United Republic of Tanzania

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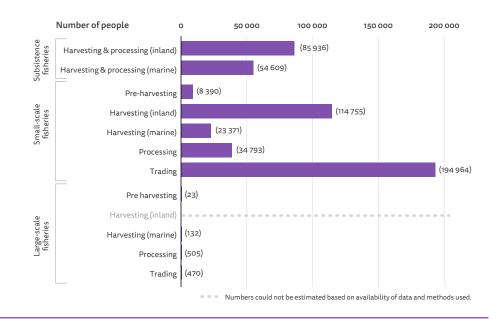
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The United Republic of Tanzania encompasses two distinct governments, each with its own fisheries and aquaculture policies: the Government of Tanzania and the Revolutionary Government of Zanzibar. By contrast, a single set of unified policies apply to deep-sea fishing, which occurs more than 12 nautical miles from the coastline.

Women play important roles across fisheries value chains and make key contributions to their households and communities as well as the local economy. However, on the whole, fisherwomen remain largely invisible and greater efforts need to be deployed to collect sex-disaggregated data, as well as recognize and integrate women's needs and priorities into fisheries policies and research. Inland fisheries are key in terms of catches and engagement in the sector, and while this fact sheet highlights important dimensions that pertain to them, it focuses predominantly on marine fisheries. The Government of Tanzania, with FAO support, is one of the few countries actively engaged in developing a National Plan of Action (NPOA) for the implementation of the SSF Guidelines. Despite significant advances and bold commitments in support of gender equality and women's empowerment, women and girls across the United Republic of Tanzania continue to suffer violence and discrimination in access to education, the right to political participation and representation, financial inclusion, employment opportunities, and access to health services.

This fact sheet provides an overview of the role of capture fisheries production in the United Republic of Tanzania, with an emphasis on marine fisheries and a focus on gender dimensions, highlighting opportunities to strengthen gender equity and women's empowerment in the sector and beyond. It is part of a series meant to offer development agency employees, government agencies, NGOs, funders and researchers with a snapshot of gender and capture fisheries to inform the planning and delivery of relevant activities these actors might be involved in, or are in the process of developing.

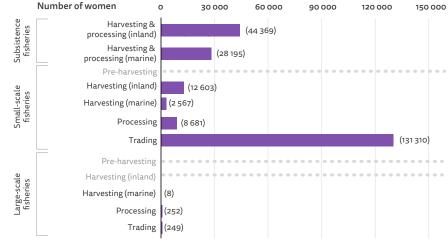
Fisheries production	National statistics report total capture fisheries production as 473,592 tonnes in 2020 ¹ , with more than 90% of that production sourced from small-scale fisheries. Marine small-scale fisheries (SSF) contributions were estimated at 63,764 tonnes (2020) and freshwater subsistence and commercial production (from Lake Victoria and Lake Tanganyika) estimated at approximately 409,828 tonnes (2020). ¹ Estimates for 2021 were slightly lower at 415,881 tonnes with more than 95% sourced from small-scale fisheries (unpublished data). Marine small-scale fisheries that year accounted for 48,877 tonnes and freshwater fisheries 367,003 tonnes. ¹ The government hopes for the sector to reach 600,000 tons by 2025/26.				
	The Sea Around Us estimated total annual marine fisheries capture production by Tanzanian fleets as follows: ²				
	Marine subsistence (2019) – 18,156 tonnes				
	 Marine commercial (2019) – 103,033 tonnes (artisanal) and 9,213 tonnes (industrial) 				
	Foreign fleets were responsible for 887 tonnes of industrial catch (2019)				
	In Zanzibar, farmed seaweed production was estimated at 104,620 tonnes (wet weight, equivalent to 10,447 tonnes transported dry weight ³) in 2021. ⁴				
Fish consumption	Fish consumption over the last 5 years has remained relatively constant and is estimated at 8kg per capita per year (2020). ¹ While per capita fish consumption is low, fish contributes between 20% ^{5,6} and 30% of the country's animal protein intake ⁷ . In Zanzibar, fish consumption is estimated at 22kg per capita per year. ⁸				
Fisheries contribution to GDP	The fisheries sector contributes 1.8% to GDP (2021) ⁶ and constitutes 3% of foreign earnings (2021) ⁹ . The Government of Tanzania's growth target is for the sector to reach 4.5% by 2025/26. ⁹				
	In Zanzibar, fishing represented 4.8% of the GDP (2019), while farmed seaweed represented 21% of exports and 34% of cash crop exports (9,663 tonnes in dry weight, exported at a value of TZS 10,382 million in 2019). ¹⁰				
Employment (all)	Government-led surveys have estimated that the fisheries sector directly provides jobs to about 202,000 people ¹¹ with more than 4.5 million people estimated to indirectly depend on fisheries-related activities. ⁶ Across their pre-harvest, harvest and post-harvest activities, SSF account for 90% of this employment. Government estimates also indicate that the fisheries sector engages 14,333 foot fishers (gleaners) ¹² and 12,903 seaweed farmers (2019). ¹³				
	The Illuminating Hidden Harvests (IHH) Initiative estimated that a total of 517,950 individuals engage in the fisheries sector (2022), including pre- and post-harvest as well as subsistence fishing activities, and with most individuals involved in the marine small-scale fisheries sub-sector (see graph below). ¹⁴ The IHH also estimated that a total of approximately 2.34 million people depend, at least partly, on fisheries or subsistence fishing: 1,811,888 for small-scale fisheries, 527,172 for subsistence fisheries and 4,217 for large scale fisheries. ¹⁵				



