

Terms of Reference (ToR) for Impact Assessment

Project Title: AQUAHUB II - Education and Research Hubs for the Sustainable Management of Freshwater Ecosystems in Eastern Africa

Country: Eastern Africa

Project/Programme Number: 0612-00 / 1975 - 2024

Name of partner Institutions stated in project contract: University of Natural Resources and Life Sciences, Vienna (BOKU); Egerton University (EGU); Addis Ababa University (AAU); and Bahir Dar University (BDU)

Additional partner Institutions: Ethiopian Institute for Agricultural Research, National Fishery & Aquatic Life Research Center (EIAR-NFALRC) and Institute for Water Education (IHE Delft)

1. INTRODUCTION/BACKGROUND

1.1. Project context

Biodiversity, natural resources and ecosystem services are important for all, but essential for the rural poor and women in particular who often rely directly on local ecosystem services and biodiversity for their food, health, income, shelter, energy and quality of life.

Freshwater ecosystems provide crucial resources (water for drinking & irrigation schemes, fish, grazing area for livestock, plants as house-building material) and functional freshwater ecosystems render services, such as water purification, protection against floods, water supply during dry-periods, hydropower generation and the provision of fertile land. On the global scale, freshwater ecosystems are amongst the most valuable and sensitive ecosystems. The situation in Eastern Africa is even more dramatic, due to the growing population, high poverty prevalence and climate change effects. The increasing discrepancy among demands and availability of freshwater ecosystem resources and services is calling for innovative management solutions suitable for the Eastern African context - ideally developed, promoted and implemented by Eastern African institutions and professionals.

Institutions of Higher Education & Research are considered as key-agents for innovation, transformation and the provision of highly qualified professionals. However, though the massive increase of university enrolment numbers, still tertiary education attainment is low in sub-Saharan Africa, compared to OECD countries and the share of women with post-graduate qualification is even lower. Furthermore, the quality-issue has become a crucial subject of discussion and major concern among stakeholders in Eastern Africa, as a result of the recent student enrolment expansions and the establishment of a large number of new universities with limited capacity. The lack of highly qualified staff, adequate infrastructure and financial resources to support student learning are the most cited factors to affect the quality of education negatively. These issues are even more crucial for academic programmes in natural sciences, medicine, engineering and technology, since these subjects require laboratories, equipment and practical courses to generate highly skilled graduates.

1.2. Project history

The AQUAHUB project (OEZA 0612-00/2021) builds on a long-term commitment of the Austrian Development Cooperation (ADC) to support collaborations among freshwater research and education institutions in Austria and the Global South. ADC provided core funding from 1975 to 2009 to the project “IPGL – International Post-Graduate Training Programme in Limnology” via 12-months project contracts, from 2009 to 2018 to the project “CAPAQUA - Development of Educational and Research Capacity in Eastern Africa for the Sustainable Management of Aquatic Ecosystems” via 3-years project contracts and from 2018 to 2021 to the project “AQUAHUB - Education and research hub for the sustainable management of aquatic ecosystems in Eastern Africa” via 3-years project contracts.

The IPGL project was initiated in 1975 by Prof. Heinz Löffler, director of the Institute of Limnology, Austrian Academy of Sciences (ILIM-AAS), as a 8-months training programme in limnology for scientists from developing countries in Austria. In the early years the training programme was short-named “UNESCO-Course”, due to support by UNESCO. Funding of grants and operational costs was, however, provided from the very beginning by the Austrian Government as a special project within its scheme for technical assistance to developing countries. For two decades, IPGL was an almost exclusive Austrian enterprise. The coordination office and the majority of courses were based at departments of the ILIM-AAS at Lunz, in Vienna and from 1982 at Mondsee. Course activities took place at all other Austrian research centres of relevance, the neighbouring fishpond research centre of the Czechoslovak Academy of Sciences and field-courses were held at various Austrian water-bodies. The programme consisted of lectures, class-work and individual research projects, considering the specific research interest of participants. As it was not possible to integrate IPGL into an Austrian University Curriculum, no academic degree could be offered, but a detailed certificate was issued to each participant after having passed the final exams and delivery of a scientific report on the individual research project.

Following the recommendations of a comprehensive “ADC Fellowship Alumni Study (ÖFSE-Edition 5, 1996)”, a process of establishing an international network of institutional collaborations was set off in 1997 (Table 1). At the end of the 1990's, the overall goal of IPGL shifted towards the support of capacity development processes at Eastern African institutions, which train professionals, carrying-out relevant research/extension activities and contributing to the development of evidence-based policies.

Year	Milestones
1975	Establishment of IPGL (“UNESCO-course”) – 8-months training programme in Austria, coordinated by the Institute of Limnology of the Austrian Academy of Sciences (ILIM-AAS).
1986	Fact finding mission to Eastern Africa (Dr Imhof, Prof Schiemer) - recommending shift towards institutional cooperation.
1994	Start of the institutional cooperation with Egerton University (Njoro Kenya) within the “Tropical River Ecology Initiative“ - two 3-weeks field-work/laboratory workshops held at Egerton University in 1994 and 1995 with 40 participants from Eastern Africa.
1997	Establishment of the collaborative Master’s Programme with UNESCO-IHE “Master’s Programme in Environmental Sciences, specialisation in Limnology & Wetland Ecosystems (ES-LWE), with the further goal to integrate Makerere University, (Uganda) and Egerton University (EGU) into the Master’s Programme in future.
2003	Strengthening of south-south cooperation in Eastern Africa via the establishment of EAAWA (East Africa - Austria Water Association) at the “Inaugural EAAWA Symposium - Linking Water Experts to Meet the Challenges of Water Resources Management in East Africa” in Mukono, Uganda, attended by 125 participants from 7 countries, majority of them IPGL alumni.
2004	EGU started contributing to the ES-LWE Master’s Programme Curriculum with a two weeks course module in “Tropical Limnology” held at EGU.
2006	EAAWA transformed to EAWA (Eastern African Water Association), incorporating 200 EAWA members from Eastern Africa. Implementation of two transdisciplinary conferences in Kenya (Mombasa, 2006 & Kisumu, 2008), attended by more than 270 participants and creating a transdisciplinary forum for scientists, policy makers, NGOs, the private sector and communities in order to facilitate the translation of research into development processes in the region.
2008	EGU became a fully-fledged partner in the joint Master’s Programme ES- LWE, contributing to the curriculum with one taught semester and hosting/ supervising MSc research projects at EGU - however, the Master’s degree still awarded by UNESCO-IHE.
2012	CAPAQUA project shifted from the ILIM-AAS Mondsee, to BOKU. Establishment of the International Joint-Degree Master’s Programme in “Limnology & Wetland Management (LWM)”.
2013	Establishment of the Joint Master’s Programme in “Aquatic Ecosystems & Environmental Management (AEEM)”, implemented by Addis Ababa University (AAU), Bahir Dar University (BDU), Ethiopian Institute for Agricultural Research (EIAR-NFALRC) and backstopping by BOKU.
2019	Expansion of the Master’s programme AEEM towards an Eastern African Joint Degree Master’s programme, implemented by AAU, EGU, BDU, EIAR-NFALRC and backstopping by BOKU. Establishment of the web-based AQUAHUB network platform.
2020	Establishment of the web-based AQUAHUB networking platform.

