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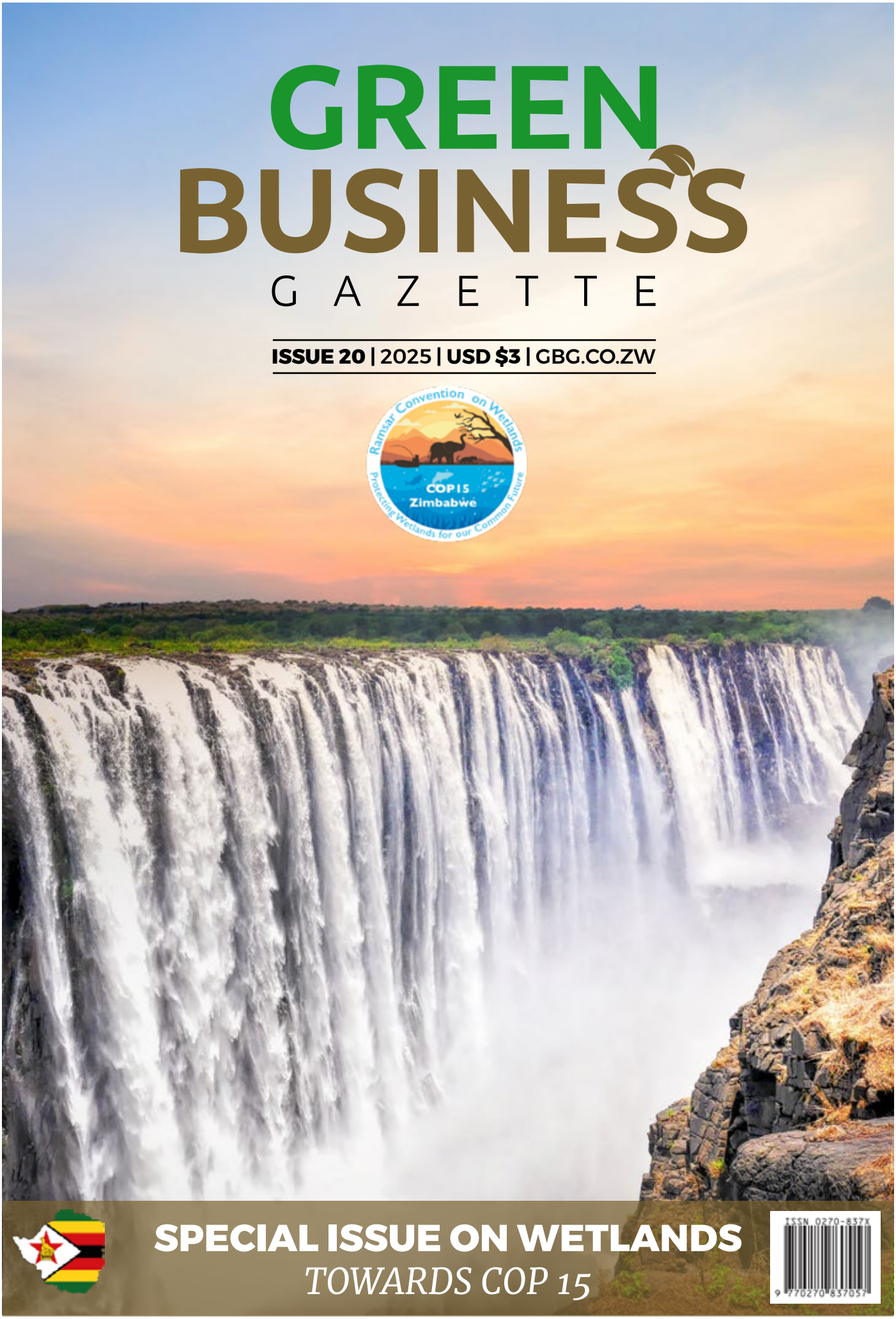

SPECIAL ISSUE ON WETLANDS

TOWARDS COP 15

ISSN 0270-837X

“Wetlands preservation is key to Sustainable Development”

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4th Floor, Pearl House; 61 Samora Machel Avenue, Harare, Zimbabwe
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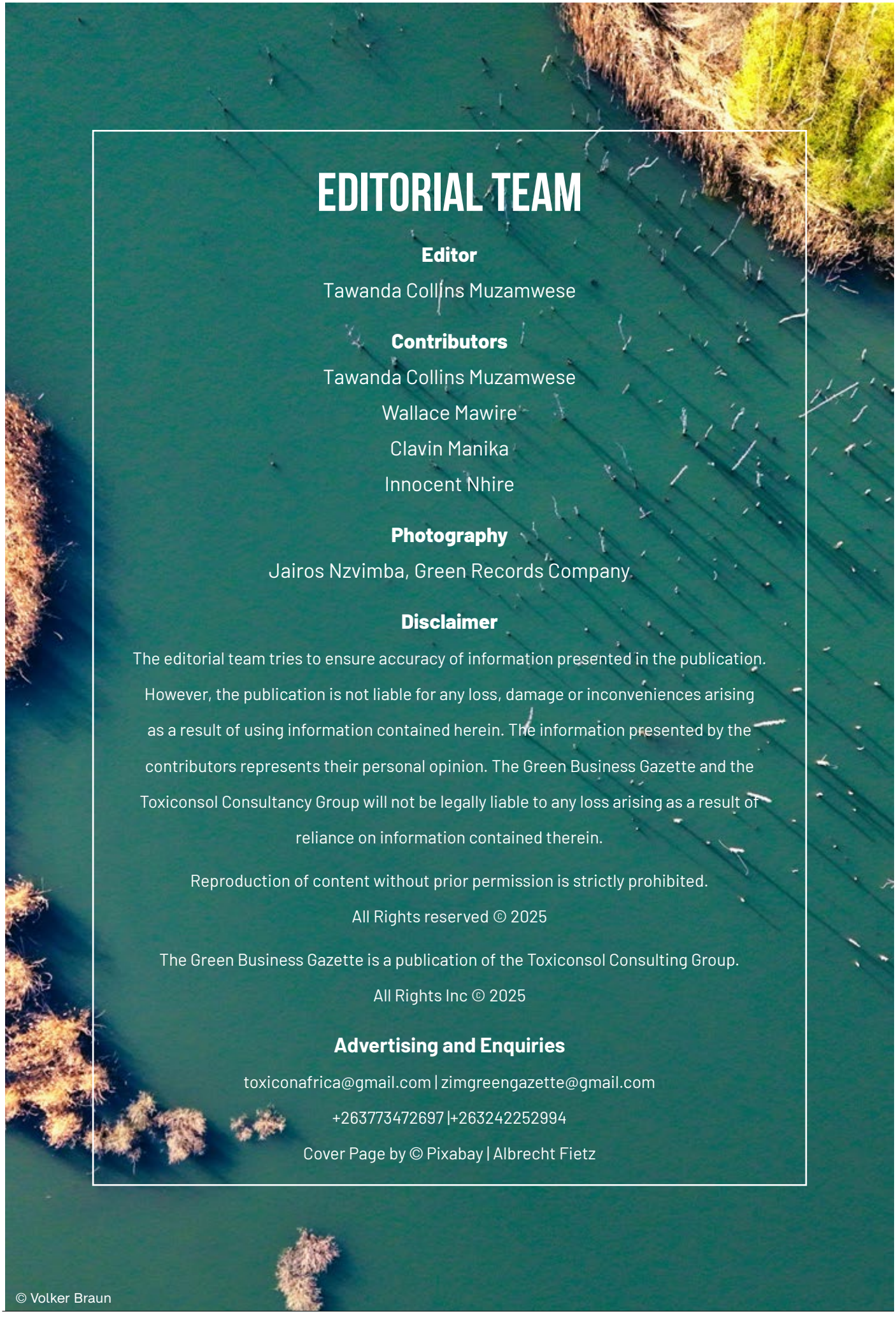

EDITORIAL TEAM

Editor

Tawanda Collins Muzamwese

Contributors

Tawanda Collins Muzamwese

Wallace Mawire

Clavin Manika

Innocent Nhire

Photography

Jairos Nzvimba, Green Records Company

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Advertising and Enquiries

toxiconafrica@gmail.com | zimgreengazette@gmail.com

+263773472697 |+263242252994

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FROM THE EDITOR'S DESK

"Let's take care of wetlands."

