Beyond the catch

What motivates fishers and their role in managing Lake Tanganyika

FISHING IS A VITAL livelihood on Lake Tanganyika in Zambia. The fishery is largely made up of artisanal fishers whose numbers have doubled in recent decades according to national surveys. This growth has been accompanied by an increase in fishing gear and the adoption of new harvesting technologies. With the addition of strong market demand, population growth, and the absence of effective legal restrictions, pressure on the lake's fish stocks has steadily increased.

The result has been widespread overfishing and the use of destructive fishing techniques that damage habitats and undermine collaborative management efforts. Studies show that fish catches in this part of Lake Tanganyika have declined by more than 50 percent over the past 25 years, raising concerns about both environmental sustainability and long-term food security.



Young men on their routine fishing expedition with longlines in the shallows of Lake Tanganyika for their pots and surplus for immediate sell. These traditional fishers are in the habit of ignoring the licensing system but making a living. *Photo by Kabunda Malukutila.*

To further clarify these conclusions, our study investigated the underlying causes of fishing overcapacity and the factors influencing low fisher participation in community-based fisheries management, or *co-management*. We found that despite falling catches and modest incomes, fishing has remained an attractive occupation for many lakeshore communities. According to our survey of 370 fishers, for households with small landholdings, large families, limited access to credit, and low educational levels, fishing offers one of the most accessible ways to earn a living. Social ties also matter: people are more likely to enter the fishery if they have relatives who fish or live in communities where fishing is deeply embedded in daily life.

Our research also highlights why co-management has struggled to gain broad participation. Although village-level fishers' committees exist, involvement in resource management is uneven and shaped by social factors such as gender, age, ethnicity, family size, and awareness of fisheries laws. Women, in particular, remain underrepresented in decision making. In addition, fishers who lack knowledge of regulations or feel excluded from management processes are more likely to be marginalized and less able to defend their local conservation efforts.

Understanding these human dimensions is critical for addressing overfishing in Lake Tanganyika. Our study suggests that reducing pressure on the fishery will require more than stricter rules. Proposed solutions include expanding non-fishing livelihood opportunities through skills training, access to loans, market provision for alternative products, and improved infrastructure to support proposed innovations. Limiting the number of fishing licenses issued each year could also help control the continued growth of the fishery. Also important are public awareness campaigns in fishing communities to address issues of management and conservation concerns.

The author will be presenting this research at the IAGLR & SCAS Joint Conference in May in the session *Informing Freshwater Policy & Practice by Reflecting on Successes and Failures.* Also see Haambiya et al., 2018 for a discussion of earlier research on this topic.

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