

# Philip Rwezawula Aquatic Scientist @ Busitema University Maritime Institute

# 2 Profile

I hold a Masters degree in Aquaculture with a great distinction (Hons) from Ghent University (Belgium), second upper class Bachelor of Science in Fisheries and Aquaculture from Makerere University as well as a first-class diploma in fisheries management and technologies from Fisheries Training Institute (FTI), (Entebbe Uganda).

I am a highly motivated and hardworking individual, who has a scientific background with good grades. I possess strong analytical and problem-solving skills with the ability to learn and train others and with good interpersonal skills and ability to relate well in a multicultural environment.

I have undertaken research in the field of fisheries and aquaculture for over eight years at the Aquaculture Research and Development Center – Kajjanai (ARDCK) and the National Fisheries Resources Research Institute (NaFIRRI) of the National Agricultural Research Organization (NARO) in Uganda. I worked on various projects in Aquaculture and Fish Biosciences, Capture Fisheries and Biodiversity Conservation, Innovations and Post-harvest Handling and Fish Habitat Management research programs.

# Projects

I have taken part in management and implementation of the following projects:

Project	Key Outputs	Funder
Development of Appropriate Cage Aquaculture Technologies and Aqua-parks.	Guidelines for selection and zoning of sites for cage fish farming and aquaculture parks as well as a manual for operation of cage fish farms and aquaculture sites were developed, suitable sites/aquaparks in Busia, Mayuge, Jinja, Buikwe and Kalangala districts were mapped and a demonstration/cage culture research farm at the Pier in Jinja established and feed trail experiments conducted.	GOU/Agricultural Technology and Advisory Services (ATAS).
2. Genetic improvement of growth of Nile tilapia ( <i>Oreochromis niloticus</i> ) and African catfish ( <i>Clarias gariepinus</i> , Gervais) in Uganda.	5 strains of African catfish suitable for selective breeding were identified and used to produce specimens of pure lines of African catfish from lakes Kyoga (700) and Wamala (547) and three Nile tilapia strains with improved daily growth rates of 8.7%, 7.3% and 6.5% were produced.	GOU/Agricultural Technology and Advisory Services (ATAS).
3. Development of low-cost captive breeding and hatching technologies for the Marbled lung fish ( <i>Protopterus aethiopicus</i> ) to improve livelihoods, nutrition, and income for vulnerable communities in Uganda.	Morphometric characteristics of lungfish populations from water bodies in Uganda are generally homogenous except populations from Lake Nawampasa.	GOU/Agricultural Technology and Advisory Services (ATAS) & Aquafish.
4. Sustainable utilization and management of natural fish food organisms for Nile tilapia and African catfish.	Three formulations for Nile tilapia grower feed and three for African catfish grower feeds were formulated and tested for palatability and digestibility.	GOU/ Agricultural Technology and Advisory Services (ATAS).
5. Promoting Environmentally, Economically and Socially Sustainable Cage Aquaculture on the African Great Lakes (PESCA).	A NARO cage culture application guiding farmers on the Best management practices, mapped the extent of cage aquaculture on the African Great Lakes, made video	African Great Lakes Conservation Fund administered by The Nature Conservancy with funding provided by John D. and Catherine T. MacArthur Foundation.

	tutorials guiding farmers on how to go about cage fish farming.	
6. Development of technologies for fish growth enhancement: Addressing aquaculture emerging issues.	Fry production technologies for 'Ningu' ( <i>Labeo victorianus</i> ) and 'Kisinja' ( <i>Barbus altianalis</i> ) developed.	GOU/ Agricultural Technology and Advisory Services (ATAS).
7. The effects of three feeds (Kajjansi CP 35%, Ugachick CP 35% and TIF feed) on catfish hatchery fecundity.	Kajjansi feed boosted the fecundity boosted from 35% to 65% and produced relatively larger eggs.	Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA).
8. Product development and value addition to farmed fish.	Improved marketability and profitability of both catfish and tilapia fish products, different packaging methods have were developed.	Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA).
9. Evaluating the effectiveness of live food (Moina and de-capsulated Artemia) and artificial dry feed (Ranan CSO) in weaning African catfish larvae.	African catfish larval survival increased from less than 25% to about 65%.	Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA).
10. From the lab to the World: Unlocking Uganda's freshwater biodiversity data for sustainable development.	Over 5,000 aquatic biodiversity records digitized and published (GBIF) and a freshwater biodiversity portal for Uganda developed and launched.	JRS Biodiversity foundation.
11. Increasing capacity for conservation of threatened fish species through data mobilization and training.	Over 7,000 fish biodiversity occurrence records digitized, mapped and published (GBIF).	EU, GBIF and GOU.
12. The potential for aquaculture in Lake Victoria and implications for wild fisheries and fish commodity markets.	Biodiversity and water quality status of the whole lake Victoria ascertained (Kenya, Uganda and Tanzania).	National Science Foundation (NSF) and University of Denver.
13. Promoting sustainable catchment management practices to improve ecosystem health in Lake Victoria basin: A case study of lake Wamala.	Mapped different land uses and associated levels of degradation and campaigns with recommendations to the locals to conserve the ecosystem launched.	GOU (CGS).