Greetings to our esteemed readers! Welcome to the Green Business Gazette Issue 20, which is a Special Issue on Wetlands. We have dedicated a whole issue to talk about the essential role of wetlands in the environment. In this particular issue, we zoom into the forthcoming COP 15 of the Ramsar Convention to be held in Victoria Falls between 23-31 July 2025. The 15th meeting of the Contracting Parties of the Ramsar Convention promises to be a world class event running under the theme – **"Protecting wetlands for our common future"**

A conscious approach towards protecting wetlands is the one desired for a sustainable society. As the world converges for COP 15, it is essential to take this opportunity to escalate the relevance of wetlands in our environment and society and concretise efforts towards their conservation.

The Green Business Gazette will continue to provide exclusive coverage on COP 15 proceedings, ensuring that stakeholders keep getting updates of this global event. This event will propel Zimbabwe to the epitome of the world as it underlines the commitment of the country towards sustainable management of wetlands.

Apart from covering the upcoming COP 15 event, this issue delves into some of the leading issues in the domain of wetlands. In this issue, we talk about the ecosystem based functions of wetlands, economic implications, aesthetic functions and also some of the emerging challenges in wetlands management.

As the Green Business Gazette, we believe that education and awareness on wetlands conservation should be an ongoing initiative, which should inform the current and future generations. At the current rate of environmental degradation taking place on our wetlands, it is essential to put our ideas together for a greener and sustainable future.

It is my wish that the upcoming event of the COP 15 in Victoria Falls and the ongoing conservation efforts to protect wetlands, will gain traction at all levels in our communities. We have a duty and responsibility to make the right choices for the enhancement of environmental quality.

Our efforts remain etched on translating theory into practice and making our promises become reality. Our future is indeed in our hands. Let's take care of wetlands. Until the next edition.

Tawanda Collins Muzamwese

Editor-in-Chief

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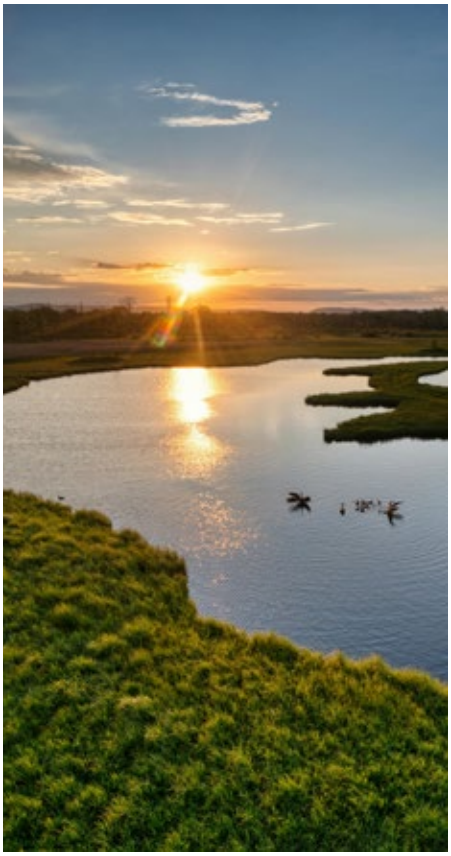
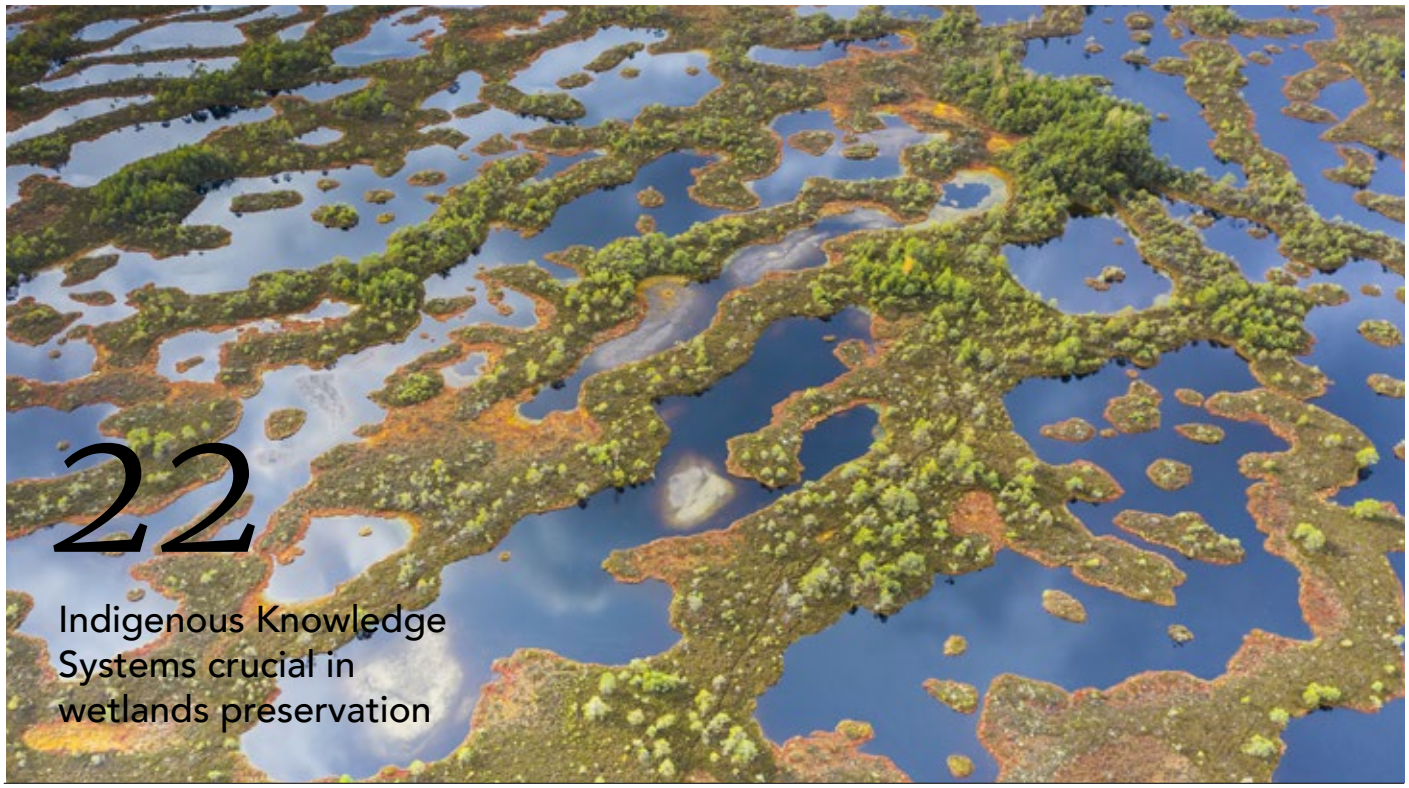
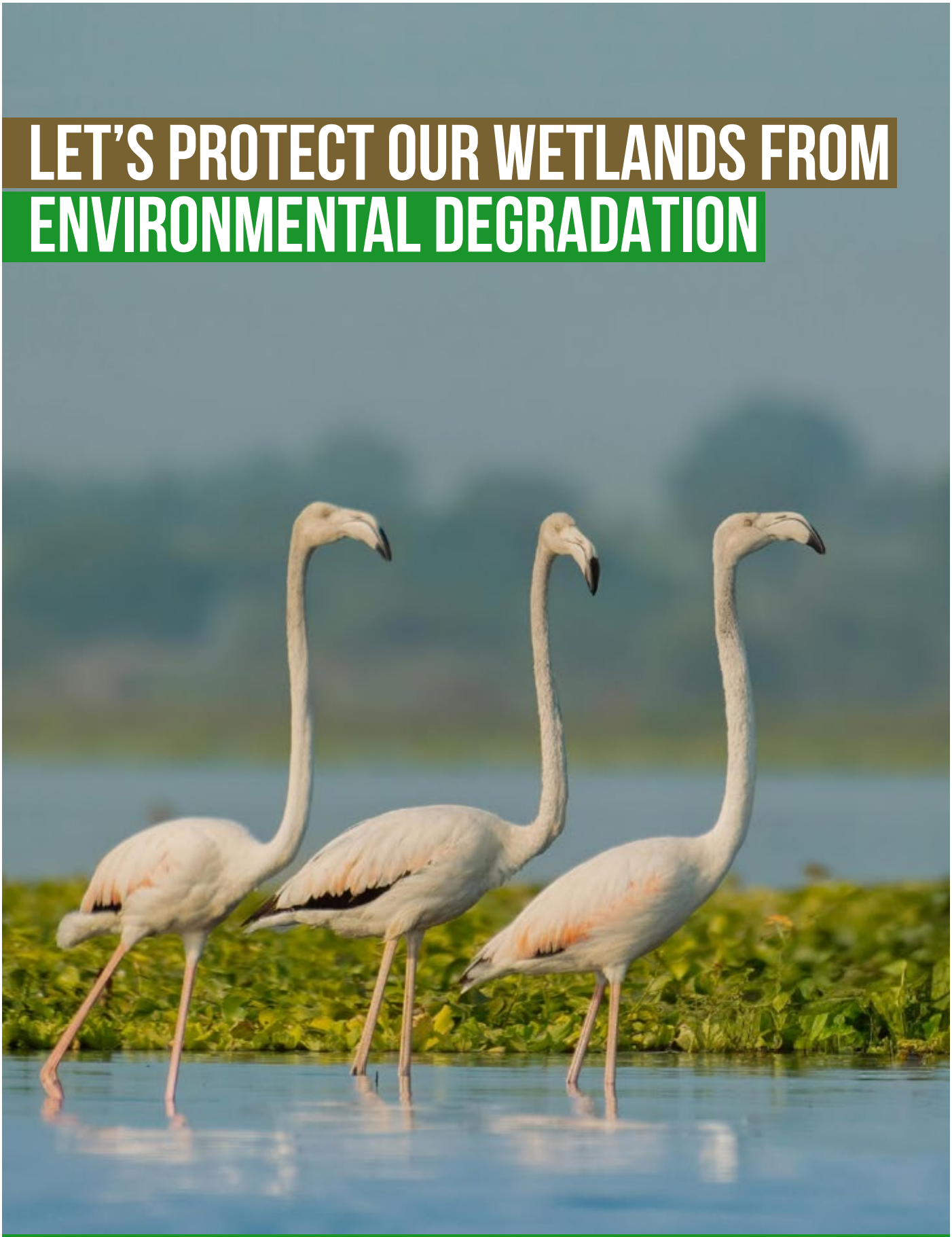




