

# **AFRICAN CENTRE FOR AQUATIC RESEARCH AND EDUCATION (ACARE)**

## **A REPORT OF THE ANNUAL MEETING OF THE AFRICAN GREAT LAKES STAKEHOLDER NETWORK**



**MULUNGUSHI INTERNATIONAL CONFERENCE CENTER, LUSAKA, ZAMBIA**

**4-6, FEBRUARY 2025**

[www.agl-acare.org](http://www.agl-acare.org)

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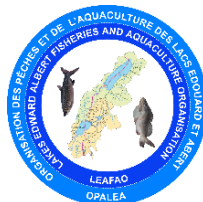
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Photo, p.3: The Mulungushi International Conference Center, Lusaka, Zambia.

## EXECUTIVE SUMMARY

The African Center for Aquatic Research and Education (ACARE) hosts the **Annual Meeting of the African Great Lakes Stakeholder Network**, gathering experts from its six Advisory Groups. These groups represent the seven African Great Lakes: Albert, Edward, Kivu, Malawi/Niassa/Nyasa, Tanganyika, Turkana, and Victoria. The meetings also welcome guests, observers, and specialists from around the world, encouraging broad participation in shaping the future of these vital water bodies.

During 2025, the Annual Meeting took place in Lusaka, Zambia, uniting leading experts dedicated to safeguarding the African Great Lakes. The event attracted a diverse group of more than

200 global professionals, including members of ACARE's network, all working to protect and sustain these crucial freshwater ecosystems that support millions of people.

The key objectives of the 2025 meeting included: advancing solutions through insights from Advisory Groups; shaping the future of monitoring, education, and training; promoting gender-inclusive approaches to problem-solving; and facilitating cross-border collaboration for effective freshwater management.

This report provides an overview of the talks, discussions, and presentations that occurred over three days, from February 4–6, 2025, at the Mulungushi International Conference Center in Lusaka, Zambia.

## LIST OF ACRONYMS AND ABBREVIATIONS

ACARE - African Center for Aquatic Research and Education  
AGL - African Great Lakes  
AGs - Advisory Groups  
AMCOW - African Ministers Council on Water  
AWIS - African Women in Science  
DRC - Democratic Republic of the Congo  
EU - European Union  
GEF - Global Environment Facility  
GIZ - German Society for International Cooperation  
IISD - International Institute for Sustainable Development  
KMFRI - Kenya Marine and Fisheries Research Institute  
LATAWAMA - Lake Tanganyika Water Management  
LEAAG - Lake Edward and Albert Advisory Group  
LKAG - Lake Kivu Advisory Group  
LMNN - Lake Malawi/Niassa/Nyasa  
LMNNBFAN - Lake Malawi/Niassa/Nyasa Basin Fisheries and Aquaculture Network  
LTA - Lake Tanganyika Authority  
LT-SAG - Lake Tanganyika Science Advisory Group  
LTuAG - Lake Turkana Advisory Group  
LVAG - Lake Victoria Advisory Group  
LVFO - Lake Victoria Fisheries Organization  
MICC - Mulungushi International Conference Center  
MoU - Memorandum of Understanding  
NaFIRRI - National Fisheries Resources Research Institute (Uganda)  
NEPAD - New Partnership for Africa's Development  
PESTEL - Political, Economic, Social, Technological, Environmental, and Legal  
SOPs - Standard Operating Procedures  
SWOT - Strengths, Weaknesses, Opportunities, and Threats  
TaFIRI - Tanzania Fisheries Research Institute  
TAKIWAMA - Tanganyika and Kivu Water Management  
TNC - The Nature Conservancy  
ToR - Terms of Reference  
UN - United Nations  
UNEP - United Nations Environment Programme  
UK - United Kingdom  
USD - United States Dollar  
WEFE - Water-Energy-Food-Ecosystem

## 1.0 Opening remarks

The ACARE annual meeting officially opened on February 4, 2025, at the Mulungushi International Conference Center (MICC) in Lusaka, Zambia. Prof. Cyprian Katongo welcomed attendees and emphasized the importance of the theme: "*Strengthening African Great Lakes Resilience: From Dialogue to Action*." Mr. Evans Mutanuka highlighted the significance of the ACARE meeting in connecting professionals, facilitating networking, and promoting the sharing of research experiences and findings that can positively impact the environment and drive economic growth, particularly for communities dependent on fisheries resources from Africa's Great Lakes. In his conclusion, Mr. Mutanuka expressed his hope that participants would find solutions to these challenges through professional discussions throughout the three-day meeting.

Several speakers participated in the opening session, including Dr. Victor Siamudaala, WorldFish Country Director for Zambia and South Africa; Dr. Matt McCandless, Vice President of Water Innovation and Impact at the International Institute for Sustainable Development (IISD); Mr. Tom Mukasa, Executive Secretary of the Lake Victoria Fisheries Organization (LVFO); Dr. Lloyd Haambiya, Chair of the Lake Tanganyika Science Advisory Group (LT-SAG); Samanta Mapfumo from GIZ Zambia; Dr. Kevin Obiero of the Kenya Marine Fisheries Research Institute and the immediate former ACARE Board Chair; and the newly elected ACARE Board Chair, Dr. Mary Kishe, Tanzanian Fisheries Research Institute.

The final welcome remarks were delivered by Dr. Ted Lawrence, Executive Director of ACARE, who extended a special welcome to all present and expressed gratitude to the Ministry of Fisheries and Livestock and the Department of Fisheries in Zambia for their preparations and co-hosting of the meeting. Dr. Lawrence also thanked the global ACARE partners and supporters for their assistance, and new supporters and partners, including the German Cooperation for International Development (GIZ) and WorldFish. He acknowledged the significant contributions of several individuals from the host country for their tireless efforts in preparing for the event.