Table 1: Overview of history and milestones of the IPGL, CAPAQUA and AQUAHUB projects from 1975 to 2020.

In total, 668 water/environmental professionals from developing countries, therefrom 374 from Eastern Africa, attended academic training programmes which were implemented by IPGL, CAPAQUA and AQUAHUB from 1975 to 2020 (Fig 1).

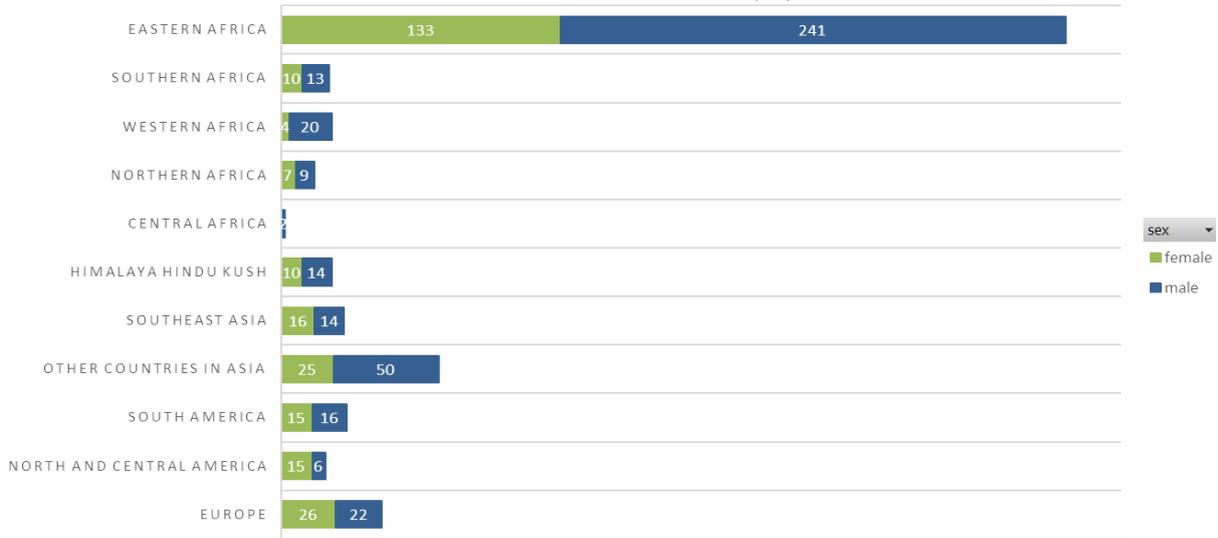


Figure 1: Origin of IPGL, CAPAQUA and AQUAHUB programme participants from 1975 to 2020

1.3. Project strategy

The overall projects strategy evolved over time via IPGL, CAPAQUA and AQUAHUB from “training individuals” towards institutional capacity development and N-S & S-S networking. Eastern Africa became the regional focus by the end of the 1990s. Over the last 20 years, the projects have been strategically focussing on the support of capacity development processes at Eastern African HEST institutions at the qualitative level via enhancing the quality and relevance of postgraduate programmes, the strengthening of national and regional networking and the provision of well-educated and well-skilled postgraduates to the Eastern African job market. The target institutions and programme graduates have been perceived as key-agents to initiate transformation processes towards the sustainable management of environmental assets to the benefit of Eastern African people. The projects have been concentrating on Master’s programmes, since the availability of national/regional fellowships/loans to attend Master’s programmes is limited in Eastern Africa and Master’s programme graduates have a broad spectrum of career opportunities (environmental research-, policy- and management institutions, universities, private sector, NGO’s, PhD studies). Over the last 10 years, the projects have been considering joint degree Master’s programmes as a strategic tool to intensify institutional N-S and S-S collaboration and to enhance the quality of educational programmes by combining complementing thematic expertise of HEST institutions, as well as fostering transformative skills via student/lecturer mobility. Special emphasis has been laid on specialised and diverse teaching staff and skill-oriented course elements such as, laboratory & field-work, excursions, group-work, seminars, data analysis/interpretation, student presentations, report writing and environmental modelling.

The overall project objectives and outcomes evolved over time as well– however, integrated over time, the following goal and outcome are most significant and consistent:

- **Overall objective:** to foster the sustainable management of freshwater ecosystems in order to improve livelihoods in Eastern Africa.
- **Project outcome:** to support capacity development processes at Eastern African institutions, which train professionals, carrying-out relevant research/extension activities and contribute to the development of evidence-based policies towards the sustainable management of freshwater ecosystems and its resources and services.

A **theory of change** (ToC) approach was developed retrospectively (attachment II) through an iterative process by an independent contractor, project beneficiaries and stakeholders of relevance. As part of an evaluability assessment, the theory of change was further developed based on a participatory approach with a consulting company in 2021. The ToC includes two impact levels. The overall impact

targeted, is to deliver contributions to effectively initiate change processes in policy making as well as attitudes and practices in society which supports to the advance the achievement of SDGs 2, 3, 4, 5, 6, 12, 13, 15, and 17. The expected preparatory impact is that increased individual capacities (I1) and increased institutional capabilities (I2) contribute to the sustainable management of freshwater ecosystems and their resources in Eastern African countries.