LET'S PROTECT OUR WETLANDS FROM ENVIRONMENTAL DEGRADATION



"Zimbabwe has ratified the Ramsar Convention and continues to strengthen efforts on wetlands protection."

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COP-15 PREPARATIONS HIT TOP GEAR

By - Tawanda Collins Muzamwese

Zimbabwe is set to host the 15th Conference of the Contracting Parties (COP-15) of the Ramsar Convention in Victoria Falls from the 23rd to the 31st of July 2025. Preparations for this event are progressing earnestly, with all boxes being ticked. Mr Phanuel Mangisi, National Focal Point for Zimbabwe of the Convention on Wetlands, who spoke at a workshop recently held for media stakeholders expressed satisfaction about the progress made so far. Mangisi reiterated the background of the Ramsar Convention as a vital cog for protecting wetlands. Zimbabwe's bid to host the esteemed COP-15 was announced in 2022 and ever since then, Zimbabwe has been working tirelessly to see the event become an overwhelming success.

According to Mr Mangisi, "During the end of COP 14 held in Geneva in 2022, Zimbabwe announced its intention to submit its candidature to host COP 15, subject to official written confirmation through diplomatic channels and the announcement was welcomed by acclamation".

As the preparations gain momentum, it is pleasing to note that the Ramsar Secretariat has visited the country on several occasions. Furthermore, the Secretary General also had a chance of visiting some of Zimbabwe's wetland sites. With the inimitable support from the Government of Zimbabwe, Secretary General, Secretariat and key stakeholders working to protect wetlands – the COP-15 is earmarked to be a hype of activity.

Zimbabwe has ratified the Ramsar Convention and continues to strengthen efforts on wetlands protection. Zimbabwe ratified the Convention on the 3rd of May 2013 and to date 7 sites have been designated as Wetlands of International Importance (Ramsar Sites), with a surface area of 453,828 hectares. These sites are;

- Victoria Falls,
- Driefontein Grasslands,
- Mana Pools,
- Lake Chivero and Lake Manyame,
- Monavale Vlei,
- Chinhoyi Caves, and
- Cleveland Dam.

> *"Wetlands are indispensable for the countless benefits or 'ecosystem services' that they provide humanity."*

According to Mr Phanuel Mangisi, National Focal Point for Zimbabwe of the Convention on Wetlands, the Convention is implemented through three strategic pillars of its strategic plan 2016-2024 which are:

- The wise use of all wetlands,
- The designation and management of Wetlands of International Importance (Ramsar sites), and
- International cooperation – including on shared wetlands, river basins, and populations of migratory water birds.

As all roads lead to Victoria Falls for the COP-15, it is essential that all stakeholders rally behind the nation Zimbabwe in delivering a successful event. In order for that to happen – cooperation, dedication and synergies are essential. The world has an opportunity to map concrete steps towards putting in place measures which protect wetlands. At the same time the event will be a chance for all international guests to enjoy the true Zimbabwean hospitality at the majestic Victoria Falls.

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TOWARDS COP 15, WHAT ARE THE ISSUES – CURRENT THREATS AND EXPECTATIONS

- By Calvin Manika

The 15th Conference of Contracting Parties to the Ramsar Convention on Wetlands (COP 15) is being hosted by Zimbabwe. Famous wetlands of global significance, including the famous Victoria Falls, are located in the nation. Zimbabwe has been a signatory to the Ramsar Convention since 2013.

As Zimbabwe prepares to host the upcoming 15th Meeting of the Conference of the Contracting Parties to the Ramsar Convention on Wetlands (COP15) in July 2025, the southern African country is leveraging the COP15 Ramsar event to show other parties its commitment to wetland conservation and sustainable ecosystem development.

The international gathering comes at a time; parties are faced with various issues to focus on - from the restoration to protection of wetlands across the globe.

In recent years, the threats on wetlands are on the rise, exponential growth in human population, lack of awareness and inadequate laws to protect the wetlands are cited as the major causes.

"Wetlands are an effective natural buffer system for reducing the danger of flooding."

The conference will come after the World Wetlands Day celebrations which were held on 2 February,

marking the adoption of the Convention on Wetlands (Ramsar Convention) on 2 February 1971 in Ramsar, Iran. The day has been celebrated since 1997. This year's theme is 'Protecting Wetlands for Our Common Future'. The theme comes at a convenient time for COP 15 to address some of the issues that will be raised on the wetlands campaign and is expected to set the tone for the conference.

