



# OVERVIEW OF FISHERIES AND AQUACULTURE RESOURCES:

## TANZANIA\*



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### Introduction

Tanzania is a coastal state on the West Indian Ocean and shares three of most important inland lakes in Africa.

**Lake Victoria** (Tanzania, Kenya and Uganda) the second largest fresh water lake in the world, with a total area of 68,800 km<sup>2</sup> with Tanzania occupying 51% which is 35,088 km<sup>2</sup>. **Lake Tanganyika** (Tanzania, Burundi, DRC and Zambia) the second deepest lake in the world, has a total area of 32,900 km<sup>2</sup> in which Tanzania has 13,489 km<sup>2</sup>. **Lake Nyasa** (Tanzania, Malawi and Mozambique) has a total surface area of 30,800 km<sup>2</sup>, in which Tanzanian share is 5,760 km<sup>2</sup>.

There are also some **small lakes and dams** like Lake Rukwa, Lake Manyara, Lake Eyasi and Lake Natron, Mtera and Nyumba ya Mungu dams which cover more than **7% of the land surface**.

The country's **total fresh water area** is estimated to be about **54,337 km<sup>2</sup>**, while the marine territorial water area is 64,000 km<sup>2</sup> thus making the country a significant fishery sector. The **Exclusive Economic Zone (EEZ)** is estimated to be **223,000 km<sup>2</sup>** and the total **coastline** is **1,450 kilometers long**.

### Fish potential

The fishery potential of Tanzania is estimated to **730,000 metric tons** (Table 1) based on a stock assessment survey carried out in the early eighties. The estimate covers only the territorial waters and there has never been stock assessment carried out in the Exclusive Economic Zone. Therefore, the estimated stock may not represent the actual status of the present resource.



Figure 1. Tanzania country map

Table 1. Fisheries potential in Tanzania

Water body	Surface area (km <sup>2</sup> )	Estimated fish potential (mt)
Territorial sea	64,000	100,000
Deep sea	223,000	Unknown
Lake Nyasa	5,760	100,000
Lake Tanganyika	13,489	300,000
Lake Victoria	35,088	200,000
Other inland water bodies	Unknown	30,000
<b>Total</b>	<b>341,337</b>	<b>730,000</b>

### Industrial Fisheries

Industrial fisheries started by 1988 with the aim of exploitation of prawns but other species are caught as bycatch. In 1998 exploitation from the EEZ started with the main focus on tuna fishing.

### Artisanal Fisheries

The artisanal fishery is the most important fisheries as it lands almost all the freshwater and most of the marine catches. It contributes about 98% of the country's total catch. The fishery supports majority of the coastal communities either as a part time or fully engaged fishers and they are spread all along the shores since the entry is free. About 150,255 fishers (Fisheries, 2006) are fully engaged in artisanal fisheries in the entire coast both marine and freshwaters.

### Commercial Species

The fishery in Tanzania is multispecies, which include mackerels, king fish, scavengers, parrot fish, sardines, rabbit fish, rays, sharks, and crustaceans from marine waters. *Lates niloticus*, Tilapia species and *Restrianebola argentea* are the most common species from fresh waters. The main commercial species are *Lates niloticus* for freshwaters and Prawns, Octopus, Lobster, Crabs and Tuna like species from marine waters.

### Aquaculture

Although aquaculture and mariculture in Tanzania makes no significant contribution to fish export, but plays an important role in seaweed farming in coastal communities. Shrimp farming is a potential mariculture in Tanzania but is yet to be realized in most of the coastal areas.

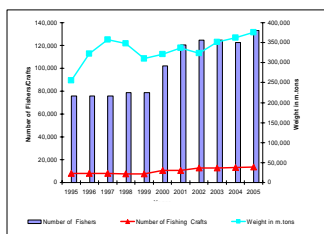


Figure 2. Trends of fishers, fishing crafts and catches from 1995 - 2005

### Policy

The **Fisheries Division** belongs to the **Ministry of Natural Resources and Tourism**. It operates as a Government institution with all the mandates and responsibilities on sound management of the fisheries resources. In 1997, the Government adopted the **National Fisheries Sector Policy and Strategy Statement**. Its main objective is to promote conservation, development and sustainable management of fisheries resources for present and future generations. The strategies of the National Fisheries Policy are based on the overall objectives of the government, which aim at poverty reduction, creation of employment opportunities, increased food security, increased economic growth and sound environmental management.

The division is responsible for the formulation of policy and overseeing its implementation, sector planning and development, formulation and review of legislation, law enforcement and surveillance, monitoring and evaluation, management of information systems, human resource management and capacity building, research, training and curriculum development, coordination of stakeholders, revenue collection and international and regional collaboration.

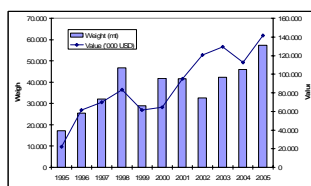
The policy seems to encourage investment in fisheries, which has resulted in increased effort and oscillating downward trends in catches.



### Legal Framework

The previous **Fisheries Act No. 6 of 1970** and its regulations were the major policy instruments under the current fisheries management system. The right to harvest fisheries resources are granted to individual fishermen on annual basis through a licensing system. The Fisheries Act was enacted as a regulatory framework within which the fish resources would be managed, conserved, protected by protecting breeding/nesting sites as well as prohibiting the use of destructive fishing gears.

The Fisheries Act No. 6 of 1970 has been reviewed and replaced by the new **Fisheries Act No. 22 of 2003** which is now operational. The implementation provides for the establishment of co-management through **Beach Management Units (BMUs)**. The principal fisheries regulations have also been reviewed to accommodate new developments in the industry and to cater for the new Act and the Fisheries policy from 1997. Thus The Fisheries regulations of 2005 have been endorsed by the government and have been in force since October 2005.



### Export Earnings

Fisheries exports contribute about **3%** towards the overall GDP.

Figure 3. Export of Nile perch and other fishery products 1995 - 2005

### Monitoring Control and Surveillance (MCS)

The government has implemented a **Monitoring Control and Surveillance programme**, as a regional programme, funded by **Southern African Development Cooperation (SADC)** and the **European Union (SADC-MCS)**, it involved five coastal SADC member states and started in 2001. The overall objective of this program is to improve management of marine resources of coastal SADC member states and to facilitate the compliance of fishery operators with the legislation in force in the region. However, the **national MCS programme**, involves law enforcement agencies and other stakeholders including communities.

### Research Institutions

**Tanzania Fisheries Research Institution (TAFIRI)** is responsible for carrying out research on fisheries resources in both fresh and marine waters. The institute conducts research on fishery resources and has a role to play in the dissemination of research findings to government and stakeholders.

Other collaborative institutes are the **Institute of Marine Sciences** and the **Faculty of Aquatic Science** both at the **University of Dar es Salaam**.

### Summary

Tanzania has abundant fisheries resources with a rapidly growing export over the last decade. The main commercial species being Nile perch. Community based management through Beach Management Units is being promoted by the authorities.

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