

## NaFIRRI poised for increased Biodiversity data generation and usage

Staff at the National Fisheries Resources Research Institute (NaFIRRI) is being trained on how to capture, share and utilize data through the Global Biodiversity Information Facility –GBIF. The three day training that started on Monday 17<sup>th</sup> September is an in-house capacity building practice that will see more data generated from the Biodiversity especially in the Fisheries, Water quality sectors.



Mr. Laban Musigunzi (standing) presenting during training on how to capture, share and utilize data through the Global Biodiversity Information Facility –GBIF

Established in 2001, GBIF was established as an effective infrastructure that delivers primary biodiversity data and multiplies the impact of hundreds of other organizations and initiatives. Global Biodiversity Information Platform formed by GBIF established in 1999 by the recommendation of the Biodiversity Informatics Subgroup of the Organization for Economic Cooperation and Development's Mega-science Forum (OECD). The recommendation expressed the need for an international mechanism needed to make biodiversity data and information accessible worldwide. The argument was that GBIF would produce many economic and social benefits and enable sustainable development by providing sound scientific evidence.

Coordinated through its Secretariat in Copenhagen, the GBIF network of participating countries and organizations, working through participant nodes, provides data-holding institutions around the world with common standards and open-source tools that enable them to share information about where and when species have been recorded. This knowledge is derived from many sources, including everything from museum specimens

collected in the 18th and 19th century to geotagged smartphone photos shared by amateur naturalists in recent days and weeks.

“Even before we became active on GBIF there was data on Uganda and on fish, even then when we were not active there were species occurrences in Uganda. For our concern it is mostly fish, invertebrates and algae are still inactive”, says Laban Musinguzi the chief trainer and Researcher at NaFIRRI.

In his remarks, the Director of Research at NaFIRRI, Dr. Anthony Taabu Munyaho said the staff will have the opportunity to get out to the world and get to be known through publishing data through the GBIF platform.” Many countries have published information on Uganda so why should we have countries doing it and we are not publishing data from our country. This means we have a potential to contribute data and knowledge to the world. This information is vital for other sectors not only Fisheries but for Educationalists as well as the Tourism sector”.



Participants during the training workshop in the NaFIRRI conference facility

Uganda is a voting participant that joined the GBIF in 2009 and has 247,699 publications with data available for Animals, Plants, Fungi, Protozoa, Bacteria, Virus, Chromista and Archaea. Notwithstanding there are still few data users from Uganda representing only 0.0% of all downloads in the last 12 months. For Uganda, the National node is hosted by the National Council for Science and Technology; whose role is to support mobilization of data within the country, encourage use and foster utilization.

Alice Endra the senior Information Scientist at NaFIRRI in charge of the Data center also has information from the Aquatic Sciences and Fisheries Abstract (Information System)-AFSA that captures Literature and now GBIF presents data. “We will now increase our usage statistics, since people will need to make use of data. We need to interest stakeholders from other data generating institutions such as Universities so that we increase our usage statistics.” Alice Endra Senior Information Scientist. She advised that it is good to publish because you share knowledge with a wider audience and publishers get to be known.

National Fisheries Resources Research Institute (NaFIRRI) is among the most recent data publishers in Uganda. Others are Makerere University and the National Biodiversity Data Bank. Top data contributors about biodiversity in Uganda include the United States of America, United Kingdom, Norway, Belgium, Colombia, Denmark, Canada, Netherlands and Uganda.

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The GBIF network draws all these sources together through the use of the Darwin Core standard, which forms the basis of GBIF organization's index of hundreds of millions of species occurrence records. Publishers provide open access to their datasets using machine-readable Creative Commons licence designations that allow scientists, researchers and others users to apply the data in hundreds of peer-reviewed publications and policy papers each year. These cover topics from the impacts of climate change and the spread of invasive and alien pests to priorities for conservation and protected areas, food security and human health.