The theme highlights the urgency of taking action and putting mechanisms to protect wetlands for the welfare of all people across the globe, with an emphasis on preserving these natural habitats for the future generations.

Every three years, delegates of the governments of each of the Contracting Parties meet to facilitate crucial discussions on the resuscitation, conservation and sustainable use of wetlands and plan on the work program for the next three years.

During the run up to the World Wetlands Day which was recently commemorated, Ramsar secretariat said wetlands are indispensable for the countless benefits or "ecosystem services" that they provide humanity, ranging from freshwater supply, food and building materials, and biodiversity; - to flood control, groundwater recharge, and climate change mitigation.

COP 15 is being regarded as timely and appropriate to consider key issues on Wetlands such as rapid wetland loss and degradation, unsustainable use of wetland resources, climate change impacts on wetlands, governance and management strategies for wetland conservation, biodiversity protection within wetlands, and securing funding for wetland restoration projects.

All these issues will be aimed at addressing the critical role wetlands play in maintaining healthy ecosystems and mitigating climate change across the world.

Wetlands globally host a huge number of species, making them disproportionately important for biodiversity. The loss of wetlands has dire consequences on the ecosystems and creatures surviving on them. COP 15 is therefore expected to address the legislation and strategies which

governments across the world can deploy to halt unsustainable agriculture, urbanisation and pollution on wetlands, which is leading to biodiversity decline.

Rising sea levels and change in rainfall patterns are threatening wetlands which are critical carbon sinks. Extreme weather events globally are threatening wetlands ability to function effectively, worsening climate change issues. COP 15 is expected to hammer more especially on wetlands management.

The world is faced with the issue of water scarcity, resulting in migration in some parts of the world, such as the Sahel region. However, the water quality is another critical factor to the health of human beings and animals. Scientists and ecologists have repeatedly raised concern on the destruction of wetlands resulting in impaired water quality. The COP is expected to point on ways that will protect wetlands in order to protect drinking water sources and the aquatic ecosystems.

Globally, countries have faced critical decisions on balancing economic growth and land use, situations which have affected wetland conservation in most of the cities. Coming up with innovative approaches to land use planning and sustainable practice is expected to be a core item on the conference's agenda.

On 24 January 2025, Food Agricultural Organisation of United Nations (FAO) applauded Zimbabwe for investing a lot of effort in the protection of its wetlands as the globe gets ready for the 15th Conference of the Parties (COP15) to the Ramsar Convention on Wetlands.

"Wetlands are critical for our country's well-being, providing essential services such as flood control, climate regulation, and supporting local livelihoods," said Angella Kabira, the Principal Natural Resources Officer in the Ministry of Environment, Climate and Wildlife.

"In hosting this event, we take an opportunity to showcase our progress and collaboration efforts with international partners to further strengthen wetland management," said Phanuel Mangisi, an Environmental Impact Assessment (EIA) Manager at the Environmental Management Authority (EMA). He is also the Ramsar Convention-National focal person for Zimbabwe.

Achieving proper land use and wetlands conservation remains an issue of governance. Critical discussions on sharable strategies will be central on COP 15 in ensuring parties come up with national wetland policies and enforcement mechanisms.

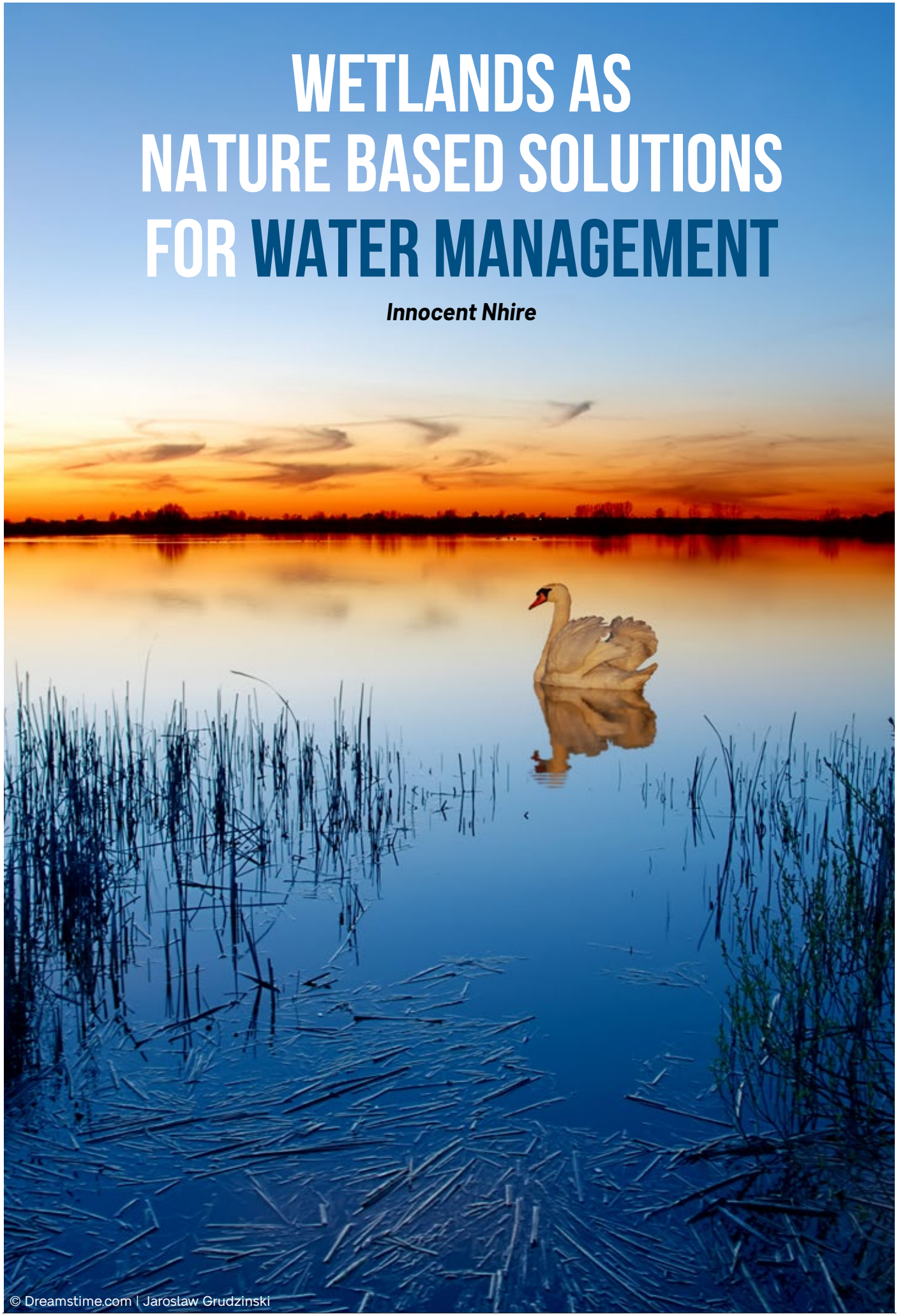
Zimbabwe is making a breakthrough in the protection of the wetland resources through the development of a comprehensive Wetlands Management Act, which aligns with the principles of the Ramsar Convention on Wetlands.

According to the World Heritage and Ramsar Conventions, 64% of the world's wetlands have disappeared since the beginning of the last century. In most regions across the world, wetlands continue to decline, compromising the benefits that wetlands provide to people. According to the Global Wetland Outlook, we lose wetlands three times faster than natural forests. Therefore, the conservation of wetlands is a vital task of humanity, which can help achieve the Sustainable Development Goals by 2030.

According to FAO, Zimbabwe's local communities and policymakers have benefited from technical assistance and capacity-building support from the Green Cities Initiative and the Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes (DSL-IP) project, which is supported by the Global Environment Facility (GEF). Through such initiatives, Zimbabwe will be able to share its experiences with member states.