## 2.0 Annual meeting official opening: Keynote speech

The Guest of Honor, **ENG. Himba Cheelo (MS), Permanent Secretary, Ministry of Fisheries & Livestock, Zambia**, warmly welcomed the delegates and participants to the annual meeting. She highlighted the gathering's significance for scientists worldwide to share knowledge in fisheries and aquaculture, particularly for the African Great Lakes region affected by climate change. Ms. Cheelo described the African Great Lakes as a region of global heritage with universal value of rich biodiversity that supports over 62 million people. These resources, however, face threats like climate change, population growth, and pollution, causing issues such as biodiversity loss and declining water quality, which therefore require a shift from dialogue to action. Ms. Cheelo concluded by stressing the importance of local communities' inclusion in sustainable lake management and highlighted Zambia's commitment to environmental policies. She praised ACARE's partnerships, especially the [African Great Lakes Advisory Groups](#) and the [African Women in Science \(AWIS\) program](#), and called for more research to combat poverty in the region.



*ENG. Himba Cheelo (MS), Permanent Secretary, Ministry of Fisheries & Livestock, Zambia, formally opening the Annual Meeting.*





*Section of the delegates in session at the ACARE Annual Meeting, 4-6 February 2025, Lusaka, Zambia*

### 3.0 Summary of Advisory Groups annual reports

During this session, each Advisory Group lead shared their group's reflections on the objectives, achievements, lessons learned, and key takeaways for 2024. The session was concluded with a discussion focused on setting future objectives and clarifying the roles of various stakeholders in the program. The session is summarized in the table below:

ACARE Advisory Groups 2024 Critical Objectives: Reflections on the Priorities		
Advisory Group	2024 Objectives	Progress and Reflections
Lakes Edward and Albert	<ul style="list-style-type: none"> <li>● Create an inventory of available information for both lakes</li> <li>● Perform a socioeconomic and value chain analysis of fisheries to identify gaps and opportunities</li> <li>● Conduct stock assessments and water resource monitoring for sustainable management</li> <li>● Identify and protect Fish Biodiversity Areas (FBAs) with a required proposal</li> <li>● Conduct socioeconomic studies to inform livelihood options.</li> <li>● Develop a proposal covering all fisheries components</li> <li>● Increase DRC membership among management, policy, and decision-makers</li> </ul>	<ul style="list-style-type: none"> <li>● Compiled an inventory of information for both lakes</li> <li>● Created a funding proposal covering all fisheries components</li> <li>● Increase membership of the DRC and attendance at Zoom meetings</li> <li>● Members attended international conferences, workshops, and trainings</li> <li>● Joseph Matunguru completed his PhD</li> </ul>
Lake Malawi/Nyasa/Niassa Basin Fisheries & Aquaculture Network (LMNNBFAN)	<ul style="list-style-type: none"> <li>● Register the LMNNBFAN with regional governments</li> <li>● Submit the riparian research agenda for each country</li> <li>● Organize meetings (in-person or virtual) to align the research agenda with SADC/AU</li> <li>● Establish an organizational structure with committees for policy, science, communication, and resource mobilization</li> <li>● Participate in the eDNA sampling in the LMNN Basin</li> <li>● Assess capacity needs and standardize data collection methods across the three riparian countries</li> <li>● Mobilize at least \$15000 for meetings and emerging programs by year-end</li> <li>● Form country teams and increase membership in Tanzania and Mozambique</li> </ul>	<ul style="list-style-type: none"> <li>● The registration of the international research organization has been completed</li> <li>● The LMNNBFAN Advisory's monthly meetings are running smoothly with a varied agenda</li> <li>● A concept note has been created to secure funding for in-person meetings</li> <li>● The testing of a Decision Support System (DSS) for Fisheries Management in Lake MNN has been prioritized to help stakeholders make informed decisions.</li> </ul>
Lake Kivu Advisory Group	<ul style="list-style-type: none"> <li>● Organize a summer school in limnology aimed at lab technicians and research assistants from both riparian countries (DRC and Rwanda) to standardize protocols</li> <li>● Assess the technical capacity of institutions working on Lake Kivu using a SWOT analysis to identify strengths, weaknesses, opportunities, and threats</li> <li>● Write and submit proposals for sustainable projects in Lake Kivu to potential funders following available project calls</li> </ul>	<ul style="list-style-type: none"> <li>● Writing a summer school concept note completed and in the process of submission</li> <li>● SWOT Analysis completed with report</li> <li>● Other funding proposals will be considered in the coming year</li> </ul>

Lake Tanganyika-Science Advisory Group	<ul style="list-style-type: none"> <li>● Establish committees within the Advisory Group: Resource Mobilization, Communication/Publications, and Policy and Governance</li> <li>● Hold an in-person meeting in Burundi to review progress and finalize the MoU with the Lake Tanganyika Authority (LTA)</li> <li>● Analyze policies and produce a brief, related to fisheries management and aquaculture, focusing on the LTA's Convention, SADC Protocols, and specific country policies</li> <li>● Conduct an Ecosystem Evaluation for Lake Tanganyika basin</li> <li>● Provide capacity-building opportunities for early career scientists through short training in limnology and molecular biology (eDNA).</li> </ul>	<ul style="list-style-type: none"> <li>● A Resource Mobilization Committee has been established, with two more set to form in 2025</li> <li>● Engagements with the LTA Secretariat have increased regarding the MoU components and LT-SAG framework</li> <li>● The LT Aquaculture Protocol was reviewed, but further collaboration with the LTA and fisheries ministries is needed</li> <li>● IUCN is conducting ongoing assessments of fish species for the IUCN Red List</li> </ul>
Lake Turkana Advisory Group	<ul style="list-style-type: none"> <li>● Strengthen the proposal for the Omorate research station.</li> <li>● Conduct the TEEB study and map ecosystem services in the Lake Turkana basin, including a Fish Value Chain study</li> <li>● Perform hydroacoustic and limnological studies and complete experimental fishing activities in Lake Turkana</li> <li>● Integrate indigenous and sociocultural knowledge with scientific research in the area</li> <li>● Redesign the Omorate proposal to engage more stakeholders in fisheries and aquaculture</li> <li>● Expand ACARE community membership, focusing on Ethiopia.</li> <li>● Create policy briefs and documents to raise awareness about Lake Turkana</li> </ul>	<ul style="list-style-type: none"> <li>● Pilot Study for Long-Term Monitoring of Lake Turkana</li> <li>● One-year experimental fishing trial with local fishers</li> <li>● Two hydroacoustic surveys were conducted</li> <li>● Value chain study and modeling of sustainable fish yield using satellite data.</li> <li>● Future: Develop a Lake Turkana Water Quality Portal for guidance</li> </ul>
Lake Victoria Advisory Group	<ul style="list-style-type: none"> <li>● Advise policymakers on issues related to Lake Victoria</li> <li>● Conduct meta-analysis of impacts and potential mitigation and adaptation measures for rising lake water levels</li> <li>● Prepare for the Lake Victoria 2027 expedition, commemorating Graham's work 100 years later</li> <li>● Refine the rules governing the advisory group to ensure they clearly outline the processes for admission and removal from the group</li> </ul>	<ul style="list-style-type: none"> <li>● A policy brief has been created with the Lake Victoria Fisheries Organization (LVFO) to address the conflict between the Dagua and Nile perch fisheries</li> <li>● On the Lake Victoria 2027 Expedition, preparations are on track, with insights from the initial survey guiding the Graham 100-Year Survey preparations for 2027</li> <li>● Membership expertise database has been developed and updated to enhance membership rules and regulations</li> </ul>