Employment (women)

228,233 women are engaged in the fisheries sector, including pre- and postharvest activities, as well as subsistence fishing activities. Women are more likely to participate in subsistence fishing activities than men, representing 52% of the total number of people engaged in this sub-sector. Women also play a disproportionately significant role in fish trading, accounting for 67% of total employment in the trading segment of small-scale fisheries.

The Illuminating Hidden Harvests (IHH) Initiative estimated that a total of



Numbers could not be estimated based on availability of data and methods used.

In Zanzibar, local estimates indicate that 49% of foot fishers are women¹⁶, and that women represent 80% of the 12,903 seaweed farmers (2019).¹⁰ In addition, 3,600 of the 4,600 fish marketers and processors are women.¹⁷

Women are engaged in a range of fisheries activities in the pre-harvest, harvest, and post-harvest subsectors, including net repair and gear preparation, gleaning or fishing from shore in shallow water or on boats, sorting fish catches, offloading sardines from canoes, fish processing (e.g., drying and smoking), marketing and trading as well as cooking in fishing camps.^{7,18,19,20} However, their participation in the country's main fish value chains (octopus, prawns, reef fish, medium pelagics, anchovies/ small pelagics) remains low compared to that of men, at 26% in mainland Tanzania, 15% in Zanzibar, and 21% for the United Republic of Tanzania overall.²¹

"Women account for 52% of the total number of people engaged in subsistence fishing."

Roles and tasks completed by women in marine small-scale fisheries

MAINLAND TANZANIA

In many communities across mainland Tanzania, women play an important role as brokers/intermediaries/fish sellers and traders. In certain areas, such as the Kilwa district, Mafia Island and Kibiti districts, some women own cargo and fishing vessels and employ men to work as crew on their boats.²² Other women work as carriers or porters in a small pelagic fishery transporting fish from the fishing boats to the shore/beach or fish processing areas.^{20,23} Men typically fish all day, with the women buying the fish when they arrive on the beach, then selling it for profit at larger markets or hiring people to transport the fish for them to the market.^{7,24} However, in a number of settings, women face constraints in accessing fish from fishers, having to swim to the boats anchored some ways from shore with safety and health implications (e.g., risk of drowning and in the case of exposure to dirty water increased incidence of vaginal infections).