WETLANDS AS NATURE BASED SOLUTIONS FOR WATER MANAGEMENT

Innocent Nhire



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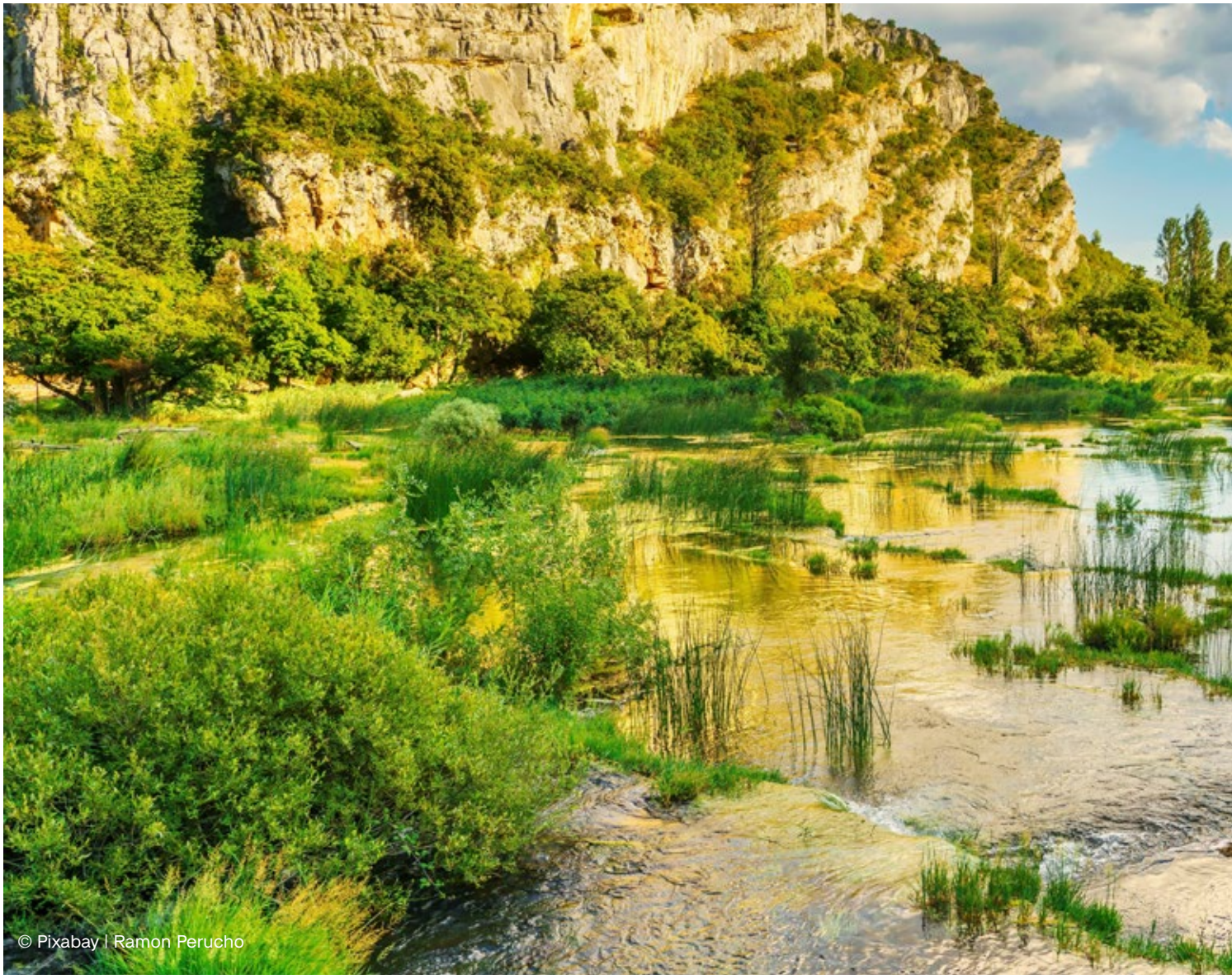
Many governments, especially those in developing nations, are very concerned about the destruction of wetlands and the threats it poses to the sustainability of livelihoods. Wetland ecosystem deficit has been exacerbated by rural poverty and population growth. Because of their abundant biodiversity, these ecosystems are essential for conservation and sustainable management. Wetlands are also essential to attaining a number of Sustainable Development Goals (SDGs), such as enhancing water quality, sustainable resource management, responsible resource consumption, zero hunger, world-class education, decent work and economic growth, clean water and sanitation, responsible consumption and production, sustainable cities and communities, and climate action. Thus, it is necessary to achieve a balance between the conversion of wetlands, sustainable use, human welfare, and the preservation of ecosystem services, particularly in emerging nations where wetlands are fast degrading.

IMPACT OF WETLANDS IN DISASTER RISK REDUCTION

Wetlands are frequently found all over the place and are essential to the landscape's water changes. Understanding their hydrological services is essential when examining the hydrological processes in river basins because of their intricate fill and spill processes. It has been demonstrated that wetlands are an effective natural buffer system (NBS) for reducing the danger of flooding with short return intervals (up to five years). However, their ability to reduce the impact of floods that occur every ten to fifty years is very limited, and they are unable to reduce the impact of catastrophic floods. However, as shown by detention basins positioned in crucial flood zones in countries like Portugal, wetlands may reduce high and extremely high flood risk if put in precise areas within catchments.

In general, river wetlands are more likely than



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upland wetlands to lessen flooding. For low return period occurrences, urban or local wetlands are effective as NBS; however, a mix of various scale solutions is required for major floods. Wetlands and their hydrological roles, however, have a complex relationship. Additionally, it is unclear if wetlands can successfully reduce flood risks in the context of future climate change, which jeopardises efforts to increase watershed resilience.

By retaining water in the landscape, wetlands can also help alleviate droughts by promoting acceleration recovery and deceleration formation, as well as by shortening the duration and intensity of dry occurrences. Their function in this situation is unclear, though, as they can both reduce water release and infiltration through evapotranspiration losses and boost low flows during dry spells. Wetlands as NBS clearly need to be better protected and restored, and their significance in extreme weather events needs to be better understood. It is evident from all of the information and experience to date that including wetland water regulation services into hydroclimate catastrophe risk assessment under climate change conditions is crucial to enhancing large-scale water management.

IMPACT OF WETLANDS IN IMPROVING WATER QUALITY

By reducing the negative effects of runoff, wastewater contamination, and soil erosion on water quality, wetlands operate as NBS to lower the amount of contaminants in surface waters. By holding pollutants through mechanical processes, adsorption on the substrate, biosorption, and other intricate and interconnected interactions between plants and microbes, as well as disinfection by Ultra Violate(UV) radiation from sunshine, wetlands prevent the deterioration of water quality. Numerous organic and inorganic materials, including nutrients, heavy metals, pesticides, hydrocarbons, xenobiotics, and antibiotics, can be eliminated from contaminated water by them.

By reducing the negative effects of runoff, wastewater contamination, and soil erosion on water quality, wetlands operate as NBS to lower the amount of contaminants in surface waters. By holding pollutants through mechanical processes, adsorption on the substrate, biosorption, and other intricate and interconnected interactions between plants and microbes, as well as disinfection by UV radiation from sunshine, wetlands prevent the deterioration of water quality. Numerous organic and inorganic materials, including nutrients, heavy metals, pesticides, hydrocarbons, xenobiotics, and antibiotics, can be eliminated from contaminated water by them. Landfill leachate, municipal wastewater (particularly from small urban agglomerations without access to municipal grids), stormwater in agricultural regions, urban surfaces, aquaculture effluents, and

"Indigenous Knowledge Systems form the foundation of identity and vision of most rural communities."

some industrial wastewaters are some of the possible sources of these contaminants. Natural wetlands have a limited ability to handle ongoing pollution because there is a limit to how much can be added before the natural chemical and plant processes are overburdened and degraded. Due to their low cost, constructed wetlands have been utilised extensively as an alternative for secondary and tertiary wastewater treatment in a variety of temperature zones, including temperate, cold, and tropical ones, especially in poor nations.