## Advisory Groups of the African Great Lakes:



Lake Edward and Albert Advisory Group



Lake Kivu Advisory Group



Lake Malawi/Niassa/Nyasa Basin Fisheries & Aquaculture Network



Lake Tanganyika Science Advisory Group



Lake Turkana Advisory Group



Lake Victoria Advisory Group



## 4.0 Cross-cutting talks: Multijurisdictional lakes management & strategies

### 4.1 A lens into ACARE's strategic plan

Led by Dr. Ted Lawrence, the ACARE Executive Director, this session focused on ACARE's strategies for addressing issues related to the African Great Lakes. Key topics included the involvement of African Women in Science (AWIS), advisory groups, monitoring efforts, and education and training.

ACARE is working towards creating a long-term education and training program to provide the next generation of experts with practical experience, including fieldwork such as boat-based research. A significant milestone for 2024 is securing funding from the U.S. Department of State for a pilot initiative, which has already been launched.

Dr. Lawrence introduced the African Lakes Hub (<http://www.africanlakeshub.org>), an information database for sharing data from various Great Lakes projects. He encouraged member participation to enhance its value.

In monitoring efforts, a pilot project was initiated on Lake Turkana, with plans to expand monitoring to all African Great Lakes. A special issue of the Journal of Great Lakes Research, featuring studies from ACARE members, was also published during 2023.

Dr. Lawrence reaffirmed ACARE's commitment to fostering collaboration and partnerships for the sustainable management of the African Great Lakes.

### 4.2 Case studies: Long-term monitoring of multijurisdictional lakes

Dr. Erick Ogello gave an overview of the evidence-based monitoring activities that would be presented by various speakers, highlighting their potential to influence policy and improve lives:

#### 4.2.1 Lake Victoria Standard Operating Procedures (SOPs) for Monitoring - Dr. Robert Kayanda, Lake Victoria Fisheries Organization (LVFO)

Research at LVFO follows established Standard Operating Procedures (SOPs) and involves collaboration with institutions like TAFIRI, NaFIRRI, and KMFRI. Findings are agreed upon regionally and implemented nationally. The idea of the LVFO's SOPs for monitoring are being considered for the other African Great Lakes as monitoring programs are being developed.

Dr. Kayanda summarized recent key findings from studies such as Frame Surveys and Hydro-Acoustic Surveys. He also presented challenges facing LVFO, including reliance on external funding and limited human resources. Finally, he outlined future goals, including securing sustainable funding, enhancing capacity building, and implementing automated buoys for long-term lake monitoring.

#### 4.2.2 Tanganyika and Kivu Water Management - TAKIWAMA, Dr. Pierre-Denis Plisnier

With European Union (EU) funding, a joint monitoring initiative is underway for Lakes Tanganyika and Kivu. Key threats include climate change, human activities, pollution, and fluctuations in fish populations. Researchers have found a link between limnological changes and fish population variations. As part of TAKIWAMA's goals from 2025 to 2029, the focus will be on identifying drivers of environmental changes and enhancing long-term monitoring conditions.

#### **4.2.3 Pilot Monitoring Project for Lake Turkana, Mr. Maurice Obiero**

This monitoring project was initiated in response to climate change and other human-induced threats, as the lake is less studied compared to other African Great Lakes. The project emphasizes the importance of collaborative sampling efforts between Ethiopia and Kenya to integrate research and generate usable data for policy implementation across the entire lake. Additionally, this project highlighted the need for capacity building and infrastructure development to enhance research capabilities. Specifically, there is a recognized need to establish a research station on the Ethiopian side of the lake.

#### **4.2.4 Graham's Survey of Lake Victoria: A Century Later, Dr. Anthony Taabu Munyaho**

The Initiative, Graham Survey of Lake Victoria: 100 Years On, plans a second lake-wide survey in 2027–2028, marking a century since Michael Graham's initial fisheries study.

Dr. Munyaho emphasized the importance of studying Lake Victoria's fisheries, which began during the British colonial era. Graham's findings revealed high biodiversity and early signs of overfishing.

The upcoming survey will assess fish biodiversity, water quality, fisheries dynamics, and socio-economic impacts. Currently in Phase I, the project involves planning and resource mobilization, with support from UK institutions previously involved with Graham. With a budget of USD 2.25 million, the project has three research vessels, skilled experts, and laboratories. A detailed report on a century of ecological changes will be published upon completion.