In the harvest sector, women tend to be active in lagoon and intertidal areas. Collecting marine resources by hand (locally referred to as Kuchokoa) or using long wooden sticks or metal rods, women mostly target octopus, sea cucumbers, squid, and a variety of bivalves for a few hours a day.²⁵ Octopus fishing is a particularly important activity. Traditionally, octopus fishing was chiefly undertaken by women. However, due to the globally increasing demand for octopus and the decline of other near-shore reef resources over the last decade or so, more men are entering this fishery, including as divers, resulting in women being pushed out of the sector.^{26,27} Gender participation in this fishery therefore now depends on fishing ground location, how accessible reefs are and the degree to which women and men engage in foot versus boat-based fisheries. In Tanga, for instance, 97% of fishing was observed to be carried out by men using non-motorized vessels. In Mafia and Mtwara, both men and women were involved in the octopus fishery, mostly on foot. At other locations, some women, like men, use boats to target octopus and squid.²⁸

In addition, women deploy two types of mosquito nets close to shore²⁹: *utazi wa mbavu* and *utazi wa juu*³⁰, which are used during the low spring and neap tides, respectively. This method of fishing is commonly referred to as *Tandillo*. Between 20 and 30 women usually fish together with daily catch rates of 2–17kg per woman. Due to their small mesh size, mosquito nets catch multiple species with most individuals comprised of juvenile fish.^{31,32} The fish species *Plotosus lineatus*, *Atherion africanus* and *Gerres oyena* usually make up about 70% of the catch. At Bagamoyo, women's catches are dominated by epipelagic shrimps (*Acetes spp*) locally known as *Uduvi* – with many different shrimps also called *Kaamamba* and *Ushimba*. Women also play an important role in the processing and marketing of fish.³³ Some fishers in Bagamoyo, having involved a woman on their fishing trips and returning to their landing sites with big catches, have come to regard women as good fortune when fishing. This is contrary to most fishers who believe that women bring misfortune on their fishing trips.³⁴

ZANZIBAR

As is the case on the mainland, women foot fishers keep to near-shore and intertidal areas and simple fishing tools, while men may use spears or snorkeling gear for harvesting in deeper areas. Consequently, the species caught by women and men differ in both nature and value with women's catches mostly comprised of gastropods and bivalves³⁵, and men mostly targeting sea cucumbers, octopus, lobster, rays, and eels.^{36,37}

Seaweed farming is an important livelihood activity for women. They account for 80% of seaweed farmers, and focus on mainly two species of red algae – *Eucheuma denticulatum*, commercially known as Spinosum, and *Kappaphycus alvarezii*, commercially known as Cottonii. Major barriers to

"Some fishers in Bagamoyo, having involved a woman on their fishing trips and returning to their landing sites with big catches, have come to regard women as good fortune when fishing." "The species caught by the growth of seaweed farming as a fruitful livelihood for women include lack of adequate infrastructure, climate change, disease outbreaks women and men differ especially for the more valuable species K. alvarezzi – and low input supply. in both nature and value Value addition and possibilities for women seaweed farmers to earn an with women's catches income from the processing of seaweed into soaps, lotions, juices and food in Zanzibar mostly additives are extremely limited as nearly all the production is bought from comprised of gastropods them in dry form and immediately exported abroad for the extraction of carrageenan - a widely used ingredient to thicken, emulsify and stabilize and bivalves, and men food and drinks. The current situation of a market with a single buyer is mostly targeting sea severely limiting women seaweed farmers' bargaining power for better cucumbers, octopus, prices.³⁸ With demand for seaweed increasing worldwide, there has been lobster, rays, and eels." renewed interest in the sector under the archipelago's Blue Economy Policy¹⁰, and a growing focus on expanding the activity to the mainland as well. Fish processing in Zanzibar employs approximately 860 women, representing around 37% of all workers employed in this activity.⁸ Fish processed by women (boiled, salted, dried) is for both home consumption and sale. Dried fish processing is however a more formalized and better organized activity among local women entrepreneurs who export their produce to the Democratic Republic of Congo (DRC).⁸ Accessing fish for processing is sometimes an issue. For example, in Pemba, women have difficulty accessing auction sites because they tend to be dominated by men.³⁹ Employment in the **fish trade** in Zanzibar has been evolving, with more women joining in by economic necessity. Currently, they represent around 19% of fish traders⁸ and are primarily engaged as buyers of fish for local markets or to fry and sell.^{24,25,40,48} Constraints in their access to and use of transport limits their market reach compared to men's⁴⁰. This, compounded by limited access to finance, which reduces value addition potential²¹, means that women's income from fish trade (e.g., *dagaa*) can be 3.5 times lower than men's.⁴¹ However, where women are involved in small-scale businesses this has afforded them a higher income in turn.⁴² "In Zanzibar, women Women in small-scale fisheries are also particularly vulnerable to represent 37% of fish market fluctuations due to limited buyer networks, a lack of modes of transportation to access a diversity of markets, and limited mobility and processors, 19% of fish time due to household duties. Examples from Kibiti and Kilwa show that traders, and 80% of where women have participated in programmes to support their economic seaweed farmers." empowerment, they have registered economic and financial successes.43 Social considerations Broadly speaking, cultural and social norms perpetuate gender inequalities in many Tanzanian communities, which tend to be more entrenched in rural areas. Discrimination in social institutions and in the family sphere limit women's access to education and health services, as well as empowerment and economic opportunities like markets and finances.⁴⁴ While the poverty rate was estimated at 26.4% in 2018 for mainland Tanzania and 25.7% in 2019/20 for Zanzibar⁴⁵, across the United Republic about 60% of women are considered to live in extreme poverty.⁴⁶ They are also often excluded from formal fisheries management or decision-making processes.⁴⁷