Up to 90% of the sediments found in runoff or streamflow can be eliminated by wetlands. Wetlands' ability to remove pollutants changes over time and depends on the local environment, the specific wetland properties, and the toxins they target. Harvesting plants increases removal efficiency and produces a lot of biomass that can be utilised for composting or the production of biogas. Wetlands' capacity to handle pollution within catchments is influenced by the type of pollution source, as well as the location and overall wetland area. If properly planned and maintained, wetlands—especially manmade wetlands—can be a very affordable approach to improve the quality of the water. The morphological, physiological, and biochemical traits of wetland plants that influence wetland efficiency, however, are little understood.

FINAL CONSIDERATIONS

In a variety of water resources management techniques, including as controlling the hydrological cycle and enhancing water quality, wetlands have become NBS. However, despite growing conservation concerns and restoration and rehabilitation initiatives, anthropogenic and climate forces continue to endanger natural wetlands around the world. Routine monitoring is the first step in stopping the future loss of existing wetlands, and this requires accurate and current maps of wetlands, which are lacking in many areas. Due to their low energy requirements, low operating and maintenance costs, and ability to effectively manage a variety of water-related issues, including storm water and wastewater treatment and reuse, constructed wetlands have drawn more attention recently and are becoming more common.

The efficiency of wetlands in flow regulation during extreme weather events (floods and droughts) and in water purification relies on their size, positioning, and local variables. However, a change in scale from focusing on discrete wetlands to wetlandscapes is essential for efficient water management. Small wetlands near sediment source areas, for instance, can maximise sediment capture; large wetlands, on the other hand, should be positioned low in the catchment to retain more runoff from upland areas if the goal is flood control or the retention of agricultural diffuse loads within the landscape. Ecological engineering methods must take into consideration the scale-dependent nature of wetland functions as well as their combined interactions with the landscape. This calls for combining remote sensing methods, statistical methods, analytical modelling, and ground-based measurements. For example, when new wetlands are needed to maximise multi-functionality at the wetlandscape scale, private landowners must utilise collaborative governance approaches that identify benefits and priorities among stakeholders. This is necessary for the development of multifunctional wetlandscapes for water management and the maximisation of other ecosystem services, such as biodiversity. In order to support successful water management strategies, policy tools that facilitate the funding and implementation of wetlands and/or restoration should also be taken into consideration.

PROTECTION OF WETLANDS THROUGH THE ADOPTION OF INDIGENOUS KNOWLEDGE SYSTEMS

- By Calvin Manika

In different parts of the world, amongst indigenous communities, wetlands have remained pillars of food security amidst droughts and climate change. With a huge loss of the majority of wetlands in the urban areas, rural communities have protected and revitalized wetlands through the adoption and use of Indigenous Knowledge Systems.

In Africa, a wide range of wetland environments are found in West Africa. The wetlands include floodplains in Senegal, Niger and larger inland deltas and lacustrine wetlands in Lake Chad and Niger Inland Delta in Mali, and coastal and delta environments, this includes deltas of the Senegal, Niger and Volta Rivers, the Basse Casamance or Banc d'Arguin in Mauritania. Most of them support substantial communities of people who depend on their natural resources and the ecology and hydrological pattern maintain them.

Wetlands are mainly found in river basins and catchment areas. Ecologists say as part of fragile ecosystems, wetlands require sustainable management for communities to continue benefiting from their functions and benefits. The United Nations Development Programme (UNDP) has been at the forefront of raising concerns on the loss of biological diversity due to the drying and shrinking of wetlands in rural areas across Southern Africa.

In Zimbabwe, the department of Natural resources in the Ministry of Environment, Water and Wildlife is responsible for management of natural resources. The department is responsible for implementation of the Environmental Management Act.

In most of the districts across Zimbabwe, population growth and lack of knowledge are the key drivers to wetlands destruction. Climate Change is also threatening the survival of wetlands, resulting in communities retracing the traditional mechanisms to sustain the environment.

Indigenous knowledge systems (IKS) are unique to a given culture, making them different on ethnicity lines but maintain common values across the country. Common elements in IKS which have been applied in the restoration and protection of wetlands are punishment for wetlands trespassers, conformity to customary laws and the taboo system.

IKS forms the foundation of identity and vision of most of the rural communities supported by their knowledge in sustainable agriculture, health, food preparation and preservation, education and natural resource management.

In Matobo, Matabeleland South, communities such as Ntunjambila and Gulathi are restoring wetlands as part of natural habitats protection, source of water and livelihood.

Villagers in Matobo have organised themselves under local traditional leadership tapping into the indigenous knowledge systems to protect

the two wetlands in the district. The initiative has saved the district which of late has faced low rainfall and high temperatures, affecting livestock and grain farming.

Communities are taking responsibilities to monitor mostly human and animal activities on the wetlands to avoid any damage. The efforts have seen the district gaining some of the wildlife species which were now evasive such as water reptiles. Villagers are now able to run projects throughout the year due to functional wetlands.

Over the years, the Zimbabwe Vulnerability Assessment (ZIMVAC) reports, have indicated food security risks especially in agro-ecological regions 4 and 5 in the country. However, in contrast, through the use of indigenous knowledge systems, a rise of wetlands has been witnessed in these regions.

Villagers have been welcome to scientific breakthroughs in wetlands restoration and protection but emphasise that the new methods must feed to the existing knowledge of the indigenous communities.

IKS are on record that where it is practised, there are strong values in preserving natural resources and creating sustainable biodiversity systems which feeds current and future generations. In Matobo district, this is promoting most of the communities to fence wetlands, form committees, and spread information in local languages through education and raising awareness.

Communities have been involved in landscape management and stopping deforestation, these efforts are coupled by the practise of conservation farming. Indigenous experts say that these practices relieve pressure from the wetlands and make them flourish.

According to ecologists, IKS helps in the management of wetlands, mostly on the period of wetness and productivity. Hwedza and Hwange districts have also seen a progressive management of wetlands spearheaded by the communities, mostly under the leadership of the Village-heads and with the assistance from the government's agricultural extension officers. The strategies used in the wetlands protections are rooted in local traditional values that preserves natural resources and sustains the environment.

Bio-cultural diversity management is the most common approach used by the rural communities due to its indigenous and traditional mechanisms of managing resources that is based on the values and knowledge of the custodians of the resources. Across the Sub-Saharan region, the elders and traditional chiefs are believed to have above average knowledge on the characteristics of wetlands and their ecosystems.

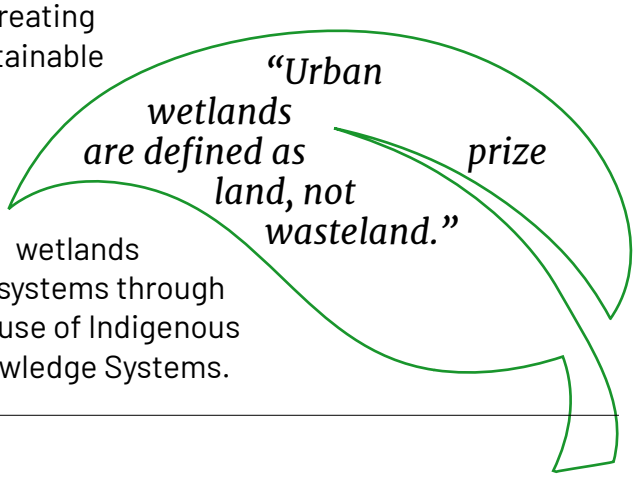
The known conservation scientific practices such as Agroforestry, fallowing, soil generation practices and stone terracing are off-shots of IKS. Ramsar convention adopted in 1971 enshrines the concept of sustainable wetland management.