The planned project outcomes are to...

1. ...establish high quality joint degree master's programmes for the sustainable management of freshwater ecosystems in Eastern Africa;
2. ...intensify South-South collaborations and enhance collective impact via networking.
3. ...provide highly qualified graduates to the job market in order to improve the management of freshwater ecosystems;
4. ...develop and implement projects and research towards the sustainable management of freshwater ecosystems and its resources;
5. ...increase capacity of Eastern African HEST institutions to strengthen them in achieving development goals; and
6. ...increase knowledge and awareness on sustainable management of freshwater resources.

The project is supporting the achievement of the six outcomes at the output level with:

- positioning the international joint degree Master's programme in Limnology & Wetland Management (LWM)" as a regional flag-ship programme in Eastern Africa (output 1);
- extending the Master's programme "Aquatic Ecosystems & Environmental Management (AEEM)" to a joint degree Master's programme, implemented by Addis Ababa University, Bahir Dar University, EIAR_NFALRC and Egerton University (output 2);
- implementing international standards for the LWM and AEEM programmes (i.e. Bologna declaration, etc.) (output 3);
- establishing a network of southern and northern HEST institutions with common interests towards the sustainable management of freshwater ecosystems in Eastern Africa (output 4);
- resource persons (including staff of research and policy institutions) from different Eastern African institutions (output 5);
- a web-based network platform that interlinks freshwater experts and enthusiasts (output 6);
- increasing research, teaching & project management skills of staff, providing high quality curricula and equipment (output 7);
- selecting high-potential students that attend the LWM and AEEM programmes and obtain their MSc degree (output 8);
- contributing to higher research output, e.g., via MSc research projects (output 9); and
- enhancing the quantity, quality and relevance of research and amplifying the dissemination of research results as well as the outreach to stakeholder and society (output 10).

1.4. Project activities

The project activities have been addressing individuals, institutions and N-S & S-S networking measures:

Activity Package 1: Capacity development at institutional level

- 1.1 Training/life-long-learning of staff members of target institutions.
- 1.2 Development and implementation of high quality inter-university programmes (LWE, LWM & AEEM).
- 1.3 Purchase of teaching & research equipment (CAPAQUA & CAPAQUA/DGIS).
- 1.4 Development and implementation of collaborative research- & capacity development.

Activity Package 2: Capacity development at individual level

- 2.1. Academic programmes (IPGL, LWE, LWM, AEEM, short-courses) are implemented
- 2.2. Hands-on practical and soft skills trainings are implemented

Activity Package 3: Networking and outreach activities

- 3.1. Support of networking: AQUAHUB platform, EAWA, social media (IPGL site at Facebook, Facebook groups of students/alumni).
- 3.2. Development & implementation of collaborative programmes/projects to support network development.

1.5. Beneficiaries

Direct individual beneficiaries

- Fellowship holders that are attending the Master's programmes.
- Young professionals from consortium universities or other Eastern African universities participating in single modules.
- Academic and technical staff of Eastern African institutions partnering with AQUAHUB.
- Lecturers and researchers from other HEST institutions or Non-governmental organisations that are involved in international, regional or inter-sectorial collaborations with the AQUAHUB project.

Direct institutional beneficiaries

- Local partner institutions in Eastern Africa that benefit from capacity development in education and research, extension activities, and enhancing research and teaching capacity through the provision of better equipped laboratories.
- BOKU as the coordinating institution benefits from a large network for education and research in freshwater ecosystems as well as from the prestige that the programmes bring to it.

Indirect individual beneficiaries

- People of the Eastern African society, especially the ones living close to and being dependent on freshwater ecosystems.
- They benefit from initiatives and activities towards the sustainable management of freshwater ecosystems and resources implemented by programme graduates and also from capacity initiatives implemented by AQUAHUB project partners.

Indirect Institutional beneficiaries:

- Eastern African ministries, environmental agencies, PPP's (environment, water & sanitation sectors), research institutions and environmental consultant firms.
- They benefit from highly qualified graduates for their staff recruitment, enhanced North-South and South-South networking and scientific contributions coming from collaborative MSc research projects (e.g. NAFIRRI, MUK, NWSC, MWE, KMFRI).

International, regional and national agencies and NGO's that benefit from highly qualified programme graduates as staff, enhanced networking including the exchange of experts as well as from scientific contributions

1.6. Project implementation

The IPGL, CAPAQUA and AQUAHUB projects have been coordinated by Austrian institutions from 1975 until now (Austrian Academy of Sciences, 1975-2012; BOKU, 2012-2024). In 2003, Eastern African institutions became informal project partners being responsible for the implementation of specific project activities, as to the project proposals. Since 2009, Eastern African partner institutions have been fully-fledged project partners in the project contracts with ADC and having leading roles in the implementation and administration of project activities. Since 2012, BOKU, IHE Delft and EGU have been planning, implementing, managing and steering the joint degree Master's programme LWM jointly. Since 2013, AAU is the overall coordinator of the joint degree Master's programme AEEM and the AEEM programme is planned, implemented managed and steered by AAU, BDU and EIAR-NFALRC, with backstopping of BOKU. In 2019 the Master's programme AEEM has been expanded towards an Eastern African Joint Degree Master's programme, coordinated by AAU and implemented by AAU, EGU, BDU and EIAR-NFALRC, with backstopping of BOKU. The organisational set-up and procedures are described within the project contracts with ADC and written agreements among the project partners in detail (Cooperation Agreements, Operational Agreements, Education & Examination Regulation Agreements).

2. PURPOSE

The purpose of the assignment is to promote organisational learning and to support decision making at both the strategic and operational level – hence, capturing both the learning, as well as the steering dimension.

The assignment serves to assess in how far outcomes have been achieved and whether the contributions to the overarching impacts are plausible. Furthermore, the assignment should enhance the understanding of change processes and impact mechanisms, conclude on lessons learnt and propose actionable recommendations to enhance the impact of forthcoming AQUAHUB projects.

The intended users of the assignment findings are the project partner institutions, key-stakeholder institutions in Eastern Africa and the ADC sub-sector “Higher Education, Science & Research”.