#### **4.2.5 North America Great Lakes: Lake Committees and the African Great Lakes Advisory Groups: History, Processes and Lessons - Dr. Marc Gaden, Great Lakes Fishery Commission**

Dr. Gaden presented a virtual overview of the history, processes, and lessons learned in the governance and management of the American Great Lakes, starting from 1897. Collaborative efforts began due to the multi-jurisdictional nature of the North American Great Lakes (NAGL). Such efforts were not established until the 1950s when the invasive fish sea lamprey invaded the lakes and began decimating the fish populations, prompting the US and Canadian governments to create the Great Lakes Fishery Commission. During the 1960s, Lake Committees were formed to harmonize jurisdictions on each of the five NAGL. The Lake Committees are a model for ACARE's Advisory Groups, which have been developing successfully with promising long-term approaches to research, information exchange, and ultimately, driving lake-wide, harmonized, positive policy and management development.

#### **4.2.6 African Women in Science (AWIS) - Ms. Diane Umutoni, Ms. Angela Nankabirwa, Dr. Lulu Kaaya, Ms. Stephanie Smith, ACARE**

The AWIS program was created to break down historical and cultural barriers to women in science and leadership positions, especially in the water sciences. The presentation covered key highlights, including the program's impact, mentorship opportunities, alumnae engagement, and the geographical distribution of women enrolled, which includes all ten of the AGL countries. Next steps for the 2025 cohort and the newly developing mentorship program were highlighted. The session concluded with a brief discussion related to the question: "Women are transformed through the AWIS program, but the working environments they return to remain unchanged. What can your institution do to support this type of transformation?"

## 5.0 Capacity Development Sessions:

### 5.1 Session I: Effective Science Communication for Policy Influence - Mr. Sumeep Bath, IISD and Ms. Mary Kasoka, ZNBC

This session was led by Mr. Sumeep Bath, Editorial and Communications Manager at IISD, and Ms. Mary Kasoka, an award-winning climate journalist with 14 years at the Zambia National Broadcasting Corporation (ZNBC). They emphasized the critical role of media in bridging the gap between scientists and the public and addressing the challenges scientists face in communicating their research to non-experts. By working with the media, scientists learned to simplify complex information for local communities and action groups, enhancing public awareness and promoting community engagement in scientific initiatives.

Through practical examples, the presenters also highlighted the significance of traditional media, noting its reliability and adherence to journalistic standards, which makes it effective for influencing policy and shaping public discourse.

Scientists received guidance on effectively communicating their findings through the media after publishing them in journals. They were advised to inform journalists in advance about upcoming publications, as scientists and journalists have different information-sharing needs.

### 5.2 Session II: Fundraising for Healthy Lakes - Mr. Louis St-Cyr, IISD and Dr. Sloans Chimatiro, Tayari Analytics

The presentation was delivered by Mr. Louis St-Cyr, Director of Philanthropy at IISD, and Dr. Sloans Chimatiro, CEO of Tayari Analytics. Dr. Chimatiro emphasized the need for effective implementation of initiatives and resource allocation for fundraising to build donor confidence. He highlighted the importance of engaging with local communities to align initiatives with their needs, particularly regarding the African Great Lakes.

He noted that food system transformation is a key priority, and securing funding requires alignment with donor interests. Dr. Chimatiro referenced a new strategy document covering water, fisheries, and aquaculture and introduced a document focused on fisher-friendly policies aimed at strengthening young women scientists' capacities. He stressed the importance of clear objectives, commitment, and effective communication, linking resource mobilization to institutional effectiveness.

Mr. Louis St-Cyr outlined the five stages of the fundraising cycle: Identifying, Qualifying, Cultivating, Solicitation, and Stewardship. He advocated for retaining existing donors over seeking new ones and emphasized the importance of building relationships, setting strategic goals, and engaging donors effectively. He also highlighted donor stewardship, the use of Customer Relations Management systems, and the need for persistence and leadership support for successful fundraising.

### 5.3 Session III: Poster Session

The three-hour session occurred on the second day of the meeting, featuring research and studies conducted in the African Great Lakes region and beyond. A total of 52 posters were displayed, primarily by emerging scientists from the region. These posters focused on diverse themes related to the ecosystems of the African Great Lakes.



*Scientific posters provided the ability of many more scientists and students to provide information on their research, studies, or projects. The session took place during the second day of the meeting, in front of the MICC, Lusaka, Zambia.*



## 6.0 Looking to the Future:

### 6.1 Objectives of the Advisory Groups of the African Great Lakes-drafts

During the Annual Meeting, each Advisory Group meets to plan future priorities, objectives, strategies, and activities. These Objectives will be refined later by the advisory groups during the virtual meetings in the coming months.

