

Fostering Local Communities' Participation in the Recovery of Native tilapias on Lakes Kayanja and Kayugi, Uganda



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Introduction

In Uganda, Victoria tilapia (*Oreochromis variabilis*) and Singidia tilapia (*Oreochromis esculentus*) are endemic to lakes Victoria and Kyoga including the satellite lakes of Kayanja and Kayugi. The species have since disappeared in the large lakes^(1,2) and their survival in the two satellite lakes is threatened by various anthropogenic activities such as poor agricultural practices, wetland degradation, poor waste disposal, competition from exotic fish species, fishing pressure hence rendering them critically endangered (IUCN Red List, 2006). The aim of the project was to contribute to the recovery of the two species in these lakes through engagement of local communities in conservation activities.



Singidia tilapia and examples of anthropogenic activities

Methods/ Activities

The project was implemented on lakes Kayanja and Kayugi in 2016. Fishermen, pupils, teachers and researchers from NaFIRRI were engaged in various activities outlined below

- ❖ Establishment of fish conservation Committee (FCC)
- ❖ Fish surveys and mapping of critical fish habitats
- ❖ Establishment and zoning of safe havens for native tilapia
- ❖ Awareness creation

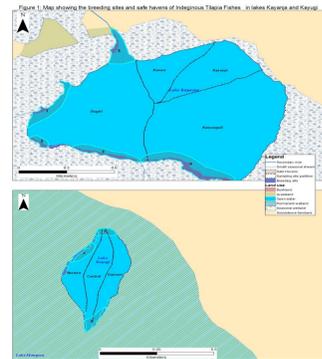


Conservation outputs

- ❖ All the sites identified as breeding and nursery habitats of critically endangered cichlid fish species were mapped by researchers and FCC team (Fig: 1-Map)
- ❖ A total of 8 safe havens for critically endangered cichlid fish species were established on both lakes (Fig:1-Map)
- ❖ Two FCCs were established and empowered to conserve fish and their habitats.

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Conservation outputs



- ❖ Fishermen, pupils, teachers, and other stakeholders were trained and highlighted on the need to conserve fish fauna and their habitat.

One of the identified fish breeding sites and FCC team



Conservation Outcomes

- Grey crown crane ❖ Safe havens created on these lakes will foster conservation of other wildlife and fish e.g. African cat fish and endangered birds like crested crane
- African cat fish ❖ Increased chances for the recovery of native tilapia populations in these lakes.
- ❖ Strengthened liaison, enthusiasm and commitment of fishermen and relevant stakeholders to conserve and protect critical habitats of native tilapia.



Conclusions

Empowerment and involvement of resource users is critical for any conservation efforts to succeed

References: 1. Ogutu-Ohwayo., 1990. Env. Biol. Fish., 27: 81-96. 2. Nagayi-Yawe et al. 2006. Afr.J. Ecol., 44: 423-430. 3. IUCN Red list 2006.

THE DYING OUT NATIVE TILAPIA: The need to conserve

Why conserve?



Source of food



Employment and Income



Wildlife Protection

Human threats to fish on small lakes (Kayanja and Kayugi)



Cage fish farming in shallow Lakes



Burning of Wetlands



Cultivation upto Lake Shores



Brick making

Solutions:



Create Fish conservation committees



Raise awareness among the youth



Map, gazette and protect critical fish habitat



Stakeholder involvement

To succeed in these fish conservation efforts, all stakeholders including resource users, researchers, natural resource managers, academia, local leaders, policy makers and civil society organizations have a role to play



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