

PROGRESS REPORT II

OCTOBER, 2023

TITLE: Conservation initiatives to protect the critically endangered Kampango (*Bagrus meridionalis*) in Lake Nyasa through community education and empowerment, Tanzania

ACTIVITIES

1. Assessing the number of *B. meridionalis* harvested by artisanal fishermen
2. Evaluating the lake Nyasa ecological habitat condition
3. Empowering and educate local communities about *meridionalis* conservation

1.0 INTRODUCTION

Lake Nyasa with an area of 31,000 km² borders Tanzania (in the Songea region), Malawi and Mozambique are located between 9°30'–14°40'S and 33°50'–33°36'E. The lake is designated as a global heritage site due to its vastness and rich biodiversity. Like other African Great Lakes, Lake Nyasa, currently is most threatened by ***use of destructive fishing gear and overfishing***. Use of destructive fishing gear and methods contributed to the decline in catches of the highly valued '*Kampango-Bagrus meridionalis*' fishes, and, together with habitat degradation.

The conducted project activities aimed at establishing the number of Kampango harvested by local fishermen from Lake Nyasa, evaluating the ecological habitat condition of meridionalis and providing education and empowering community for sustainable fishing activities.

so as to understand the extent to which the fish is at extinction risk and providing data to local government authorities for promoting sustainable fishing activities

2.0 ACTIVITIES

❖ Establishing the number of Kampango harvested by local fishermen from Lake Nyasa

The number of harvested kampango were counted from fishers to assess the number of Kampango harvested by local fishermen from Lake Nyasa. The data were collected from five landing sites where the kampango fishers land their canoes such as Mkwakwa, Linda, Mhalo, Chiulu and Chinula landing site, from April to July 2023. The catch from eight (8) canoes from Mkwakwa, six canoes (6) from Linda, two (2) canoes from Chiulu, four (4) canoes from Chinula and three (3) canoes from Mhalo, were accessed to counted the number of kampango from the catch, its total length, standard length and weight were measured. The interview on the number of kampango were also conducted to the fishers to support the information collected from fishers catch.

❖ **Evaluating the lake Nyasa ecological habitat condition**

The ecological habitat condition of the fishing sites was determined through assessing the water parameters from the shore of eight (8) landing site such as Mbamba bay, Mkwakwa, Undu, Chiulu, Linda, Kilosa, Ndengele, Chinula and Tundu, to the lake. The water parameters such as dissolved oxygen (DOC), Ph, chlorophyll-a (ChloA) and turbidity were measured and water samples were also collected to analyze the indicators of eutrophication in the laboratory, all measurement and sample collection were conducted from three different station from each landing site to the lake, with the distance of 1000 meters from one station to another.

❖ **Empowering and educate local communities about meridionalis conservation**

The total of seven villages such as Chinula, Mbamba bay, Lihuli, Chihila, Kilosa, Linda and Undu were visited to provide education and raise awareness so as to promote the conservation of the critically endangered kampango. The awareness on the status of the critically endangered kampango, impact on illegal fishing activities and importance of the sustainable fishing were provided to fishers. The training was conducted in collaboration with the local NGO known as Social Health and Environmental Education (SHEMO), fisheries officers and Beach Management Unit (BMU) of the respective villages. The fisheries officers and BMUs were facilitated with the gears such as life jackets and working boots that will help them in law enforcement activities. During the awareness activities, the following comments from fishers were raised:

Few researches have been conducted from lake Nyasa in Tanzania side to provide enough information on the status of not only kampango, but also other fishes so as to allow them planning for sustainable fishing activities, also there is an increasing of community population that depend mainly on fishing activities and the lake in general, so there is a need on researches and education on alternative income generation activities so to diversify the community's income

3.0 CONCLUSION.

Generally, the project Principal Investigator with her team in collaboration with Social Health and Environmental Organization (SHEMO), Fisheries officers from Nyasa District Council and Beach Management Unit (BMUs) from all landing sites, provide their special thanks to Rufford Foundation for funding the project that aim conserving the critically endangered kampango and lake Nyasa habitat in general and for sustainable livelihood of the communities of Nyasa, Tanzania. It is recommended that more projects and research should be conducted in lake Nyasa so as to support restoring the population of the critically endangered kampango and other fish species of the lake

4.0 APENDIX: Plates



Plate 1: Meeting with fishermen at Kilosa and Undu villages for awareness conducted by the project team member



Plate 2: Counting the number of kampango from fish catch and taking its measurements for total and standard length



Plate 3: Assessing the kampangos habitats condition, measuring the water parameters and collecting water samples for laboratory analysis