



# The Importance of Wild Fisheries For Local Food Security: **TANZANIA**

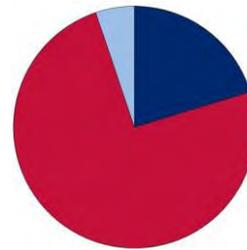
*Fisheries are important to Tanzania's economy, providing income, export revenues, and about 4 million jobs (about 35% of rural employment). Fish are also important to nutrition, providing about 22% of animal protein in the diet. Tanzania primarily produces wild fish in Lake Victoria – the world's second-largest freshwater lake – and along its coast. Yet, due in part to harmful fishing practices, the sector's growth is declining. There is an urgent need for management strategies that increase the sustainable use and natural productivity of Tanzania's fisheries.*

**Food Security:** Despite the economic growth Tanzania has experienced over the past decade, about 68% of the population lives below the international poverty line [1]. Food insecurity and poverty lead to undernutrition, which is the primary cause of more than 130 child deaths each day [1]. About 42% of children in Tanzania are stunted and 35% of the population is undernourished [2, 3]. Further, about 59% of children and 40% of women have some level of anemia [3]. Low consumption of micronutrient-dense foods contributes to the poor health and nutritional status of women and children [4]. Average per capita annual fish and shellfish consumption is estimated to be 5.5 kg [5]. Fish provide about 22% of animal protein supply and have the potential to mitigate some of these nutritional deficiencies [6].

**National Development Priority:** The Government of Tanzania has committed to reducing food insecurity and undernutrition among its citizens [1]. The government launched the Fisheries Sector Development Programme to implement interventions geared to the sustainable management, development, and conservation of fisheries [7]. The National Strategy for Growth and Poverty Reduction also recognizes fisheries as having the potential to contribute to improving livelihoods and nutrition [8]. The importance of fisheries is recognized across multiple sectors: the 2006-2015 National Water Sector Development Strategy highlights the important links between water quality and fisheries, the importance of fish to sustainable livelihoods, and the negative impact of pollution on fisheries [9].

**Economic Benefits:** Tanzania primarily produces wild fish along its coast and in Lake Victoria – the world's second largest freshwater lake [7]. Fisheries are important to Tanzania's economy, providing employment, income, and foreign export revenue. The sector is responsible for over 4 million jobs (about 35% of the 14 million in rural employment) and contributes about 1.4% to the country's Gross Domestic Product (GDP) [7, 10, 11]. Although the fisheries sector grew by 5% in 2008, its growth declined to 2.7% in 2009 and has continued declining since. In 2013, it experienced the lowest growth rate compared to all other sectors of the Tanzanian economy (2.2%) [8, 10]. The relationship between economic growth and nutritional status is strong: vitamin and mineral deficiencies have been linked to about \$390 million in annual revenue loss or 2.65% of the GDP [4].

## COUNTRY PROFILE: **TANZANIA**



- Land Area
- Freshwater & Floodplains
- Marine Area/Exclusive Economic Zone

- **Average per capita annual fish/shellfish consumption: 5.5 kg (12.1 lbs)**
- **Provision of animal protein by fish: 21.8%**
- **Stunting: 42%**
- **Undernourished population: 35%**

**Challenges:** Illegal fishing and trafficking of fish and fisheries products across the country's borders are major challenges: illegal extraction and trade are diverting valuable resources that could be utilized for national economic growth and poverty reduction strategies [8]. Other challenges that fisheries face include the use of inappropriate fishing gear; over-exploitation; destruction of fish habitats through blast fishing and other harmful practices; high post-harvesting loss; and high export rates of commercially valuable fish species [8, 12, 13]. Climate change also poses a significant threat to Tanzania's coral reef fisheries. A recent study found that coastal fishing communities in Tanzania were particularly sensitive to climate change due to their high dependence on fisheries for food security and livelihoods [14]. Conservation and adaptive management strategies that foster sustainable fish populations and equitable distribution of resources are urgently needed to mitigate some of the negative consequences caused by these challenges [13, 15].

**Fisheries Management and Gender:** Gender inequality is prevalent within Tanzania's fisheries sector [15]. A study that examined the gender dimensions of the fish trade in Zanzibar found that women traders generated lower incomes because they had less access to resources, profitable markets, and high-value fish [15]. Further, the current system of control and division of labor that exists within the Tanzania fisheries sector deprives women of both cultural and economic resources [13]. Effective management strategies have the potential for long-term, positive impact for both fisheries resources and fishers. A study on the effectiveness of marine protected areas (i.e. "fish banks") in three ecological zones in Tanzania found they led to an increase in fish catch and income and to a reduction in harmful fishing practices, thus enhancing their sustainability and resiliency [12].

