Final Evaluation Report

Your Details	
Full Name	Byabasaija Syliver
Project Title	Understanding Local Community Perception, and Potential of Sustainable Aquaculture Development in Ecologically Sensitive Areas of Lake Victoria Crescent, Uganda
Application ID	38553-2
Date of this Report	20-12-2023

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Carry out suitability modelling of fishpond development			☑	Successfully assessed the most suitable and non-suitable locations for fishpond development. We focused on factors, water availability, soil quality, and ecological compatibility, and we created the results map or set of guidelines indicating optimal areas for establishing fishponds.
Respond to resource availability to develop aquaculture in area sustainably			☑	Successfully assessed the resource availability for sustainable aquaculture. This involved understanding resource availability - water availability, feed sources, and land suitability. The information was shared with the district aquaculture officers and we hope shows how aquaculture can be developed sustainably without straining local resources.
Understand aquaculture contribution to livelihood and its influence on capture fisheries reduction an Assess factors influencing fish farmer's perceptions towards sustainable aquaculture development			☑	Community's perception of sustainable aquaculture was assessed through various means, including surveys, interviews, and community meetings. The collected data covered a range of topics, such as the understanding of sustainable practices, awareness of environmental impacts, and the perceived benefits and challenges associated with aquaculture development.
Train communities on different approaches to develop aquaculture without interfering area biodiversity			☑	A total of 180 fish farmers participated in workshops conducted across project clusters. The workshops aimed to transfer knowledge, develop skills in sustainable practices, and engage communities in fostering sustainable aquaculture.
The findings of our project serve as a crucial foundation for policymakers and governing bodies. These insights are poised to shape future strategies and policies, emphasising community engagement, ecological sensitivity, and sustainable				

practices in the realm of aquaculture development. The project's report not only guides informed decision-making but also underscores the significance of aligning policies with community needs and environmental conservation. It anticipates influencing the formulation of policies that prioritise sustainable aquaculture, taking into account the unique ecological characteristics of the Lake Victoria crescent, Uganda

2. Describe the three most important outcomes of your project.

a) We successfully mapped and modelled suitable fishpond sites for small scale aquaculture in the ecologically sensitive areas of the Lake Victoria crescent, Uganda.

b) We success fully trained communities on different approaches to develop aquaculture without interfering with area biodiversity and we also trained fish farmers on quality assurance and management of ponds in ecologically sensitive areas.

c) We successfully promoted the use of other alternative feeds in culturing Nile tilapia with focus on black soldier fly larvae. Fish farmers were empowered with skills on how to have these on their farms.

d) We were able to collect comprehensive data on community perception of sustainable aquaculture and we hope the information which was analysed and shared with policy makers will be relevant in sustainable aquacture development in the Lake Victoria crescent, Uganda.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

Some communities exhibited resistance to adopting new sustainable aquaculture practices or were skeptical about the benefits. In response, we undertook extensive community training programmes. These initiatives aimed to address concerns by providing evidence of successful sustainable aquaculture practices. Moreover, we actively engaged local leaders in the training sessions, fostering trust and mitigating resistance.

Deep-rooted cultural beliefs and practices that conflicted with modern sustainable aquaculture approaches posed challenges in gaining community acceptance. In our training, we added culturally sensitive training, collaborating with local influencers, and integrating traditional knowledge where applicable helped bridge the gap and fostered acceptance of sustainable aquaculture practices in our project area.

Language barriers and communication gaps hindered effective interaction with some community members, impacting the understanding of sustainable aquaculture concepts. We were able to employ local translators, adapting communication materials to local languages, and organising interactive sessions to ensure clear comprehension of the project goals and benefits.

4. Describe the involvement of local communities and how they have benefitted from the project.

We developed capacity of fish farmers, through training programmes and workshops associated with sustainable aquaculture and we believe it enhanced the skills of community members. Capacity building included educating them about best sustainable practices in fish farming, water management, and environmental conservation. The improved knowledge base empowered locals to engage in sustainable practices, ensuring the long-term success of the project.

We educated local communities about the importance of preserving the ecosystem and implementing eco-friendly fish farming methods we hope this will ensure the long-term health of Lake Victoria crescent. This benefits not only the aquatic environment but also the broader community that relies on the lake's resources.

5. Are there any plans to continue this work?

Yes, looking at state of aquaculture and the demand for fish in the project area there is in need for more sustainable interventions. During our project implementation we realised tilapia (*Oreochromis esculentus*) is the most exploited in the area and requires intervention, therefore going forward we will look at insitu conservation of this species.

6. How do you plan to share the results of your work with others?

Two articles from the results of the project are under review; once these articles are published, they will be accessible to the academic community and the public through the respective peer-reviewed journals.