ACARE Advisory Groups 2025-2027 Critical Objectives (draft for improvement)					
Advisory Group	Objective(s)	Activity (ies)	Outcome (s)	Timelines	Responsible
<b>Lakes Edward and Albert (LEAAG)</b>	1. Finalize the draft proposal for the Lakes Edward and Albert biodiversity project	<ul style="list-style-type: none"> <li>Refine/refocus the proposal</li> <li>submit to ACARE secretariat and council for review</li> <li>Joint funder search with ACARE</li> <li>Project Implementation</li> </ul>	<ul style="list-style-type: none"> <li>Improved quality and value of the proposal</li> <li>Submit to potential donors for funding support/consideration</li> <li>Assisted LEAB riparian countries' management bodies define biodiversity conservation needs and sustainable resource use criteria for the LEAB</li> </ul>	April 2025  May 2025  Jan 2026- Dec 2027	Herbert, Mbalassa, Anthony, Rugadya, Nantongo, Bwambale
	2. To complete the research inventory, gather and digitize all accessible data and information on LEAB	<ul style="list-style-type: none"> <li>Summaries the compiled data sets and share with the AG</li> </ul>	Improved access to information and identified specific areas for further research will strengthen policy and decision-making in the LEAAG basin	Dec 2025	Anthony, Marie-Claire, Eunice, and Oscar
	3. To evaluate the livelihood opportunities for communities in the Lakes Edward and Albert basin	<ul style="list-style-type: none"> <li>Desk review of ATAAS and LEAFII reports and documents</li> </ul>	Informed suitable and sustainable livelihood ventures/options in the LEAAG basin.	June 2025	Bwambale Mbilingi Richard Rugadya
<b>Lake Kivu Advisory Group (LKAG)</b>	1. Mobilize the necessary financial (\$50,000) and equipment resources to implement a ten-day summer school: Empowering young scientists and laboratory technicians to enhance aquatic research through standardized protocols and limnology training for L. Kivu	<ul style="list-style-type: none"> <li>Training participants in sampling, treatments, and data analysis of various L. Kivu ecosystem parameters, including water physio-chemistry, phytoplankton, zooplankton, macroinvertebrates, fish and others.</li> <li>Conducting in situ field measurements and water sample collection and processing activities.</li> <li>Laboratory work, data analysis and report preparation.</li> </ul>	<ul style="list-style-type: none"> <li>20 lab technicians trained in limnology</li> <li>Harmonized protocols: Protocols used for research and monitoring are harmonized for both Riparian countries, ensuring consistency and comparability of the data</li> <li>Strengthened cooperation: Cooperation between the two Riparian countries is strengthened among scientists, allowing the course participants to adopt the newly standardized protocols</li> </ul>	Sept 2025	Janviere Tuyisenge Masilya Pascal Riziki Walumona Kisekelwa T. Simon Tabaro Eric Ruhana Fabrice Muvundja ACARE secretariat

<b>LKAG – Cont.</b>	2. Creation and operationalization of the advisory group sub-committees: - science and research, policy and advisory, communication and outreach, and resources and mobilization	<ul style="list-style-type: none"> <li>• Develop the committee membership skills, expertise, needs and roles guidelines and share with members</li> <li>• Develop online survey tool for members sign-up.</li> <li>• Identification of sub-committee chairs</li> </ul>	Improved focus, objectivity and tasks accomplishment amongst group members guided by overall goal.	June 2025	Janviere Tuyisenge Kisekelwa T Riziki Walumona Eric Ruhana AG Facilitator (ACARE-IISD)
	3. To create compelling research and grant proposals related to limnology, fishery, hydrology, and water quality.	<ul style="list-style-type: none"> <li>• Set up proposal development team</li> <li>• Identify project stakeholders</li> <li>• Identify possible funders for submission and objectives alignment with funder needs</li> <li>• Project Implementation</li> </ul>	Addressed the ecological health of Lake Kivu and its fisheries for improved management, productivity and livelihoods	June 2025 Sept 2025 Jan 2026- Dec 2027	LKAG Leadership to engage members in the actions during monthly virtual meetings
	4. Periodic Evaluation of the LKAG 2025 Objectives and activities progress	<ul style="list-style-type: none"> <li>• To determine progress, gaps and areas of improvement/requiring attention</li> </ul>	Ensured detailed and achieved objectives/activities	Monthly	Leads AG Facilitator (ACARE-IISD)
<b>Lake Malawi/Niassa/Nyasa Basin Fisheries &amp; Aquaculture Network (LMNNBFAN)</b>	1. Operationalize the Lake Malawi/Nyasa/Nyasa Basin Network after it's legal registration with a base in Malawi.	<ul style="list-style-type: none"> <li>• Brief directors on the existence and objectives of LMNNBFAN.</li> <li>• Setting up the secretariate and structures</li> <li>• Begin executing the key objectives.</li> </ul>	Harmonized sustainable management of the lake ecosystem	May 2025	Jose Halafo Maxon Ngochera Gladys Chigamba Peter Nestory
	2. Align and prioritize local research objectives (per country)	<ul style="list-style-type: none"> <li>• Develop the comm. membership skills, expertise, needs and role guidelines, share with members</li> <li>• Develop online survey tool for members sign-up.</li> <li>• Identification of sub-committee chairs</li> </ul>	Consistent and efficient use of research and monitoring resources across the lake.	May 2025	Jose Halafo Maxon Ngochera Peter Nestory AG Facilitator (ACARE-IISD)
	3. Secure funding to host a joint meeting in Malawi aimed at raising awareness among government officials about the mission and objectives of the LMNNBFAN under ACARE	<ul style="list-style-type: none"> <li>• Proposal development for meeting</li> <li>• Identify project stakeholders</li> <li>• Identify possible funders for submission and objectives alignment with funder needs</li> <li>• Meeting hosting</li> </ul>	Improved collegiality among government officials, local organizations and the network LMNNBFAN	May 2025 Mar 2025 June 2025 Sept 2025	Emmanuel Kaunda Sloans Chimatiro Maxon Ngochera Peter Nestory Jose Halafo ACARE Secretariat