### Sources:

1. USAID, Tanzania Nutrition Profile. Available from: <http://www.usaid.gov/what-we-do/global-health/nutrition/countries/tanzania-nutrition-profile>. 2015.
2. The World Bank, Prevalence of undernourishment (% of population). Available from: <http://data.worldbank.org/indicator/SN.ITK.DEFC.ZS>. 2015.
3. National Bureau of Statistics (NBS) [Tanzania] and ICF Macro, Tanzania Demographic and Health Survey 2010. Available from: <http://dhsprogram.com/publications/publication-fr243-dhs-final-reports.cfm>. 2011, NBS and ICF Macro: Dar es Salaam, Tanzania.
4. UNICEF, Tanzania Nutrition Overview. Available from: <http://www.unicef.org/tanzania/nutrition.html>.
5. National Marine Fisheries Service, Per Capita Consumption. Available from: [http://www.st.nmfs.noaa.gov/st1/fus/fus11/08\\_percapita2011.pdf](http://www.st.nmfs.noaa.gov/st1/fus/fus11/08_percapita2011.pdf). 2011.
6. FAO Fisheries and Aquaculture Department, Summary tables of Fishery Statistics: Food Balance Sheets 2011. Available from: <ftp://ftp.fao.org/FI/STAT/summary/default.htm>. 2011.
7. United Republic of Tanzania Ministry of Livestock and Fisheries Development, Fisheries Sector Development Programme. Available from: [http://www.tanzania.go.tz/egov\\_uploads/documents/FSDP\\_sw.pdf](http://www.tanzania.go.tz/egov_uploads/documents/FSDP_sw.pdf). 2010.
8. United Republic of Tanzania Ministry of Finance and Economic Affairs, National Strategy for Growth and Reduction of Poverty II. Available from: <http://www.international.gc.ca/development-developpement/assets/pdfs/countries-pays/NATIONAL-STRATEGY-FOR-GROWTH-AND-REDUCTION-OF-POVERTY-TANZANIA.PDF>. 2010.
9. United Republic of Tanzania Ministry of Water and Irrigation, National Water Sector Development Strategy 2006-2015. Available from: <https://www.kfw-entwicklungsbank.de/Immigration/Entwicklungsbank-Startseite/Development-Finance/About-Us/Local-Offices/Sub-Saharan-Africa/Office-Tanzania/Activities-in-Tanzania/National-Water-Sector-Development-Strategy.pdf>. 2008.
10. National Bureau of Statistics and Ministry of Finance, National Accounts of Tanzania Mainland 2001-2013. Available from: [http://www.nbs.go.tz/nbs/index.php?option=com\\_content&view=article&id=559:national-accounts-of-tanzania-mainland-2001-2013&catid=98:national-acc&Itemid=132](http://www.nbs.go.tz/nbs/index.php?option=com_content&view=article&id=559:national-accounts-of-tanzania-mainland-2001-2013&catid=98:national-acc&Itemid=132). 2014.
11. The United Republic of Tanzania, Basic Demographic and Socio-Economic Profile Report Tanzania Mainland. Available from: [http://www.tanzania.go.tz/egov\\_uploads/documents/TANZANIA\\_MAINLAND\\_SOCIO\\_ECONOMIC\\_PROFILE\\_sw.pdf](http://www.tanzania.go.tz/egov_uploads/documents/TANZANIA_MAINLAND_SOCIO_ECONOMIC_PROFILE_sw.pdf). 2014.
12. Machumu, M.E. and A. Yakupitiyage, Effectiveness of marine protected areas in managing the drivers of ecosystem change: A case of Mnazi Bay Marine Park, Tanzania. *Ambio*, 2013. **42**(3): p. 369-380.
13. Medard, M., *Relations between people, relations about things: Gendered investment and the case of the Lake Victoria fishery, Tanzania*. *Signs*, 2014. **40**(1).
14. Cinner, J.E., et al., *Vulnerability of coastal communities to key impacts of climate change on coral reef fisheries*. *Global Environmental Change*, 2012. **22**(1): p. 12-20.
15. Fröcklin, S., et al., *Fish traders as key actors in fisheries: Gender and adaptive management*. *Ambio*, 2013. **42**(8): p. 951-962.