Tanzanian women are more likely than men to be engaged in informal non-wage earning work, and Tanzanian women have a higher rate of unemployment than men.⁴⁸ For the United Republic as a whole, estimates suggest that women and girls aged 5+ spend 16.5% of their time on unpaid care and domestic work, compared to 4.2% spent by men⁴⁹, with women traditionally expected to make sure food is available and everyone is fed. "Women's participation in fisheries value chains is multifaceted and shaped by their gender and factors such as household assets, education, and skills." However, there are certainly important variations across the country's regions, with studies showing that while traditional, cultural and religious norms and practices may limit women in some spaces, they tend to have considerable control and power in others. Women's participation in Tanzanian's coastal fisheries value chains is multifaceted and shaped not just by their gender, but also by factors such as household assets, education, and skills.²¹

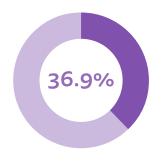
Many women in small-scale fisheries do not have sufficient access to capital or equipment to engage in fishing activities. They also tend to have limited access to information and credit facilities as well as lack of financial management skills, resulting in their economic marginalization.^{50,51} In many places, women lack access to capital because of existing social-cultural values and a lack of collateral.^{52,53} Despite a considerable improvement in the percentage of women having access to loans through empowerment funds and micro-finance schemes over the past 20 years (currently 68–70%), they remain largely excluded from mainstream financial services and business development services.²¹

In Zanzibar, social-cultural and gender norms still strongly influence the use of coastal spaces and activities undertaken by women and men, restricting for instance women from engaging in certain activities such as swimming and going out to sea.³⁸ Currently, men have higher independence, social status, mobility, freedom, access to assets and agency than women.⁴⁸ While gender inequalities do exist, particularly in coastal villages⁵⁴, it is important to note that there have been periods of time during which women benefited from high status. Despite these limitations, women actively participate in reef gleaning activities and are involved in fish trade activities, which used to be exclusively done by men.⁴³

Around Lake Victoria, evidence suggests that to access fish, women are often required to trade "sex for fish"^{55,56,57,58} which has led to high rates of sexually transmitted infections as well as gender-based violence.⁵⁹ Trading sex for fish can be seen as the result of colonization, and globalization dismantling traditional fishing practices that used to regulate subsistence fishing.^{20,23,59} While not always resulting in the trade of sex for fish, recent work on Lake Victoria fisheries illustrates that women often have less power than men in trading relationships, including to access fish.⁶⁰

Women's rights and political empowerment

While the government is taking encouraging steps to advance women's empowerment and gender equality across the United Republic, discrimination in social institutions and in the family sphere limit empowerment opportunities for women and girls - with important variations across the country's regions according to traditional, cultural and religious norms and practices. Formal legal provisions guarantee women access to ownership and protection of their rights to land and equal rights to men, but even if women formally have the legal right to own land under the Land Act, poor implementation and the continued existence and application of customary law can still undermine women's empowerment. While women make up most of the agricultural labour force, women are more land-insecure than men, with only 9% having sole ownership of land. In Zanzibar, only 27.2% (as of 2015) have right of land occupancy.⁶¹ Women do have ownership of assets, but only 7.4% and 20.9% of house owners are women in mainland Tanzania and Zanzibar respectively.²¹ In addition, both customary and Islamic law, the two main systems of succession in the United Republic, limit women's inheritance based on their gender.⁶² Under customary law, a widow is generally denied inheritance altogether,