In a previous phase of the AQUAHUB project, an independent consultancy was commissioned by the University of Natural Resources and Life Sciences, Vienna (BOKU) to:

- a) assess the project’s relevance and coherence in the local context of Eastern Africa;
- b) reflect, assess and -if necessary- revise the original Theory of Change; and
- c) assess the evaluability of the project for this impact assessment.

Based on these three objectives, the consultancy carried out three separate analyses that were tied together into a holistic research strategy.

First, AQUAHUB’s coherence to the policy context and relevance to local needs was assessed. A sample of the most important policies in the three countries and the region were systematically analysed regarding their point of intervention, and assumed causal mechanism, and subsequently scored regarding their practical relevance for and alignment with the AQUAHUB project. Interviews and focus group discussions with students, academic staff, and alumni of the educational programmes and key institutions and organisations (incl. potential and actual employer’s of graduates) allowed the assessment of these stakeholders’ needs.

Second, the Theory of Change was analysed, tested for plausibility, and ultimately visualised. The analysis results represent a preparatory step to this impact assessment, therefore, its approach and results do not speak to the project’s effectiveness or impact. Instead, it focusses on the internal consistency and theoretical plausibility of the project’s Theory of Change. The practical validation of the impact hypotheses shall be conducted in this tendered assignment.

Finally, the AQUAHUB project was assessed according to it’s evaluability. The assessment used data from interviews, the revised theory of change, and project documents to develop detailed scores for different criteria and analytical dimensions. The results from the evaluability assessment provide insights regarding the general evaluability of the project (*whether* it can be evaluated), as well as regarding the specifics of a possible evaluation (*how* it could be evaluated). Conclusions of the evaluability assessment were used to develop this tendered assignment.

3. OBJECTIVE

The objectives of the assignment are:

- 1) To assess the degree to which direct outcomes have been achieved;
- 2) To assess contributions towards impacts; and
- 3) To identify key learnings to feed into the design and implementation of forthcoming AQUAHUB projects.

The specific objectives are:

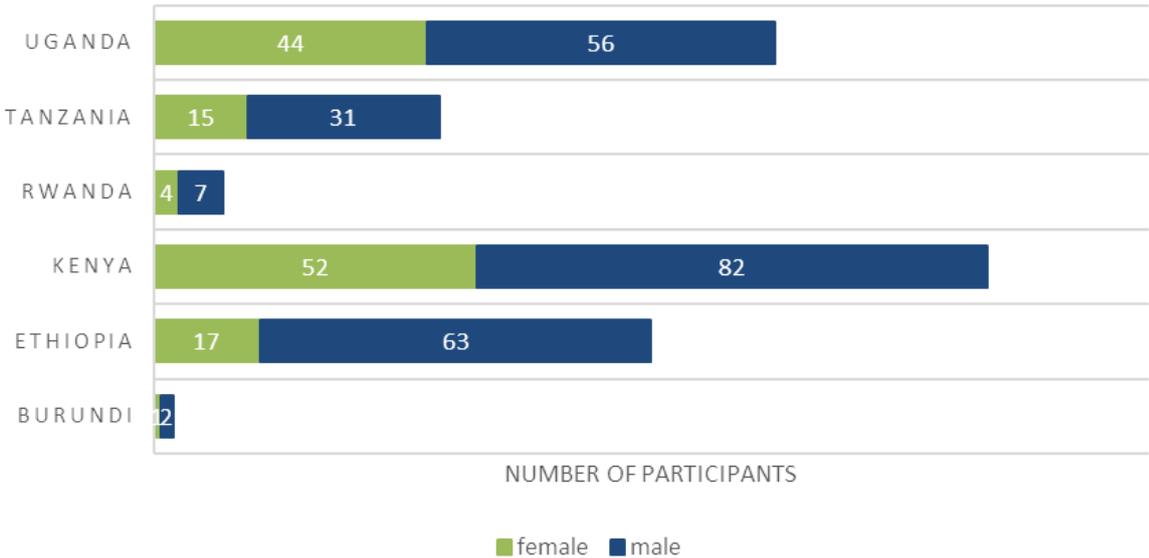
- 1.1. To assess the contribution of project outputs to project outcomes;
- 2.1. To assess the contribution of project outcomes to the overarching project impacts;
- 3.1. To identify lessons learnt and to provide actionable recommendations to enhance the impact of forthcoming AQUAHUB projects.

4. SUBJECT AND SCOPE

Subject of the study projects the ADC funded projects with the project number IPGL 0612-00, implemented from 1975 to 2021 (IPGL, 612-00/1975 to 612-00/2009; CAPAQUA 612-00/2009 to 612-00/2018; AQUAHUB 612-00/2018).

Geographically, the assignments shall focus on the Eastern African region, with special emphasis on Uganda, Kenya and Ethiopia. Therefore, the assignment will focus on institutions and individuals (Fig 2.) from/in these three countries. As to cover regional aspects, institutions and individuals from Tanzania and Rwanda may be included as well.

Figure 2: IPGL, CAPAQUA & AQUAHUB programme participants from Eastern Africa from 1975 to 2020.



The target group are project beneficiaries, as stated in the ToR document in chapter 1.5. The assignment shall include the input of at least 150 IPGL alumni (at least 60 females) and at least 20 stakeholder institutions. The assignment shall identify eventual gender specific aspects.

The assignment shall focus on the OECD DAC evaluation criteria “impact”.

The assignment is expected to apply a reflective and qualitative approach, taking into account the complexity and wider context of capacity development processes. The assignment shall identify and summarise key learning to feed into the strategy, design and implementation of future AQUAHUB projects.