In East Africa, South Africa and Southeast Asia, communities plant on raised beds for agri -pisci-culture, the practise has proved to be sustainable and effective. Zimbabwe, also acknowledged the use of raised plots in vleis as a wetland utilization technique.

In Zambia, Barotse area in Western Province revere their traditional knowledge institution and still forbids farming on headwaters of rivers and streams. This has ensured all year round wetlands protection.

The Ramsar Convention, which is a convention on wetlands, is an intergovernmental treaty that is mandated in providing the framework for national action and international cooperation for the conservation and sustainable utilization of wetlands and their resources. Three pillars of the convention include working on ways which sustain wetlands, designating suitable wetlands for the Ramsar List and transboundary sharing of wetland systems and shared species.

With the inclusion of indigenous people in climate change conferences, environmentalists and ecologists propose that the inclusion of the same communities at conference of parties on wetlands can be a turning point and foundation of creating sustainable wetlands ecosystems through the use of Indigenous Knowledge Systems.



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ZIMBABWE'S VICTORIA FALLS ATTAINS GLOBAL WETLANDS CITY STATUS

- By Wallace Mawire

The city of Victoria Falls in Zimbabwe has joined the global community getting approval for the much acclaimed wetlands city status.

The approval was endorsed under the Convention on Wetlands, an intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources.

The Convention was adopted in the Iranian City of Ramsar in 1971 and came into force in 1975. Since then, almost 90% of UN member states, from all the world's geographic regions have acceded to become Contracting Parties.

The city of Victoria Falls joined a list of 31 newly accredited Wetland Cities, announced at the 64th meeting of the Standing Committee.

The 64th meeting of the Standing Committee of the Convention on Wetlands was held in Gland, Switzerland from January 20 to 24, 2025 and was called SC64.

The cities' list include Argentina: Trelew, Belgium: Mechelen, Botswana: Kasane-Kazungula, Shakawe, Chile: Valdivia, China: Chongming, Dali, Fuzhou, Hangzhou, Jiujiang, Lhasa, Suzhou, Wenzhou, Yueyang, France: Abbeville, Arles, Hampigny, India: Indore, Udaipur,Iran (Islamic Republic of): Babol, Bandar Kiashar, Gandoman, Japan: Nagoya City,Morocco: Mehdya,Philippines: Balanga City, Poland: Poznan, Republic of Korea: Gimhae, Mungyeong, Serbia: Novi Sad, Switzerland: Geneva and Zimbabwe: Victoria Falls.

The status of the respective cities was approved under the Convention on Wetlands Diplomatic Note 2023/6: Wetland City Accreditation following a call for applications.

According to the Convention urbanization is one of the key defining mega-trends of this time.

It says that urbanization is transforming where and how people will live in the future.

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It says that at least four billion people, about half of the world's population live in urban areas today. By 2050 that number is expected to increase as more people move into cities.

According to the Convention, current trends in human settlement potentially pose a major threat for wetland conservation and wise use.

It further adds that as cities grow and demand for land increases, the tendency is to encroach onto wetlands.

It adds that wetlands are often viewed as wasteland to be converted for other purposes including being used as dumping grounds.

It is said that when they are preserved and sustainably used, urban wetlands can provide cities with multiple economic, social and cultural benefits.

The Convention adds that during storms, urban wetlands absorb excess rainfall, which reduces flooding in cities and prevents disasters and their subsequent costs.

It says that the abundant vegetation found in urban wetlands, acts as a filter for domestic and industrial waste and contributes to improving water quality.

Urban wetlands are defined as prize land not wasteland which should be integrated into the development and management plans of cities.

The 172 Contracting Parties to the Convention have agreed to the conservation and wise use of wetlands in their territories.

Recognizing the importance of cities and urban wetlands, the Convention has introduced a Wetland City accreditation scheme (Resolutions- XII.10, XVI.10).

The voluntary scheme provides an opportunity for cities that value their natural or human-made wetlands to gain international recognition and positive publicity for their efforts.

According to the Convention, the Wetland City Accreditation scheme will encourage cities in close proximity to and dependent on wetlands, especially Wetlands of International Importance, to highlight and strengthen a positive relationship with the valuable ecosystems, for example through increased public awareness of wetlands and participation in municipal planning and decision-making.

The Accreditation scheme is expected to further promote the conservation and wise use of urban and peri-urban wetlands, as well as sustainable socio-economic benefits for local people.

"Indigenous knowledge systems are science for the communities."

INDIGENOUS KNOWLEDGE SYSTEMS CRUCIAL IN WETLANDS PRESERVATION

- By Wallace Mawire

Indigenous Knowledge Systems (IKS) are reported to be a key component and crucial in the preservation of wetlands and in that thrust, the Environmental Management Agency (EMA) encourages communities to adopt the beliefs.

EMA, Environmental Education and Publicity Manager, Amkela Sidange said that IKS is grounded in community beliefs, ethos, norms and values and are an important aspect in wetlands preservation especially practiced by rural communities in Zimbabwe.

Sidange said that the agency has noticed that some communities, especially in the rural areas across the country are using IKS in the preservation of wetlands and it is being encouraged.

"We have noticed that there is cohesion within rural communities and they believe in what defines them, especially in the preservation of nature. They always agree in their cultural beliefs, norms and values. This is also being practiced in the preservation of wetlands", Sidange said.

She gave examples of some of the wetlands across the country were indigenous Knowledge Systems are being applied for their preservation. Sidange cited the examples of Detroit wetland in Mashonaland West province and Malilangombe wetland in Matebelaland South province of Zimbabwe.

She also said that there are many other wetlands across the country where communities are using IKS for their preservation.

Sidange also added that this has helped to have some of the wetlands to remain in their pristine state. She said that this has also proven that some indigenous knowledge systems really work. Another example she cited of the importance of the use of indigenous knowledge systems is in flood-prone communities of Muzarabani in Mashonaland Central province of Zimbabwe were she said that an abundance of indigenous fruits like the popular Masau signifies to the communities on impending heavy rains and floods.

Sidange said that they believe that there is an unproven connection between indigenous Knowledge Systems and science. She said that this has emphasized the notion that indigenous knowledge systems are science for the communities.

According to previous local media reports in 2022, EMA is reported to have stepped up efforts to protect Malilangombe wetland in Matobo district as it was regarded to be critical in the provision of water in Matebelaland South province.

It was then reported that consultations with various stakeholders including traditional leaders had been conducted. The wetland was believed to be sacred and plans were being initiated to have the wetland recognized as one of the protected sites under the Ramsar Convention.

As defined by the Ramsar Convention, wetlands are land areas that are flooded with water, either seasonally or permanently.

According to the EMA, common names of wetlands in Zimbabwe include vleis, dambos matoro, mapani in shona and amaxhaphozi in isindebele.

EMA said that wetlands ensure supply of fresh water for communities and they help purify and filter harmful waste from water.

The agency has also identified causes of wetland degradation in Zimbabwe as housing

"Wetlands directly aid in the achievement of the UN Sustainable Development Goals (SDGs)."

and infrastructure developments, agriculture, industrial activity, effluent discharge, unsustainable agricultural practices, grazing, mining and deforestation.

On how to conserve wetlands, EMA said that there is need to understand ecosystem services that wetlands provide, accounting for the uses of wetlands and integrating them into land use plans, using all remaining wetlands sites wisely, meeting human needs while sustaining biodiversity and other wetland services, restoring wetlands that have been degraded, developing financing sources for wetlands conservation, developing policies that promote the wise use of wetlands and educating communities about the benefits of wetlands.

"Wetlands' preservation also respects cultural and spiritual traditions passed from generation to generation."