<b>LMNNBFAN – Cont.</b>	4. Develop a proposal to conduct a joint lake wide frame survey	<ul style="list-style-type: none"> <li>Conduct fisheries frame surveys for traditional fisheries.</li> </ul>	Harmonized records for fishery characteristics	Oct 2025	Jose Halafo Maxon Ngochera Peter Nestory Ben Ngatunga
	5. Develop a tripartite pelagic fisheries management program proposal	<ul style="list-style-type: none"> <li>Mobilize resources to conduct a workshop to develop project proposals</li> <li>Identify stakeholders, partners and potential donors</li> <li>Conduct pelagic fish survey.</li> <li>Implementation of the tripartite proposal to build capacity on decision support system with pelagic fishery case study</li> </ul>	Capacity for home grown implementation of DSS and potential options for managing pelagic fishery, improve stakeholder buy-in and better compliance with fisheries management regulations.	Dec 2025 Dec 2025 Mar 2026- Mar 2027	Kevin Reid Emmanuel Kaunda Sloans Chimatiro Maxon Ngochera Peter Nestory Jose Halafo ACARE Secretariat
<b>Lake Tanganyika- Science Advisory Group (LT-SAG)</b>	1. Assessment of potential candidate species in aquaculture on Lake Tanganyika	<ul style="list-style-type: none"> <li>Literature Review: Examine existing studies on the Lake's ecosystem, native and introduced species.</li> <li>Stakeholder Consultation:</li> <li>Ecological and Biological Suitability Assessment.</li> </ul>	<ul style="list-style-type: none"> <li>Available biological, ecological and nutritional information on the species gathered and collated</li> <li>Financier or donor engagement and project pitching conducted</li> <li>Field studies on the biology of species and possible domestication trials conducted. d. Validation of flagship species for possible commercial use (propagation and out grower) commenced</li> </ul>	May 2025 Aug 2025 Oct 2025- Jun 2027	Haggai Gondwe Mabo Lwabanya Kundanaji Peter Limbu Gondwe Edith Loziwe Chilufya Eva Nambeye Deo Mushaghalusa Nshombo Muderhwa Beatrice Marwa
	2. Assessing the effect of climate change and variability through remote sensing, pollution, and water quality monitoring - Assessing the effect of water level changes on lake riparian communities	<ul style="list-style-type: none"> <li>Monitor changes in acidity and salinity due to climate variability, which affects fish health.</li> <li>Monitor changes in water level and flood impact in the lakes and riparian communities.</li> <li>Monitor the impacts of the environmental degradation in the lake's watershed.</li> <li>Assessing the Impact of Climate Change and Environmental Stressors on the Community Composition and Biomass of Microalgae in Lake Tanganyika</li> </ul>	To be refined by the assigned group and updated before end of May 2025	2025-2027	Cyprian Katongo Claver Sibomana Mulenga A. Prudence B. Lambert N. Nathalie Nzigire Lloyd Haambiya Beatrice Marwa

<b>LT-SAG – Cont.</b>	3. Conduct a lake-wide fish stock assessment and frame survey	<ul style="list-style-type: none"> <li>• Gill net surveys</li> <li>• Hydro acoustic surveys</li> <li>• Catch Assessment Survey</li> <li>• Survey of official operational fishing units</li> </ul>	The total count of active fishing units—both licensed and unlicensed—is recorded.	May-Dec 2025	Mabo Lwabanya Beatrice Marwa Peter Limbu Loziwe Chilufya Deo Mushaghalusa Nshombo Muderhwa Harris Phiri
	4. Biodiversity monitoring- Assessment of biodiversity in fish breeding AND KBA areas	<ul style="list-style-type: none"> <li>• Assessing the impact of flooding in fish breeding areas on the fish abundance and diversity, and fish production.</li> <li>• Gill net surveys.</li> <li>• Inventory to update the list, diversity and abundance of spawning grounds and KBSAs.</li> </ul>	Detailed list of spawning grounds that have been inundated by rising waters or have been affected by retreating waters-useful for management decision making	2025-2027	Haggai Gondwe Mabo Lwabanya Peter Limbu Deo Mushaghalusa Nshombo Muderhwa Beatrice Marwa TNC & IUCN Tanzania
	5. Conduct the PESTEL analysis for LT-SAG	<ul style="list-style-type: none"> <li>• Conduct a baseline survey on the PESTEL elements of LT-SAG states</li> <li>• Draft PESTEL analysis report</li> <li>• Circulate report for group review</li> <li>• Finalize LT-SAG PESTEL report</li> </ul>	Enhanced comprehension of the group's strategies, opportunities, and adaptability to different factors, thereby promoting the long-term sustainability of its operations.	July 2025	Harris Phiri Cyprian Katongo Lloyd Haambiya Colin Apse Beatrice Marwa
<b>Lake Turkana Advisory Group (LTuAG)</b>	1. To mobilize funds for the establishment of the Omorate research station	<ul style="list-style-type: none"> <li>• Revise the proposal to meet the donors' expectations.</li> <li>• Securing a collaborative working document between Jinka University and local administration.</li> <li>• Mobilization of the funds.</li> </ul>	Outcome to be updated by the team during the monthly virtual meetings	Feb-Mar 2025  Feb-Dec 2025	Mulugeta Wakjira Elias Alemu  Resource mobilization committee
	2. To conduct a scoping study of TEEB study and mapping of ecosystem services of Lake Turkana basin	<ul style="list-style-type: none"> <li>• Revise and update the concept</li> <li>• Mobilization of funds</li> <li>• Project implementation-in 2026</li> </ul>	Outcome to be updated by the team during the monthly virtual meetings	Feb-May 2025	Resource Mobilization committee
	3. To continue conducting the hydroacoustic study, limnological studies and complete the ongoing experimental fishing activity in L. Turkana ecosystems.	<ul style="list-style-type: none"> <li>• Follow up on additional funding</li> <li>• Implementation, report writing and dissemination</li> </ul>	Outcome to be updated by the team during the monthly virtual meetings	Feb-Dec 2025	Kevin Obiero
<b>LTuAG – Cont.</b>	4. Integrate indigenous knowledge & citizen science with scientific research of Lake Turkana	<ul style="list-style-type: none"> <li>• Review existing indigenous knowledge</li> <li>• Develop a concept</li> <li>• Mobilization of funds</li> </ul>	Outcome to be updated by the team during the monthly virtual meetings	May 2025- May 2027	Res. & Dev. committee Resource mobilization committee