5. SPECIFIC QUESTIONS

Aligned to the specific objectives of the ToR, the assignment is expected to respond to the following questions:

Ad specific objective 1.1.:

- 1.1.1. To what degree did the implementation of the LWM (**output 1**) & AEEM (**output 2**) master's programmes, as well as the implementation of international standards (**output 3**) contribute to the establishment of high quality joint-degree master's programmes for the sustainable management of freshwater ecosystems (**outcome 1**) ?
- 1.1.2. To which extent did the implementation of the AEEM master's programme (**output 2**), the involvement of external resource persons (**output 5**), the network of southern and northern HEST institutions (**output 4**), and the web-based network platform (**output 6**) contribute to South-South collaborations and to an enhancement of collective impact (**outcome 2**)?
- 1.1.3. To what extent did the implementation of the LWM (**output 1**) & AEEM (**output 2**) master's programmes, the implementation of international standards (**output 3**), and the research, teaching & skills training of staff (**output 7**) contribute to the provision of highly qualified graduates to the job market in order to improve the management of freshwater ecosystems (**outcome 3**)?
- 1.1.4. To what extent did the implementation of the LWM (**output 1**) & AEEM (**output 2**) master's programmes, the network of southern and northern HEST institutions (output 5), and the MSc research projects and publications (**output 9**) contribute to the implementation of projects and research towards the sustainable management of freshwater ecosystems and its resources (**outcome 4**)?
- 1.1.5. To what degree did the network of northern and southern HEST institutions (**output 4**) and the research, teaching & skills training of staff (**output 7**) increased the capacity of Eastern African HEST institutions and strengthened them in achieving their development goals (**outcome 5**)?
- 1.1.6. To what degree did the network of northern and southern HEST institutions (**output 4**) and the dissemination of research results and outreach to stakeholders and society (**output 10**) contribute to increasing the knowledge and awareness on sustainable management of freshwater ecosystems (**outcome 6**)?

Ad specific objective 2.1.:

2.1.1. To what extent did...

- a) ...the high quality joint degree master's programmes for the sustainable management of freshwater ecosystems in Eastern Africa (outcome 1),
- b) ...the intensified South-South collaborations and enhanced collective impact via networking (outcome 2),¹
- c) ...the highly qualified graduates on the job market (outcome 3),
- d) ...the projects and research towards the sustainable management of freshwater ecosystems and its resources (outcome 4), and
- e) ...the increased capacity of Eastern African HEST institutions (outcome 5)

contribute to **increasing institutional capabilities** and to **promoting the sustainable management of freshwater ecosystems and their resources in Eastern African countries (impact 1)**?

2.1.2. To what extent did...

- a) ...the intensified South-South collaborations and enhanced collective impact via networking (outcome 2),
- b) ...the highly qualified graduates on the job market (outcome 3),
- c) ...the projects and research towards the sustainable management of freshwater

¹ Analysing the networking activities shall include aspects on a) quality of cooperation and b) the cooperation level with stakeholder institutions.

ecosystems and its resources (outcome 4), and
d) ...the increased knowledge and awareness on sustainable management of freshwater ecosystems (outcome 6)²

contribute to **increasing individual capacities** and to **promoting the sustainable management of freshwater ecosystems and their resources in Eastern African countries (impact 2)?**

2.1.3 To what extent did increased institutional capabilities (impact 1) and individual capacities (impact 2) contribute effectively to change processes in policy making, as well as to attitudes and practices in society that support the achievement of SDGs 2, 3, 4, 6, 12, 13, 15, and 17?

Ad specific objective 3.1.:

3. Ad specific objective 3.1.:

3.1.1. Which are the key lessons learnt?

3.1.2. What are the most promising strategic options and actionable measures to enhance the impact of forthcoming AQUAHUB projects?

6. APPROACH AND METHODS

The assignment shall be undertaken by an independent expert, or team of experts. Throughout the entire process the assessment will be undertaken in accordance with the evaluation policy and evaluation guidelines of ADC³, downloadable at: <https://www.entwicklung.at/en/ada/evaluation/>

6.1. Data availability and sources

The assessment shall be based both on primary data collected by the contractor as well as secondary data sources provided to the experts by AQUAHUB. The assignment shall thus include a desk study phase as well as field data collection phase. Data collection instruments shall be aligned with the data needs to answer the evaluation questions. Qualitative data collection methods may be used, such as individual interviews as well as formats that allow for the interaction between the interview partners, such as workshops or focus group discussions. Quantitative data collection methods, such as surveys and questionnaires shall be used where appropriate. It is suggested to implement an online survey to be able to trace the career and professional development of alumni.

For the data collection phase, it is suggested to include the following stakeholders:

- Alumni & students
- Project coordinators
- Academic staff and lecturers
- Faculty management
- Relevant employer organisations
- Relevant policy institutions
- Further stakeholders within the relevant sector

Furthermore, the assignment may include the following available data:

- The underlying problem analysis (as stated in the project proposals and reports)
- The Theory of Change (as visualised and analysed in the previous assessment)
- Data collected in the M&E system (as included in the progress reports and statistics)
- Alumni survey results (to be provided by the AQUAHUB project consortium)

² It is required from the contractor to suggest an approach to analyse to what extent knowledge and awareness transfers into changes in the target groups' behaviour. The contractor shall investigate literature, case-examples, best practices and provide recommendations. This could be done by using theories of behavioural science, as for example the theory of planned behaviour.

³https://www.entwicklung.at/fileadmin/user_upload/Dokumente/Evaluierung/Evaluierungs_Leitfaeden/Guidelines_for_Programme_and_Project_Evaluations_ADA_2020.pdf

- Alumni data-base that monitors job placements and job profiles (to be provided by the AQUAHUB project consortium)
- Evaluations of programme participants for individual course modules (to be provided by the AQUAHUB project consortium)
- Additional documents for the impact assessment are the proposals for the CAPAQUA and AQUAHUB projects, the annual reports of the AQUAHUB project, as well as the AQUAHUB Assessment of 2021, CAPAQUA evaluation of 2018, and the IPGL evaluation of 2001

The 2021 evaluability assessment of the AQUAHUB project suggests that data availability differs for the four phases of the projects with earlier stages offering significantly lower data quality and quantity. Additionally, some data points might need to be reconstructed, such as a detailed description of the composition of the target beneficiaries along key dimensions, a stakeholder analysis, including the core project partners, as well as a description of the sphere of influence of the actors and its consequences for the project or a detailed mapping of the practical effects of the policy and intervention context. In the tender, the contractor shall outline how they aim to answer the evaluation questions for each phase and the data sources used and/or reconstructed.

6.2. Evaluation design

The assignment shall follow a participatory approach and engage a suitable range of project stakeholders and an appropriate number of project beneficiaries and partners. The contractor shall define how stakeholders will be involved in the impact assessment in a participatory way. The assignment is expected to be based on a solid theoretical basis and to use mixed methods to collect data and information. Data collection shall be triangulated to the extent possible to ensure the validity and reliability of findings, as well as recommendations. The contractor shall assess in how far monitoring data from the project can be used as one source for triangulation.