On wetlands protection and utilization projects in the country, EMA said that it has supported a total of 70 community wetland protection projects.

The agency said that support has been technical and in the form of material inputs and infrastructure. They added that the objectives of the projects include protection of water sources, restoration of degraded wetlands and improvement of livelihoods.

CULTURAL, SPIRITUAL AND RELIGIOUS USES OF WETLANDS

As the world builds up for the upcoming COP-15 event, it is essential to note that there is realisation that wetlands have far reaching uses. Some of them include their use for religious, cultural and spiritual uses. Many religious groupings undertake activities near wetlands. In some communities, certain cultural rites are undertaken near wetlands in order to give prayer, supplication and communication with divine powers. Therefore, as stakeholders preserve wetlands. It is not only for their provisioning function, economic impacts or tourist benefits, but there are far-reaching cognitions of their preservations. Due to the diversity of society, it is very essential to note that these religious, cultural and spiritual beliefs are preserved from one generation to another.

"Wetlands' preservation also respects cultural and spiritual traditions passed from generation to generation."

Building in wetlands will cost you...

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WETLANDS- A GLOBALLY SIGNIFICANT ANSWER TO LIFE AND LIVELIHOODS

- By Innocent Nhire

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UNDERSTANDING WETLANDS OF INTERNATIONAL IMPORTANCE

The first intergovernmental agreement devoted to environmental protection is the Convention on Wetlands. Our Wetlands of International Importance, which were established in 1971 for the conservation and prudent use of wetlands, are valued for their substantial ecological, hydrological, and socioeconomic contributions.

Wetlands are essential to global sustainability initiatives because they directly aid in the achievement of the UN Sustainable Development Goals (SDGs). By filtering contaminants and enhancing water quality, wetlands serve as organic water purifiers, ensuring that everyone has access to clean water (SDG 6). Additionally, by absorbing greenhouse gases, they help combat climate change by storing carbon (SDG 13).

Mangroves and coral reefs are examples of coastal and marine wetlands that sustain fisheries and marine biodiversity, providing food and a living for many (SDG 14). Many rare or endangered plant and animal species can be found in wetland habitats, which are also rich in biodiversity (SDG 15). Urban wetlands also provide green spaces, regulate stormwater, and promote urban resilience, all of which raise city quality of life and lower the risk of disasters in regions that are already at risk (SDG 11).

WETLANDS AS AN ECONOMIC DRIVER

Wetlands are not just good for the environment; they are also very beneficial to the economy. Communities that depend on wetlands for their livelihoods are suffering greatly as a result of climate change, which they help to mitigate.

Consider a boatman in the Sundarbans transporting products through marshy waterways, the sole means of transit for rural villages, or a Senegalese woman gathering water lilies to create a delicious regional specialty. These occupations, along with many others, are lost when wetlands disappear.

Wetlands serve as carbon sinks, which lowers the atmospheric concentration of CO2. By preventing climate-related health hazards for people, animals, and plants—which can include heat waves and disease transmission—this aids

in the fight against global warming and eventually improves human livelihoods.

URBANIZATION AND WETLANDS

Human settlement patterns are being drastically changed by urbanization; now, half of the world's population lives in urban regions, and by 2050, that number is predicted to increase rapidly. Wetland conservation is seriously threatened by this tendency. Wetlands are frequently seen as ideal development sites as cities grow and the need for land rises.

However, there are several social, economic, and environmental advantages to urban wetlands when they are protected and managed responsibly. They reduce city flooding and disaster-related expenses by acting as natural sponges during storms. These wetlands' dense vegetation improves water quality by filtering industrial and household trash.

Incorporating wetlands into urban design and development requires an understanding of these advantages. Urban wetlands have been restored and integrated by cities like Kampala, Uganda, and Colombo, Sri Lanka, to improve water security and reduce flooding.

Additionally, urban wetlands offer city people leisure and educational opportunities. Urban waterways and green spaces give locals an opportunity to engage with nature, which enhances both their physical and emotional health.

WETLANDS' EFFECT ON THE GLOBAL ECONOMY

Every year, mental health and wellness problems including depression, burnout, and absenteeism cost the world economy billions of dollars. According to the International Labour Organisation (ILO), mental health issues cost the world economy $2.5 trillion a year, or about 4% of GDP, in lost productivity and absenteeism.

There may be financial gains from using nature-based approaches to mental health issues, such as protecting and enhancing access to wetlands. Imagine saving literally trillions of dollars by taking a stroll in a wetland area. Many cities have advanced this concept by turning urban wetlands into parks and natural reserves, which also have

the added advantage of drawing tourists and strengthening local economies. Los Pantanos de Villa in Lima, Peru, has done just that. A popular destination for relaxation, tourism, education, and scientific research, this little urban wetland, which is just 263 hectares in size, serves as a haven amidst the capital's development.

STRATEGIES FOR SAVING URBAN WETLANDS

Urban wetland conservation calls for an all-encompassing strategy that incorporates innovation, community involvement, and governmental changes.

Wetland-friendly urban planning and design is one successful tactic. This entails repairing degraded wetlands, preventing encroachment on existing wetlands, and integrating wetlands into urban development plans. Wetlands have been successfully incorporated into the urban landscapes of cities like Singapore and New York, proving that development and conservation can coexist.

Involving the community is also essential since local people frequently possess important knowledge and have a stake in preserving their natural environments. A sense of responsibility and ownership can be promoted by involving locals in wetland restoration, providing educational opportunities, and encouraging citizen research. For instance, the restoration of the Thane Creek Wetland near Mumbai, India, has engaged local populations in the wetland's management and monitoring, guaranteeing its long-term viability.

Constructed wetlands can be used to manage rainwater, treat wastewater, and generate new green spaces in urban areas by simulating the activities of natural wetlands. For instance, the German city of Hamburg has improved water quality and biodiversity by incorporating artificial wetlands into its sustainable urban drainage system.

THE WETLAND CITY ACCREDITATION SCHEME

The Wetland City Accreditation program is run by the Convention on Wetlands to acknowledge and encourage the preservation of urban wetlands. The goal of this program is to identify cities that have taken important actions to conserve and responsibly use wetlands. Accredited cities can operate as best practice examples, demonstrating that wetland protection and urban development can coexist.

Numerous localities have already received recognition for their outstanding efforts through the Wetland City Accreditation program. Changde in China, Colombo in Sri Lanka, and Dakar in Senegal were among the first 18 certified cities listed in 2018. There are currently 43 Wetland Cities that have received accreditation, and more are applying for this esteemed designation.

Through initiatives, regulations, and community involvement, these cities have shown a strong commitment to wetland conservation. They have preserved and restored wetland ecosystems, incorporated wetlands into their urban planning, and increased public understanding of the value of wetlands.

Urban wetlands have the ability to make communities more sustainable and livable, as demonstrated by the Wetland City Accreditation program. I hope more communities will embrace urban wetland protection as a major part of their development agenda and join the Wetland City Accreditation program. By working together, we can build a future that values and protects wetlands.

THE BENEFITS OF WETLAND CONSERVATION

Beyond environmental sustainability, there are several advantages to conserving wetlands in both urban and rural locations. By supplying resources like fish, vegetation, and clean water, wetlands help sustain livelihoods. They help food security and revenue production by providing chances for sustainable aquaculture and agriculture. By shielding people from floods, storms, and droughts, wetlands also significantly lower the risk of disasters.

Wetlands are important to many communities on a cultural and spiritual level in addition to these obvious advantages. They are frequently connected to customs and beliefs and are regarded as sacred sites. Wetland conservation fosters a feeling of identity and belonging while also assisting in the preservation of cultural assets.

Wetland protection is more important than ever as we deal with the twin issues of climate change and growing urbanisation. Wetlands are nature-based solutions that sustain livelihoods, boost resilience, and advance sustainable development; their conservation and restoration are the answer.

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