	5. To develop knowledge management products towards the dissemination of information	<ul style="list-style-type: none"> <li>Produce policy briefs, facts sheets and technical reports/scientific reports on preliminary findings</li> <li>Dissemination of information to the local communities through fact sheets and brief documentaries</li> <li>Resource mobilization</li> </ul>	Outcome to be updated by the team during the monthly virtual meetings	Feb-Dec 2025	Communications committee Research and development committee
	6. To conduct capacity building activities among the fisherfolks and students of the Lake Turkana communities	<ul style="list-style-type: none"> <li>In-house training on proposal development and scientific report writing</li> <li>Resource mobilization</li> <li>Develop a guiding framework on capacity building and training on need basis</li> </ul>	Outcome to be updated by the team during the monthly virtual meetings	Feb-Dec 2025	Research and development committee Resource mobilization committee
<b>Lake Victoria Advisory Group (LVAG)</b>	<ul style="list-style-type: none"> <li>To provide advisories to policy makers, resource managers and other relevant stakeholders on pertinent issues relating to Lake Victoria</li> </ul>	<ul style="list-style-type: none"> <li>Conflict management and transformation</li> <li>Fisheries management and governance</li> <li>Aquaculture information dissemination</li> </ul>	Strengthened transboundary collaboration on fisheries and aquaculture resources management	Dec 2025	Edward Rukuunya
	<ul style="list-style-type: none"> <li>To Synthesize existing data and information to provide science-based solutions for the sustainable management development and governance of Lake Victoria ecosystem</li> </ul>	<ul style="list-style-type: none"> <li>Complete and publish a meta-analysis of rising water level</li> <li>Identify emerging issues and threats to Lake Victoria and develop a concept note to address them</li> </ul>	Improved basis for developing sound-solutions to address emerging threats in the L. Victoria basin	Dec 2025	Julius Manyala
<b>LVAG – Cont.</b>	<ul style="list-style-type: none"> <li>To FastTrack preparations for the expedition of Lake Victoria 2027 (Graham 100 years on)</li> </ul>	<ul style="list-style-type: none"> <li>Finalize the proposal</li> <li>Resource mobilization</li> <li>Publicize the expedition</li> </ul>	<ul style="list-style-type: none"> <li>Leveraged modern methodologies to document, evaluate, and understand a century of ecological, socio-economic, and governance transformations in Lake Victoria</li> </ul>	Open	Chrispine Nyamweya
	<ul style="list-style-type: none"> <li>To mobilize resources to support implementation of the group activities</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen capacity of the resource mobilization committee</li> <li>Enhance networking and partnerships</li> <li>Increasing visibility/pitching of proposals</li> <li>Donor mapping and establishment of a database</li> </ul>	<ul style="list-style-type: none"> <li>Improved functioning and sustainability of the advisory group</li> </ul>	Sept 2025	

## 6.2 Council of Advisory Groups Activities and Plans

Presented by Ms. Joyce Ikwaput Nyeko, who gave a presentation on the Council's 2025 Action Plan. She outlined essential components, including strategic objectives, planned activities, and budget considerations. The estimated budget for the plan is \$46,000.

Strategic Objective	Activities	Responsible Party	Timeline	Resources Needed	Key Output	Budget Estimate
<b>1. Harmonize the Mission and Vision of the AGs</b>	<ul style="list-style-type: none"> <li>Compile the mission/vision statements of the AGs</li> <li>Analyze, review, and harmonize the mission and vision statements</li> <li>Align the mission and vision statement of AGs with that of ACARE</li> </ul>	AGs / CoAG members	March 2025	<ul style="list-style-type: none"> <li>Online/offline tools</li> <li>Strategic documents.</li> </ul>	Agreed-upon mission and vision statements	<ul style="list-style-type: none"> <li>Communications: \$1,500</li> <li>Stationery &amp; materials: \$300</li> </ul> <p>Total: \$1,800</p>
<b>2. Guide AGs to Complete the PESTEL Analysis</b>	<ul style="list-style-type: none"> <li>Collect and review national and regional PESTEL documents</li> <li>Review PESTEL framework and facilitate analysis</li> <li>Conduct full PESTEL Analysis, taking into account the national and regional context</li> </ul>	AGs / CoAG members	April 2025	<ul style="list-style-type: none"> <li>Online/offline tools.</li> </ul>	Completed PESTEL analysis reports	<ul style="list-style-type: none"> <li>Communications: \$1,500</li> <li>Cloud Storage: \$500</li> <li>Logistics \$700</li> </ul> <p>Total: \$2,700</p>
<b>3. Review the Expertise Available in AGs and Advise on Membership Recruitment Strategy</b>	<ul style="list-style-type: none"> <li>Conduct a skills audit and gap analysis to determine recruitment needs.</li> <li>Prepare guidelines for expert recruitment based on AGs proposals</li> </ul>	AGs / CoAG members	April 2025	<ul style="list-style-type: none"> <li>Skills Profile</li> <li>Biodata</li> <li>Recruitment policy/guidelines</li> </ul>	Membership recruitment strategy	<ul style="list-style-type: none"> <li>Communications: \$1,000</li> <li>Documentation of profiles: \$2,000</li> <li>Recruitment materials: \$500</li> </ul> <p>Total: \$3,500</p>
<b>4. Identify Resource Mobilization Strategies for the Sustainability of AGs</b>	<ul style="list-style-type: none"> <li>Develop a fundraising plan, explore partnerships, and identify grant opportunities</li> <li>Organize and support grant writing workshop</li> </ul>	AGs / CoAG members	Continuous	<ul style="list-style-type: none"> <li>Grant databases,</li> <li>Partner engagement tools</li> </ul>	Resource mobilization strategy	<ul style="list-style-type: none"> <li>Consultant fees: \$10,000</li> <li>Grant proposal writing workshop: \$1,500</li> <li>Networking events subscription: \$1,000</li> </ul> <p>Total: \$12,500</p>
<b>5. Guide the AGs on Implementation of Strategic Objectives</b>	<ul style="list-style-type: none"> <li>Develop an implementation roadmap with milestones and KPIs.</li> </ul>	AGs / CoAG members	Ongoing (quarterly reviews)	<ul style="list-style-type: none"> <li>Project management tools</li> <li>Strategic objectives documents</li> </ul>	Actionable strategic implementation plan	<ul style="list-style-type: none"> <li>Consultant: \$2,500</li> <li>M&amp;E software/tools: \$1,200</li> <li>Review meetings: \$800</li> </ul> <p>Total: \$4,500</p>