Tenders are expected to propose a strategy, methodology and implementation approach for the assignment, which the contractor considers to be most appropriate to address the purpose and objectives of this ToR document, including its advantages, disadvantages and limitations.

The evaluation design shall take into account the results of the “Assessment of AQUAHUB – Education and Research Hub for the Sustainable Management of Aquatic Ecosystems in Eastern Africa” regarding the evaluability. The evaluability assessment showed that there are limitations for an impact assessment, which have to be countered by measures within the evaluation. It should be emphasized that the design of the AQUAHUB intervention as a whole is not suitable for a counterfactual evaluation. This concerns, among other things, the interconnected impact dimensions, which make an isolated consideration of individual causal chains difficult, the treatment group is comparatively small and that no baseline information is available at the impact level and a reconstruction at this level is not possible. Against this background, no evaluation design is assigned explicitly for the impact assessment. Instead, the “most appropriate” design should be used. It is suggested to use a theory-based approach, to the evaluation. A potential design for this assignment could be a contribution analysis. The contractor shall suggest a suitable method to measure change and the contributions of the project, e.g. process tracing, outcome harvesting, or other methods.

The contractor should explicitly discuss how different outcomes and impacts can be evaluated, this includes network effects, capacity development on the institutional and individual level. For this purpose, established concepts, like the 5c model to assess capacities (Morgan, 2006)⁴, should be considered. The contractor shall include an exemplary evaluation matrix for at least two evaluation questions in their offer.

Whenever possible, data collected shall be disaggregated (by sex, age, and country) and the study shall identify potential gender, age, and country specific aspects.

⁴ Morgan, P. (2006). The Concept of Capacity. Maastricht: European Centre for Development Policy Management.

Tenders shall provide information on the planned implementation modalities and methods to collect data for the assignment. A field data collection phase in Eastern Africa is perceived to be important to answer the specific questions of the assignment – hence, field-trips may be included, if deemed necessary and safe. Local consultants, with proven experience in conducting semi-structured interviews/focus group discussions, can be included in the evaluation team, especially concerning the main countries of implementation, i.e. Kenya, Ethiopia and Uganda. As a measure to avoid eventual assignment delays, tenders are expected to include information on alternative data collection methods for the eventual case that anti-COVID19 measures may limit international travels face-to-face interaction, and local data collection. Therefore, contractors are expected to provide information how to ensure the validity of their findings and recommendations in the light of possible constraints due to the development of the pandemic.

7. TIME FRAME, WORKING DAYS, BUDGET & PAYMENT MODALITIES

The suggested time-plan for the evaluation is indicated in the table below:

Action / deliverable	Responsible	Date
Tendering and contracting process	Contracting party	December 2021 to March 2022
Contract signed	Contractor	April 2022
Kick-off meeting	Contractor & contracting party	April 2022
Inception phase	Contractor	April – June 2022
Submission of draft inception report	Contractor & contracting party	June 2022
Presentation of draft inception report	Contractor & contracting party	June 2022
Submission of final inception report	Contractor	July 2022
Data collection and triangulation	Contractor	September 2022 to March 2023
Submission of draft assignment report	Contractor	May 2023
Presentation of draft assignment report	Contractor & contracting party	June 2023
Submission of final assignment report (hard copy and electronic copy)	Contractor	July 2023
Submission of scientific manuscript	Contractor	July 2023

The contractor shall indicate within the tender whether it is feasible for the contractor to implement the assignment as to the aforementioned time frame and may provide an eventual alternative time frame within the tender.

The tentative number of working days for the assignment is roughly estimated with 80 to 90 working days. A tentative example is indicated in the table below:

Activity	Working days	Date
Kick-off meeting	2	April 2022
Desk-study	10	April – June 2022
Preparation of draft inception report	4	June 2022
Presentation of draft inception report	2	June 2022
Preparation of final inception report	4	July 2022
Data collection & data analyses	15	September 2022 to January 2023
Field data collection	15	February – May 2023
Preparation of draft study report & data analyses	17	May - June 2023
Presentation of draft study report	2	June 2023
Preparation of final study report	4	July 2023

Preparation of final evaluation report and scientific manuscript (hard copy and electronic copy)	5	July 2023
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The potential contractor is expected to deliver a table of the estimated total number and distribution of working days for the assignment phases (ToR chapter 6), as well as for the three specific objectives of this ToR (ToR chapter 3), as to the contractor's working-load assessment and the specific assignment strategy and methodology chosen.

The estimated honorarium range for implementing the assignment is EUR 75,000.- to EUR 82,000.- including travel costs and including all applicable taxes (VAT).

The assignment honorarium will be paid in two instalments to the contractor. The 1st instalment will be provided after the delivery of the draft inception report in the amount of 40% of the total honorarium. The 2nd instalment, in the amount of 60% of the total honorarium, will be paid after the delivery of the final assignment report.

8. CONTRACTOR / ASSESSMENT TEAM

The assignment shall be implemented by an independent contractor and may consist of a team of experts/specialists, which is led by the leader of the assessment team.

Mandatory conditions

- The leader of the assessment team must not have been involved in the operational implementation of the AQUAHUB project and must not have conflict of interests when implementing the assignment.
- The CV of the leader of the assessment team, as well as the CV's of the expert/specialist team members need to be provided along with the tender.
- The leader of the assessment team has expertise and experience in the field of impact assessment studies (proven by at least two publications in impact assessments).
- The leader of the assessment team has expertise and experience in the field of evaluation of capacity development programmes.
- The assessment team can demonstrate a record of having conducted at least two impact assessment studies, or two studies on the assessment and/or analysis of capacity development projects/programme.

Key qualifications of the assessment team

- At least Master degree (or equivalent degree), in social sciences, international relations, policy studies, international development, higher education science, aquatic science, environmental science, or related disciplines.
- Expertise in theories and models with regard to capacity development processes.
- Expertise and experience and in a variety of impact assessment and evaluation methods and proven experience in qualitative data collection and analysis.
- Expertise in the field of "capacity development processes in the higher education and research sector".
- Experience in project cycle management.
- Strong communication and presentation skills.
- Very good oral and written English language skills.

