

# PROJECT REPORT

## Preventing the Aquarium Trade and Illegal Collection of *L. kungweensis* to Enhance its Conservation in Tanzania

Activities:

- I. Project implementation initiation
- II. Awareness raising and capacity building to protect *L. kungweensis* and its habitats
- III. Assessing and quantifying the number of *L. kungweensis* collected by local fishermen and local people

### INTRODUCTION

Lake Tanganyika is a globally important ecosystem that supports a high diversity of endemic and threatened species, including the critically endangered cichlid fish *Lamprologus kungweensis*. Similar to other critically endangered freshwater species, the population of *L. kungweensis* in Lake Tanganyika is under severe pressure from human activities that degrade the lake's biological integrity and impair the species' reproductive capacity. The illegal collection of *L. kungweensis* for the international aquarium trade represents the most serious threat to its survival and must be urgently addressed. In the Kigoma region, limited awareness among artisanal fishers about the conservation status of this species, coupled with ongoing informal trade, significantly increases the risk of local extinction. These threats are further compounded by unregulated fishing and habitat degradation, which destroy or pollute key foraging and breeding sites, disrupting natural reproductive processes. In response to these challenges, a series of project implementation activities were carried out to engage local stakeholders and assess the scale of the threat. Specifically, the activities aimed to:

- Raise awareness among local communities about the conservation importance of *L. kungweensis*.
- Assess and quantify the number of individuals collected by local fishers and community members.

- Estimate the population presence of *L. kungweensis* around the Kungwe Bay landing site on Lake Tanganyika.

## **IMPLEMENTATION OF THE PROJECT**

The project began with an initial phase of stakeholder engagement, carried out in collaboration with the Social Health and Environmental Organization (SHEMO). Our team visited four villages surrounding Kungwe Bay, a region recognized as a critical habitat for *Lamprologus kungweensis*. The primary objective of these visits was to formally introduce the project to community members, local leaders, and artisanal fishers, and to establish a foundation for collaborative conservation efforts. During this phase, we clearly communicated the key threats facing *L. kungweensis*, particularly the impact of illegal collection for the aquarium trade, and emphasized the broader ecological consequences of continued exploitation. These discussions aimed to raise awareness, foster local support, and promote shared responsibility in safeguarding this critically endangered species and the ecological integrity of Lake Tanganyika.





**Fig. 1.** Project stakeholder at Kungwe Bay, at Lake Tanganyika, Kigoma

## **ASSESSING AND QUANTIFYING THE NUMBER OF *L. KUNGWEENSIS* COLLECTED BY LOCAL FISHERMEN AND LOCAL PEOPLE**

During the assessment phase, the team conducted structured interviews with local fishermen and carried out direct observations at several key landing sites surrounding Kungwe Bay—a region historically known for the presence of *Lamprologus kungweensis*. These efforts aimed to quantify the number of individuals being collected and to gain insights into current harvesting practices.





Fig.2. Awareness-raising training sessions. These were held to educate local communities about *Lamprologus kungweensis*, its ecological importance, and the major threats contributing to its decline.



Despite extensive fieldwork, no individuals of *L. kungweensis* were reported as recently collected by the fishermen, nor were any specimens observed at the landing sites during the survey period. Interviewees acknowledged that collection activities may have occurred in the past, but emphasized that no active harvesting was taking place at the time of the assessment. This absence of both reported and observed specimens may point to several possible scenarios:

- A significant decline in the local population of *L. kungweensis* due to past overharvesting or habitat degradation;
- Seasonal variation in the species' abundance or visibility, possibly linked to breeding cycles or habitat shifts;
- Behavioural changes among fishermen, potentially resulting from prior awareness campaigns, increased enforcement, or a decline in market demand for the species in the aquarium trade.



Fig 3. A few cichlid fish species were observed in Lake Tanganyika, excluding *L. kungweensis*.

While the lack of recent harvesting activity could indicate the effectiveness of prior sensitization efforts, it may also reflect an alarming local depletion of the species. This uncertainty underscores the need for continued monitoring, more comprehensive population surveys, and ecological studies to determine whether the observed absence is a positive sign of recovery or a warning signal of impending local extinction.



Fig. 4. A diver in Lake Tanganyika search for *L. kungweensis*

## CONCLUSION

The project achieved several notable outcomes that laid a strong foundation for the conservation of *L. kungweensis*. One of the key accomplishments was the documentation of a baseline estimate



regarding the extent of illegal collection of *L. kungweensis* in the Kungwe Bay area. Importantly, many stakeholders expressed a strong commitment to discontinue the capture of this critically endangered species and pledged to support conservation initiatives within their communities. Additionally, local leaders committed to working closely with regulatory authorities to monitor fishing activities, report violations, and actively discourage the illegal aquarium trade. These commitments mark a significant step forward in fostering community-driven conservation. However, the project also faced several challenges during its implementation. Some participants were initially reluctant to engage, largely due to concerns about potential repercussions for disclosing information related to illegal practices. Moreover, logistical constraints, such as inadequate transportation and limited communication infrastructure in certain remote villages, hindered broader outreach and delayed some field activities. Despite these obstacles, the active support of SHEMA and the collaboration of local authorities played a critical role in overcoming barriers and ensuring the overall success of the project. Their involvement helped build trust within communities and strengthened the foundation for future conservation efforts.



Fig 5: Team member on the shore of Lake Tanganyika preparing for field activities.