<b>6. Develop Guidelines/ToRs for Sub-committees</b>	<ul style="list-style-type: none"> <li>Draft, review, and approve terms of reference (ToRs) for sub-committees.</li> </ul>	AGs / CoAG members	May 2025	<ul style="list-style-type: none"> <li>Framework, governance documents</li> </ul>	Sub-committee guidelines	<ul style="list-style-type: none"> <li>Communications and references: \$2,000</li> <li>Documentation: \$500</li> </ul> <p>Total: \$2,500</p>
<b>7. Review meeting</b>	<ul style="list-style-type: none"> <li>Conduct one in-person meeting of the CoAG</li> </ul>	CoAG members / ACARE	August 2025	<ul style="list-style-type: none"> <li>Air tickets</li> <li>Subsistence</li> <li>Meeting venue</li> </ul>	Biannual review report	<ul style="list-style-type: none"> <li>Flights: \$10,000</li> <li>Subsistence: \$5,000</li> <li>Meeting venue: \$1,000</li> </ul> <p>Total:\$16,000</p>
<b>8. Policy Advocacy</b>	<ul style="list-style-type: none"> <li>Policy and Institutional Framework Assessment</li> </ul>	AGs / CoAG members	June 2025	<ul style="list-style-type: none"> <li>Online/offline tools</li> <li>Policy documents</li> </ul>	Policy and Institutional Framework Assessment Report	<ul style="list-style-type: none"> <li>Bundles and references: \$2,000</li> <li>Documentation: \$500</li> </ul> <p>Total: \$2,500</p>
<b>TOTAL ESTIMATED PROJECT BUDGET</b>						<b>\$46,000</b>

## **7.0 Future actions and global connections**

The following presentations highlighted various opportunities for collaboration, networking, partnerships, and lessons learned in efforts across the African Great Lakes.

### **7.1 Tanganyika Water Management Project (TAKIWAMA), by Dr. Didier Cadelli, Project Manager**

The EU-funded TAKIWAMA project, in its second phase, supports the Lake Tanganyika Authority (LTA) and promotes transboundary water management across four countries. The project, presented at the UN 2023 Water Conference, focuses on enhancing environmental and climate monitoring of Lake Tanganyika and Lake Kivu, despite political challenges. TAKIWAMA collaborates with institutions like CEH (DRC), OBEPEO (Burundi), and TAFIRI, with scientific oversight from PLO DPCE. The project's goal is to generate high-quality data for informed policy and sustainable lake management. However, funding beyond 2029-2030 is uncertain, and Dr. Cadeli emphasized the need for continued investment to ensure effective water management.

### **7.2 Water-Energy-Food-Ecosystem (WEFE) Nexus process and modelling, Dr. Marco Pastori, Joint Research Centre (JRC) of the European Commission**

The JRC's focus is on water demands, addressing climate variability, extreme events, and land degradation. Dr. Pastori advocated for an integrated approach to water management that balances hydropower, agriculture, food security, and environmental needs. He introduced a European Commission-funded initiative supporting water science research through a network of 20 centres of excellence across Africa, in collaboration with African Ministers Council on Water (AMCOW) and African Union Development Agency-New Partnership for Africa's Development (AUDA-NEPAD). Dr. Pastori emphasized early stakeholder engagement, identifying data gaps, and long-term monitoring to ensure effective, sustainable water management by aligning data collection with project goals.

### **7.3 Citizen science application in the African Great Lakes, Ms. Aisha Nankanja, Earthwatch Europe**

Ms. Nankanja highlighted the role of citizen science in generating data, raising environmental awareness, and connecting scientists, communities, and policymakers. Through Earthwatch's *Freshwater Watch* program, initiatives in Sierra Leone and Zambia expanded from two to twelve catchment sites, involving schools, farmers, and educators to promote water literacy. She shared the story of a Zambian student who became an environmental advocate, inspired by early program involvement. Earthwatch provides easy-to-use water quality kits, enabling rural students to engage in hands-on science. The initiative recently expanded to the Upper Zambezi, with plans to reach the Great Lakes region. Ms. Nankanja also introduced tools for data quality control and project impact assessment, encouraging collaboration and exploration of these resources.

### **7.4 UNEP-GEF International Waters, Ms. Kaisa Uusimaa, United Nations Environment Programme-Global Environment Facility (UNEP-GEF) International Waters**

Ms. Uusimaa discussed UNEP's leadership in addressing global environmental challenges, including the triple planetary crisis: climate change, biodiversity loss, and pollution. She



highlighted the Global Environment Facility (GEF) and its role in supporting transboundary cooperation on shared ecosystems, particularly through its International Waters focal area. She shared that GEF currently funds four active freshwater projects in Africa, totaling \$18 million, including initiatives in the Volta River Basin, Niger Basin, and the Senegal-Mauritanian aquifer system. Ms. Uusima also announced a new Lake Tanganyika project, emphasizing that lessons from ongoing discussions would inform its development.

## 8.0 Meeting conclusion and ways forward

### From dialogue to action: Building Sustainable Futures in Africa's Great Lakes Region

The Annual Meeting of the African Great Lakes Stakeholder Network reaffirmed the essential role of scientific gatherings in bringing together professionals to connect, network, and exchange research experiences, findings, and information that can help influence positive policy and management development on the African Great Lakes. The ultimate goal: make the lakes healthy especially for those communities dependent on fisheries and water resources for their own livelihood and food security.

Participants acknowledged the importance of continued collaboration in addressing the challenges that negatively impact these large lake ecosystems. After its postponement in 2024 due to circumstances beyond control, the meeting's return to Zambia was warmly welcomed and seen as a testament to the commitment toward regional cooperation and progress.

Over the meeting's three days, valuable insights were shared, and constructive discussions took place, laying the groundwork for practical solutions to pressing issues within the fisheries sector.

Looking forward, attendees proposed organizing the **African Great Lakes Conference**, also referred to as the **Large Lakes Conference**, to be held during the next few years, funding permitting. This proposed gathering aims to build on the momentum and collaborative spirit established during the current meeting with other global actors and partners.

The meeting concluded with a collective sense of optimism that the knowledge exchanged and relationships built will contribute meaningfully to future initiatives.