Qualifications/expertise of the assessment team which are perceived as an additional asset

- The potential contractor conducted already impact assessment studies in the field of "capacity development processes in the higher education and research sector".
- Expertise in the area of "conservation and sustainable management of freshwater ecosystems, including its resources and services" and/or experience in evaluating programmes/projects in the aforementioned thematic area.
- Knowledge of the Ugandan, Kenyan and Ethiopian policies related to higher education & research, and policies in freshwater ecosystem management (e.g. protection & conservation, water quality monitoring, biodiversity, fisheries & aquaculture, etc.).
- Expertise and experience in assessing gender specific aspects.

- Working experience in Eastern Africa.

9. REPORTS/DELIVERABLES

The contractor will submit the following deliverables:

- 1. Draft inception report (15-20 pages without annexes, adhering to structure and checklist outlined in the ADA Guidelines p.46-47⁵), including:**
 - Assignment strategy, methodological approach and methods;
 - Analyses of wider context and limitations of the assignment;
 - Reflection of ToC;
 - Data collection and data analyses plan;
 - Work plan and time plan;
 - Data triangulation and quality assurance measures; and
 - Annex: Evaluation matrix, data collection instruments, such as semi-structured interview topic guidelines and list of stakeholders
- 2. Presentation of draft inception report.**
- 3. Final inception report (15-20 pages without annexes), including:**
 - Assignment strategy, methodological approach and methods;
 - Analyses of wider context and limitations of the assignment;
 - Data collection and data analyses plan;
 - Work plan, time plan and schedule of tasks, activities and deliverables, with clear responsibilities;
 - Role and responsibilities of each member of the contracted team;
 - Data triangulation and quality assurance measures; and
 - Annex: Evaluation matrix.
- 4. Draft assignment report (about 30-50 pages without annexes, adhering to structure and checklist of the ADA Guidelines p. 48-49⁵), including:**
 - Executive summary;
 - Analyses of wider context and limitations of the assignment;
 - Assignment strategy, methodological approach and methods
 - Data analysis;
 - Findings, conclusions and recommendations in terms of:
 - Assignment objectives;
 - Specific assignment questions;
 - Annex: Evaluation matrix; and
 - Annex: ADA Evaluation Results Assessment Form.
- 5. Presentation of draft assignment report**
- 6. Final assignment report (30-50 pages without annexes), including:**
 - Executive summary;
 - Analyses of wider context and limitations of the assignment;
 - Assignment strategy, methodological approach and methods
 - Data analysis;
 - Findings, conclusions and recommendations in terms of:
 - Assignment objectives;
 - Specific assignment questions;
 - Annex: Evaluation matrix; and

⁵ Throughout the entire process, the assessment will be undertaken in accordance with the evaluation policy and evaluation guidelines of ADC, downloadable at:

https://www.entwicklung.at/fileadmin/user_upload/Dokumente/Evaluierung/Evaluierungs_Leitfaeden/Guidelines_for_Programme_and_Project_Evaluations_ADA_2020.pdf

- Annex: ADA Evaluation Results Assessment Form.

7. Scientific manuscript of the impact assessment report:

- Scientific manuscript for submission at a scientific journal; and
- The manuscript shall adhere to submission guidelines and requirements of the conjointly chosen scientific journal.

Reporting details

- All reports need to be written in English.
- All reports must be provided in electronic form to: gerold.winkler@boku.ac.at
- The final inception report and final assignment report need to be provided in printed form (in 5 copies) as well.
- The executive summary should summarize key findings, conclusions and recommendations (three to five pages) and must be submitted as part of the final draft report.
- The findings, conclusions and recommendations of the reports have to be structured according to the specific objectives and specific assignment questions as to this ToR.
- It is expected that the reports are easy readable, illustrative and well structured.
- An outline of the report's structure shall be agreed during the inception and desk study phase – however, the following outline is suggested as a starting point:
 1. Executive summary (maximum 5 pages; includes chapters 2 to 7 stated below);
 2. Introduction (purpose, objectives, scope, reference to quality standards & criteria)
 3. Background & context analysis (including an analysis of wider context and limitations of the assignment);
 4. Study design & approach;
 - Methodological approach (description of the contractor's approach, including its strengths and weaknesses);
 - Data collection and data analysis methods and tools;
 - Limitations, risks and mitigation measures;
 5. Findings (specifically on assignment objectives and specific assignment questions);
 6. Conclusions & lessons learnt (specifically on the assignment objectives and specific assignment questions);
 7. Recommendations (specifically on the assignment objectives and specific assignment questions);
 8. Annexes;
 - Data collected & analyzed (people/institutions interviewed, documents reviewed, etc.);
 - Evaluation matrix;
 - ADA Evaluation Results Assessment Form; and
 - Eventual any others.
- The quality of the reports will be judged according to the following criteria:
 - Does the report contain a comprehensive and clear executive summary?
 - Were the Terms of Reference fulfilled and is this reflected in the report?
 - Are all assignment objectives covered and all specific assignment questions answered sufficiently?
 - Are the methodology, methods and processes of the evaluation well documented in the assignment report?
 - To what extent is the revision of the project ToC and ToR for the planned impact assessment based on a solid theoretical/methodological foundation?
 - Does the report reflect, assess and revise the intervention logic/theory and its underlying assumptions sufficiently?
 - Are gender aspects of relevance documented and analyzed in the report?
 - Are the conclusions and recommendations based on a solid theoretical and/or empirical foundation, as well as on assignment findings, which are clearly stated in the report?
 - Does the report clearly differentiate between findings, conclusions and recommendations?
 - Are the recommendations realistic and is it clearly expressed to whom the recommendations are addressed to?
 - Were the most significant stakeholders involved and/or consulted?

- Does the report summarize key learning to feed into the strategy, design and implementation of future AQUAHUB projects?
- Does the report present the information in a presentable and clearly arranged form?
- Is the report free from spelling mistakes and unclear linguistic formulations?
- Can the report be further distributed and published for open access in the delivered form?

10. CO-ORDINATION / RESPONSIBILITIES

The contractor will be contracted by BOKU and the contractor will report to BOKU. BOKU is in charge of the overall contracting process, the formal approval of deliverables and all financial matters. The central contact person for the contractor will be Mr. Gerold Winkler (assignment coordinator) at BOKU throughout the assessment process.