We presented our findings at relevant conferences, seminars, and workshops, engaging with professionals, researchers, and stakeholders.

Some project results are shared on relevant online platforms, such as the project website, social media channels, and academic networks, ensuring broader visibility.

Copies of project reports have already been shared with administrators in the project district, and we will continue to distribute reports to other relevant stakeholders, fostering awareness and understanding of the project.

The project results also appear on my Uganda Martyr's University portfolio, and this increases visibility.

7. Looking ahead, what do you feel are the important next steps?

Looking ahead, I am committed to maintaining my involvement in conservation projects, particularly in the domain of sustainable aquaculture development in ecologically sensitive areas of Lake Victoria crescent, Uganda. The support provided by this project, along with the collaboration with relevant stakeholders, have

equipped me with the necessary skills and insights to continue advocating for nature conservation.

The experience gained through this project, strengthened by the contributions from The Rufford Foundation, have instilled in me a profound sense of responsibility and passion for safeguarding ecosystems. As I reflect on the project's impact, it becomes evident that there is a critical need to extend these efforts.

With the knowledge and expertise acquired, I am enthusiastic about becoming an advocate for nature conservation on a broader scale, both at the local and national levels, and even globally. The project's emphasis on sustainable practices, community engagement, and ecological sensitivity has inspired me to contribute to research and conservation-related initiatives that address the challenges faced by aquatic ecosystems.

I am optimistic that the foundation laid by this project, coupled with a commitment to continuous learning and collaboration, will enable me to make meaningful contributions to the conservation of species and their ecosystems. By leveraging the insights gained from the project, I aspire to play a role in shaping policies and implementing projects that foster environmental sustainability and community well-being.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

Yes, the Rufford Foundation's logo prominently featured in various presentations and conferences, serving as a testament to their crucial role in making our project a success.

All the articles that are under review, I acknowledged The Rufford Foundation for the financial grant towards the success of the project**.**

Through various channels, including social media platforms like ResearchGate, Facebook LinkedIn and X, I have consistently published information highlighting the significant role played by The Rufford Foundation in supporting conservation initiatives. It is my belief that anyone accessing the documents associated with this project will gain a clear understanding of the foundation's mighty role in the conservation sector.

9. Provide a full list of all the members of your team and their role in the project.

Member	Role
Syliver Byabasaija (PhD fellow)	I served as the principal supervisor overseeing the implementation of project activities. My responsibilities encompassed producing comprehensive reports for the Rufford Foundation to update them on the project's progress. Additionally, I undertook tasks such as project data

	analysis, manuscript writing, and played a key role in mobilizing the community for active participation in project activities.
Naigaiga Helen (PhD fellow)	She contributed a key skill set focused on social data collection and the analysis of community perceptions. This role involved actively engaging in the design and execution of surveys, interviews, and community outreach initiatives to gather pertinent social data. Her expertise extended to the comprehensive analysis of data, providing valuable insights into the perceptions held by local communities
Kamugisha Derrick	Derrick contributed valuable expertise to this project through his experience in Geographic Information Systems (GIS) and remote sensing. He played a crucial role in assessing the suitability of sites and modeling optimal locations for pond aquaculture within the Lake Victoria Crescent in Uganda. Leveraging GIS and remote sensing capabilities, Derrick's contributions enhanced the precision and efficiency of site selection, ensuring a well-informed approach to sustainable pond aquaculture development in the region.
Sr. Namutebi Theopista	Namutebi brought extensive experience in aquaponics and hydroponics, showcasing expertise in managing various fish species within controlled environments. She proficiently extended to the training of fish farmers, where she imparted knowledge on diverse culture systems. This valuable skill ensured that local fish farmers were well-equipped to adopt and implement different methods effectively, fostering sustainable and efficient aquaculture practices within the Lake Victoria Crescent region.
Dr Ssemyalo Ronald (PhD)	Guided us in the publication of project results in peer reviewed journals
Dr Limuwa Moses (PhD)	Guided the proper monitoring and evaluation of the project.

10. Any other comments?

I am deeply honoured and sincerely grateful to The Rufford Foundation for generously funding this significant project, which has made a substantial contribution to the field of conservation. Being a Rufford grantee has not only facilitated the realisation of this noble endeavour but has also provided me with invaluable experience in leading a project. This experience holds immense importance in shaping my professional development as a conservationist, paving the way for me to evolve into an independent researcher.

I extend my heartfelt thanks once again to The Rufford Foundation for supporting this project. The foundation's support has been instrumental in bringing this project to completion, and I am optimistic that future applications I submit will also be considered and granted by the foundation. This project has not only added to my academic and professional growth but has also significantly advanced our understanding of sustainable aquaculture development in ecologically sensitive area.