

## PROJECT UPDATE: DECEMBER 2025

### **Upscaling conservation awareness and compliance campaign for Conservation of the endangered Manyara Tilapia (*Oreochromis amphimelas*) in Lake Manyara - Tanzania**

Rufford grant number: 46504-2

Name of leader: Gordian Rocky Mataba

#### **1. DISSEMINATION OF CONSERVATION AWARENESS**

This is the second Rufford grant project which aims to upgrade conservation awareness among villagers living adjacent Lake Manyara. In this phase two, we use evidence-based information generated from the research conducted during the phased-out project (first phase) on Lake Manyara. We think that this way, actual situation happening in Lake Manyara will be revealed, and can boost or speed up community compliance to sustainable fishing and land use to stop overfishing, overgrazing, and poor cultivation practices. We believe, but evidence also shows that conservation education can make villagers sensitive to species existence and thus be ready to offer their support voluntarily. This ensures that villagers around Lake Manyara become important participants or key players in protection and conservation of Lake Manyara and its resources.

Conservation education to communities around Lake Manyara was conducted in July 2025. To deliver this education, we first met indoors with village leaders such as fisheries officers and village natural resource committee personnels. These are the ambassadors and frontline environmental protection supporters in their communities. Having them well educated first has far reaching impact. Later we met with the sole fishing population, the fishermen, who to get them in good numbers, we decided to follow them where they are living (at fishing camps). Meeting with subsets of fishermen made sure that the knowledge provided will be transferred to other villagers who failed to attend the meeting. We visited 11 fishing camps (among these three were not visited in the first phase) and conducted open air public meetings that were so successful with a good fishermen turnout. On each fishing camp or landing site more than 40 fishermen showed up making a total of over 440 people who attended our meetings. The visited fishing camps were Mayoka A, Kambi ya fisi, Kisese, Zimbabwe, Paris, Mfuru wa ng'ombe, Minjingu, Oltukai, Burudika, Ngogolo, and Migunga Mitatu.

The main content of our education material focused on the results of the published research on Lake Manyara (Mataba et al., 2022; <https://doi.org/10.1007/s10452-023-10083-1>) which was supported by Rufford Foundation as the first phase of this project. We aimed to communicate the real situation in Lake Manyara backed up by research data to catch the attention of fishermen on the fate of the lake and its resources. The results in Mataba et al., (2022) revealed that the population of Manyara Tilapia is under heavy fishing pressure and is dominated by juveniles and first-time spawners. Also, anthropogenic activities have hypereutrophied the lake and degraded the ecological quality for the growth of Manyara Tilapia. The research team also stressed the implication and way forward based on these research results. Overall, fishermen were so moved by the research results which made the meeting very interactive.

Generally, based on the results in Mataba et al., (2024), the team-taught villagers on the importance of (i) complying with recommended mesh size which allows catching mature fish with good market value while leaving out juveniles, on this we also taught them how to measure mesh size and identifying juvenile fish to enable community fisheries monitoring through citizen science, (ii) temporary closure of the lake, and protection of fish breeding and nursery grounds, (iii) introduction of catch limits which will enable more fish to survive and reproduce, (iv) fish resource co-management at village level for shared problem solving (e.g., overfishing and illegal fishing) between communities and the government or conservation partners, and (v) good farming practices that can reduce sedimentation and pollution in the lake such as afforestation, agroforestry, crop rotation, and under-grazing.

Conclusively, through the conservation education we offered, we believe that it has built the capacity of local communities and has ensured that they have become citizen scientists who can sustainably use and monitor natural resources and detect changes thereof themselves.

**Field team**

The education facilitators were.

1. Dr. Gordian Mataba (Nelson Mandela African Institution of Science and Technology).
2. Mr. Joseph Kigoda (Fisheries officer – Monduli district).
3. Mr. Haji Deus (Fisheries officer – Babati rural district).
4. Mr. Alfán Rashid (Livestock officer - Babati rural district)

**Below are some photographic records**

Public meeting at Burudika Landing site



Public meeting at Kiseke Landing site





Public meeting at Migunga Mitatu Landing site



Public meeting at Mfuru wa Ng'ombe Landing site