The contractor is supported by the AQUAHUB coordination team, consisting of:

1. The overall coordinator: Mr. Gerold WINKLER, BOKU, Austria, gerold.winkler@boku.ac.at
2. Kenyan coordinator: Prof. Nzula KITAKA, Egerton University, Kenya, nkitaka@yahoo.com
3. Ethiopian coordinators: Prof. Tadesse Fetahi HAILU, Addis Ababa University, Ethiopia, tadesse.fetahi@aau.edu.et and Prof. Ass Prof Getachew Beneberu Abebe, Bahir Dar University, gech13@gmail.com
4. Ugandan coordinator: Dr Juliet Nattabi, Makerere University, Uganda, juliet.nattabi@mak.ac.ug

The AQUAHUB coordination team will support the contractor in terms of:

- Provision of documents and data needed to implement the assessment;
- Provision of logistic support to the contractor;
- Introducing/linking the contractor to project beneficiaries and stakeholders;
- Arrangement and organization of eventual workshops and interviews in Austria, Kenya, Uganda and Ethiopia, including the financial coverage of travel, accommodation and per diem costs of project beneficiaries/stakeholders; and
- Provision of feedback throughout the assessment process.

The contractor shall consult the AQUAHUB coordination team on any procedural matter requiring attention and the timing/planning of meetings, workshops, interviews and eventual travel dates. The contractor shall organize, book and cover any travel costs of the assessment team, since the assignment honorarium includes travels, accommodation and per diems) - hence, the contractor shall include all travel costs in the tender.

11. SPECIFICATIONS FOR THE SUBMISSION OF TENDERS

The following specifications are mandatory for assignment tenders:

- Tender must be delivered at latest by February 22nd 2022 in electronic form to: gerold.winkler@boku.ac.at
- Tender includes a table of the estimated number and distribution of working days for the assignment phases (ToR chapter 6), as well as for the three specific objectives of this ToR (ToR chapter 3).
- Tender includes an overall tender sum and a budget breakdown including the working day rates, number of working days, eventual travel costs and eventual additional fees. The tender does not include VAT tax.
- Tender includes the CV's of all assessment team members.
- Tender includes references with regard to the expected contractor's expertise stated in chapter 8 of this ToR document.
- Tender includes a time-table for the assignment, including dates for the reports delivery (draft inception report, final inception report, draft assignment report, final assignment report).
- Tender includes an outline of the proposed strategy, methodology and implementation approach for the assignment, which the potential contractor considers to be most appropriate

to address the purpose and objectives of this ToR document, including its advantages, disadvantages and limitations.

- Tender provides information on the planned implementation modalities and methods to collect data, since anti-COVID19 measures are likely to limit travel activities and face-to-face interaction.
- Tender document comprises of maximum 15 pages, plus any eventual annexes.

12. ANNEXES

- I. List of abbreviations
- II. ToC – Theory of Change
- III. ADA evaluation policy and guidelines

Annex I: List of abbreviations

AAU	Addis Ababa University
ADA	Austrian Development Agency
ADC	Austrian Development Cooperation
AEEM	Joint degree Master's Programme in Aquatic Ecosystems & Environmental Management
AQUAHUB	Education and research hub for the sustainable management of aquatic ecosystems in Eastern Africa
AQUAHUB platform	Knowledge networking platform: https://aquahub.boku.ac.at/
BDU	Bahir Dar University, Bahir Dar, Ethiopia
BOKU	University of Natural Resources and Life Sciences, Vienna, Austria
BOMOSA	Integrating BOMOSA cage fish farming system in reservoirs, ponds and temporary water bodies in Eastern Africa, EU funded project via INCO FP6, 2006 - 2010
CAPAQUA	Development of Educational and Research Capacity in Eastern Africa for the Sustainable Management of Aquatic Ecosystems, ADC funded via ADA IPGL projects from 2009 to 2018
COTRA	Collaborative training in fisheries and aquaculture in East, Central and Southern Africa, EU funded project via Intra-Africa Academic Mobility Scheme, 2018 - 2020
DGIS	Directorate-General for International Cooperation, The Netherlands
EAWA	East African Water Association
Erasmus K1	International mobility programme funded by the EU
EGU	Egerton University, Egerton, Kenya
EIAR-NFALRC	Ethiopian Institute for Agricultural Research, National Fish and Aquatic Lives Research Center, Sebeta, Ethiopia
HEST	Higher Education, Science and Technology
IHE Delft	IHE Delft Institute for Water Education, Delft, The Netherlands (former name UNESCO-IHE Institute for Water Education)
IPGL	International Post-Graduate Education & Research Hub in Limnology
KMFRI	Kenya Marine & Fisheries Research Institute, Kenya
LARIMA	Sustainable Highland Rivers Management in Ethiopia, ADC funded project via APPEAR, 2016 - 2019
LWM	International joint degree Master's Programme in Limnology & Wetland Management
LWE	International MSc Programme in Limnology & Wetland Ecosystems
MUK	Makerere University, Uganda
NAFIRRI	National Fisheries Resource Research Institute, Jinja, Uganda
NUFFIC	Netherlands Organization for International Cooperation in Higher Education.
NWSC	National Water and Sewerage Corporation, Kampala, Uganda
OKP	Orange Knowledge Programme, The Netherlands Fellowship Programme, administered by NUFFIC
MWE	Ministry of Water & Environment, Uganda
RCV	Fellowship programme funded by the Rotary Club Vienna

STRECAFISH Strengthening regional capacity in research and training in fisheries and aquaculture for improved food security and livelihoods in Eastern Africa, ADC funded project via APPEAR, 2015 - 2018

ToC Theory of Change

ToR Terms of Reference

Annex II: Project ToC

Project ToC is provided as separate file: Annex II_Project_ToC

Annex III: ADC evaluation policy and guidelines

ADA evaluation website, including “evaluation matrix template” and “evaluation results assessment form”: <https://www.entwicklung.at/en/ada/evaluation/>

ADA evaluation policy

https://www.entwicklung.at/fileadmin/user_upload/Dokumente/Evaluierung/Englisch/Evaluationpolicy.pdf

ADA evaluation guidelines

https://www.entwicklung.at/fileadmin/user_upload/Dokumente/Evaluierung/Evaluierungs_Leitfaeden/Guidelines_for_Programme_and_Project_Evaluations_ADA_2020.pdf