Building strong international scientific networks in the African Great Lakes

by Jessica Ives and Ted Lawrence

Last November, nearly 100 freshwater experts from 18 countries gathered in Entebbe, Uganda. Their purpose? To answer the call for more collaborative research in understanding the African Great Lakes (AGL). Unlike the North American Great Lakes, these large lakes in East Africa each lack long-term, comparable, peer-reviewed data.

For decades, international researchers have been calling for more collaborative work in the AGL region. During the past five years, several undertakings have highlighted these calls to action: the Great Lakes to Great Lakes Initiative, spearheaded by Russell Feingold, former U.S. senator and special envoy to the Great Lakes region of Africa (2015); the Global Conference on Inland Fisheries in Rome, sponsored by the United Nations' Food and Agriculture Organization and Michigan State University, which resulted in 10 consensus-based steps toward achieving responsible inland fisheries (2016); and the African Great Lakes Conference in Entebbe, Uganda, led by The Nature Conservancy with funding from the MacArthur Foundation (2017). Additionally, in 2017, the African Center for Aquatic Research and Education (ACARE) was formed by freshwater experts from Africa and North America. Its goal is to better address the challenges facing the AGL by strengthening collaboration among freshwater experts both worldwide and specifically within the AGL riparian countries.

"Strengthening collaboration and communication is critical for a resilient scientific and management community that effectively makes use of their limited resources," says Robert Hecky, ACARE board member and editor of IAGLR's *Journal of Great Lakes Research*. "IAGLR is mostly familiar with this in the North American Great Lakes, where cross-jurisdictional collaboration is well established. Thus, we look forward to strengthening the interaction of the global freshwater communities surrounding these large lake systems at IAGLR 2020."

ACARE convened a workshop in November 2019 in Entebbe, Uganda, centered around establishing a network of collaboration and information exchange on the AGL. This network is loosely based on the successful lake committee model that administers the *Joint Strategic Plan for Management of Great Lakes Fisheries for the Laurentian Great Lakes*. However, for it to succeed, this AGL network and the processes around it must be designed by African experts to fit African contexts and goals. The workshop was co-hosted by ACARE, the Lake Victoria Fisheries Organization (part of the East African Community, a regional intergovernmental organization), and the National Fisheries Resources Research Institute (one of Uganda's public research institutes), and it included participants from all 10 of the riparian AGL countries.

Using a mixed plenary–breakout format, the workshop established six multi-jurisdictional, lake-specific advisory groups comprised of participants from the AGL riparian countries to help address the gaps in knowledge about each AGL. Each advisory group had the same basic structure and overall goals, but had the freedom to develop specifics independently within the context of its lake(s). These groups are the Lake Edward/Albert Advisory Group, the Lake Kivu Advisory Group, the Lake Malawi/Niassa/Nyasa Basin Fisheries & Aquaculture Network, the Lake Tanganyika-Scientific Advisory Group, the Lake Turkana Advisory Group, and the Lake Victoria Advisory Group.



Participants of the November 2019 ACARE workshop in Uganda

Each group created a purpose statement, identified missing key participants, designed group structure and processes, and developed next steps, which included a commitment to meet at least annually. At these annual meetings, each advisory group will prioritize research needs and harmonize both research approaches and data collection efforts among their riparian counterparts. Details of the workshop outcomes are available in a workshop report.

"The purpose of this process is so that each lake can produce long-term, comparable, and peer-reviewed data that can eventually be used to positively influence policy and management," explains Kevin Obiero, director of the Kenya Marine Fisheries Research Institute's Sagana Research Centre and member of both the ACARE board and IAGLR. "Additionally, we intend that each group not only harmonizes research on its specific lake, but among the other lakes through larger, inter-basin meetings. We hope that we will be better equipped to direct financial and research resources where they are needed most and allow for more efficient information and data exchange."

We view international collaboration as essential to IAGLR's interest in the global advancement of large lake science. While the AGL are fascinating from a scientific viewpoint, they historically have been studied in disparate and piecemeal ways. Critical outcomes of the AGL collaborative process can improve upon that history by influencing research to be useful to the local communities and by creating clear lines of communication both among AGL research communities and between the African researchers and the global freshwater community. In that spirit, more than 20 African freshwater scientists will attend the IAGLR conference in Winnipeg this June to engage with IAGLR members. Seek them out to help strengthen the global freshwater community.

If you are interested in becoming involved with ACARE or following our efforts, please reach out to Ted Lawrence (ted@agl-acare.org).

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