOGICAL SCIENCES (PIAHS)

After the symposium authors will have an opportunity to submit their papers for review and publication in a special edition of the Journal of Physics and Chemistry of the Earth. It is a journal published by the Elsevier and the normal peer review process will apply. Guidelines for submitting a paper to this journal

are available: <http://www.elsevier.com/journals/physics-and-chemistry-of-the-earth/1474-7065/guide-for-authors>.

Authors will also have an opportunity to publish under the PIAHS (Proceedings of the International Association of Hydrological Sciences), a 6-page summary of the work presented during the Symposium. More details can be accessed at <https://www.proceedings-iahs.net/>.

Submissions will be via online. More details on submission will be announced at the symposium.



SPECIAL SESSIONS

All organizations interested in convening special sessions should submit their proposals on the digital platform as well. Please note that you will be required to show the relevance of the workshop to the symposium and the expected number of participants. The proposals need to be motivating, and will be allocated on a first come/first served basis. Each special session will be allocated approximately two hours. However, if more time is required the organizers should state this in the proposal. The proposal should state the materials and equipment that will be required.

PLEASE NOTE: Abstracts for special sessions should adhere to the deadlines and will be peer reviewed like all others.

IMPORTANT DATES AND REGISTRATION FEES

Deadlines

Deadline for submission of abstracts:	30 April 2025
Notification acceptance of abstracts:	31 May 2025
Deadline for early bird registration:	30 July 2025

Registration Fees for Physical Attendance

Early bird registration for international delegates	USD 390.00
Early bird registration for Zambia based delegates	ZMW 8,000.00
<i>Payable by 31st July 2025</i>	

Normal Registration for international delegates	USD 450.00
Normal Registration for Zambia based delegates	ZMW 10,000.00
<i>Payable by 30th September 2025</i>	

Late Registration for international delegates	USD 500.00
Late Registration for Zambia based delegates	ZMW 12,000.00
<i>Payable after 30th September 2025</i>	

Early bird International Student Registration	USD 330.00
Early bird Zambia based Student Registration	ZMW 3,500.00
<i>(Proof of studentship to be provided) Payable by 31st July 2025</i>	

Normal Registration for International Student delegates	USD 370.00
Normal Registration for Zambia based Student delegates	ZMW 5,000.00
<i>Payable by 30th September 2025</i>	

Late Registration for International Student delegates	USD 410.00
Late Registration for Zambia based Student delegates	ZMW 6,500.0
<i>Payable after 30th September 2025</i>	

Registration Fees for Virtual Participants

Early bird virtual registration for international delegates	USD 50.00
Early bird virtual registration for Zambia based delegates	ZMW 500.00
<i>Registration by 31st July 2025</i>	

Normal Virtual Registration for international delegates	USD 80.00
Normal Virtual Registration for Zambia based delegates	ZMW750.00
<i>Payable by 31st July 2025</i>	

Late Virtual Registration for international delegates	USD 120.00
Late Virtual Registration for Zambia delegates	ZMW 1,000.0
<i>Payable after 30th September 2025</i>	

Exhibitions

International organizations/company	USD 800.00
Local organization/company	ZMW 12,000

Special Sessions

International organizations/company

USD 800.00

Local organization/company

ZMW 12,000

Payable by 30th September 2025

Payment Details for International Participants

Bank Name: Stanbic Bank Botswana Limited
Branch: Fairgrounds
Branch Code: 064967
Account Name: WaterNet Trust
Account Number: 9060002591915
Swift Code: SBICBWGX
Account Type: USD
Bank Postal Address: Stanbic House, Plot 50672, Old Machel Drive
Fairgrounds, Gaborone, Botswana
Reference to be used: Symposium, Initials, Surname
(e.g. *Symposium Kabila*)

Payment Details for Local (Zambia) Participants

Bank Name: Zambia National Commercial Bank (ZANACO)
Branch: Cairo Road Business Centre
Branch Code: 01 00 40
Account Name: MEWD Drilling Account
Account Number: 0393994300815
Swift Code: ZNCOZMLU
Account Type: Current Account
Currency: Zambia Kwacha
Bank Postal Address: P.O. Box 33611, Cairo Road, Lusaka, Zambia
Reference to be used: Symposium, Initials, Surname
(e.g. *WaterNet M. Nyirenda*)

Kindly generate an invoice [HERE](#).

Requests for Customised Invoices and General Inquiries

- International participants request invoices on symposium@waternetonline.org.
- Local participants request invoices on info@mwds.gov.zm.

Proof of Payments

Please upload proof of payment [HERE](#).

It is **VERY IMPORTANT** to indicate delegate's name on Bank Transfers to facilitate processing of registration.

Registration

- Online registration can be done [HERE](#).

FOR FURTHER INFORMATION AND GENERAL INQUIRIES

More information on the Symposium is available [HERE](#).

- For requests for invitation letters, contact: symposium@waternetonline.org or info@mwds.gov.zm

TRAVEL AND ACCOMODATION

All delegates attending the symposium should secure accommodation early. Travel arrangements will also need to be done on time. More information on accommodation and travel is contained in Zambia Brief which can be found [HERE](#)