Key activities undertaken include: Earthen pond and cage aquaculture site suitability and capability assessments; fish farm planning and layouts; enterprise budgeting and farm planning; pond and cage designing and construction; fish seed multiplication and breeding (Nile tilapia, African catfish, African lungfish, *Barbus altianalis*, Ssemutundu, Nile perch and Ningu); routine on-station pond and cage farm management; including stocking feeding, sampling, grading and sorting, water quality monitoring and assessments, fish health monitoring and disease control, harvesting, marketing and value addition; extension services to farmers on and off station, through media, exhibitions and agricultural shows, and training. I also work as an aquaculture planning and development officer at AFLANET Uganda, a non-profit oriented organization for which I am part of the founding members. Currently, I work with Busitema University, at the Maritime Institute as an Assistant Lecturer Aquatic Sciences with terms of reference pivoting around capacity building, research and outreach, giving me a mandate to freely collaborate and offer services to the general community and contribute to local people's livelihood enhancement.

### Details

+256704525252/+256775243069

philiprwezawula@gmail.com

#### Links

https://www.linkedin.com/in/rweza wula-philip-31751911a

### Skills

Good communication and interpersonal skills

Good organizational and managerial skills

Experimental/sampling designing, data collection, analysis (R and SPSS) and scientific reporting

GIS (QGIS)

Digital manipulation skills

## Languages

English

Luganda

Swahili

### Hobbies

Football, Swimming and Reading

# Employment History

Assistant Lecturer Aquatic Sciences at the Maritime Institute of Busitema University, Uganda

December 2020 — Present

Researcher at National Fisheries Resources Research Institute (NaFIRRI) and Aquaculture Research and Development Centre, Kajjansi (ARDCK) of the National Agricultural Research Organization (NARO) January 2013 — December 2020

### Education

Masters in Aquaculture, Ghent University Belgium, GHENT

September 2018 — September 2020

Bachelors of Fisheries and Aquaculture, Makerere University, Kampala

August 2013 — February 2017

Diploma in Fisheries Management and Technologies, Fisheries Training Institute (Entebbe), Entebbe

August 2010 — November 2012

UACE, Masaka Secondary School, Masaka January 2008 — December 2009

UCE, Broadway High school Kawempe , Kampala January 2004 — December 2007

PLE, Hillroad Public School, Masaka January 1997 — December 2003

### **Publications**

- Fish species occurrence records for Uganda mobilized from Observation Archives. Version 1.1. National Fisheries Resources Research Institute. Occurrence dataset: <a href="https://doi.org/10.15468/ywx440">https://doi.org/10.15468/ywx440</a>
- Additional fish species occurrence records for Uganda. National Fisheries Resources Research Institute. Occurrence dataset: https://doi.org/10.15468/yx4qaz
- Fish species distribution, with emphasis on haplochromine cichlids, in different habitats of the Ugandan portion of Lake Victoria. National Fisheries Resources Research Institute. Occurrence dataset https://doi.org/10.15468/cezng8
- 4. A chapter in Encyclopedia of the World's Biomes <a href="https://doi.org/10.1016/B978-0-12-409548-9.12090-1">https://doi.org/10.1016/B978-0-12-409548-9.12090-1</a>
- The extent of cage aquaculture, adherence to best practices and reflections for sustainable aquaculture on African inland waters <a href="https://doi.org/10.1016/j.jglr.2019.09.011">https://doi.org/10.1016/j.jglr.2019.09.011</a>

### Referees

1. Assoc. Prof. Mwanja Wilson Director Maritime Institute, Busitema University wwwwanja@yahoo.com +256701594923

2. Dr. Mujibu Nkambo, Aquaculture Research and Development Center Kajansi. mnkambo@yahoo.co.uk 0776190279/0702968281

3. Dr. Ogutu-Ohwayo Richard, CEO, African Lakes Network (AFLANET) ogutuohwayo@yahoo.com 0702518324