Percentage of women in the National Assembly in 2022

"In 2021, H.E. Samia Suluhu Hassan became the sixth and first female president of the United Republic of Tanzania." while under Islamic law, women only inherit half as much as men.⁵³ In addition, procedural laws favor the selection of male administrators, excluding women from the management of estates.⁵³ The national legal framework does not grant women the right to be recognized as the head of their household and does not establish equal parental authority over their children. Yet, many women widowers act as *de facto* heads of household, and divorce is relatively commonplace even in communities that are predominantly Muslim.

Violence against women remains one of the most significant barriers for Tanzanian women and girls to achieve gender equality.⁶³ Importantly, the United Republic lacks legislation on domestic violence and marital rape and critical reforms such as a repeal of the Law of Marriage Act, in part to establish 18 as the minimum age of marriage for girls, is still pending.⁶⁴ Recent evidence indicates that more than 24% of women between the ages of 15 and 49 have experienced physical and/or sexual violence in the last year (40 percent in their lifetime)⁶⁵ with no change in this statistic since 2010.⁶⁶ Tanzania is therefore considered to have one of the weakest legal and policy frameworks in Africa addressing protection against genderbased violence.⁴⁹ To address violence against women and girls, the United Republic of Tanzania has developed and is implementing a National Plan of Action on Violence Against Women and Children (NPA-VAWC).⁴⁷

Labour laws are rather weak and neither labour rights nor occupational health and safety standards are generally enforced in mainland Tanzania or Zanzibar, each of which has its own labour law regime.²¹ While the jobs in the fisheries sector may or may not be skilled, they are unqualified (>90%). Traders and artisanal processors (men and women) are mostly self-employed and work informally. Formal employment is principally found in the sub-chains where industrial seafood processors play a major role (i.e., octopus and prawn sub-chains in mainland Tanzania) and there is no evidence of breaches of labour standards.²¹ The general informality of employment in the coastal fisheries sector means that the enforcement of labour laws and rights is particularly challenging, and even more so for women.

However, the United Republic has registered impressive achievements over the last 20 years. In 2015, the first woman, H.E. Samia Suluhu Hassan, was elected as Vice President, and in 2021, she became the sixth and first female president of the United Republic of Tanzania.⁴⁷ The President recently established a new Ministry of Community Development, Gender, Women and Special Groups.⁷¹ In November 2022, women's representation in the National Assembly stood at 36.9%⁶⁷, ranking the United Republic of Tanzania 38th out of 187 countries, with women representatives holding key positions such as Speaker of the National Assembly of Tanzania (Dr. Tulia Ackson), Chief Executive Officer at NMB Bank (Ruth Zaipana), Minister of Health (Hon. Ummy Mwalimu) and Minister of Foreign Affairs and East African Cooperation (Dr. Stergomena Lawrence Tax). The country's commitment towards advancing gender equality in decision-making has led to 30.68% of women holding elected seats in deliberative bodies of local government⁶⁸, with the proportion of women judges in the country at 41%.⁴⁷

Progress on promoting gender equality has also included the implementation of gender-responsive budgeting and initiatives – one of the first across Africa ⁶⁹ – and empowerment of women in some political spheres. At high political levels, the United Republic has made several commitments towards gender equality and women's empowerment under the Economic Justice and Rights Action Coalition of Generation Equality, including to expand decent work, to broaden women's access and control

	over productive resources and to develop gender-responsive economic plans. ⁷⁰ Gender responsive laws have included the Women and Gender Policy and National Strategy for Gender Development for Mainland; and the Gender Policy of Zanzibar (2016-2020), reflecting the Government of Tanzania's commitment to global frameworks. ⁷¹				
	In July 2021, the United Republic, together with global leaders, made bold commitments to accelerate progress on gender equality by co-leading the Generation Equality Forum Action Coalition on Economic Justice and Rights. ⁴⁷ In his recent speech, the Minister for Finance and Planning ⁶ proposed to amend the Local Government Finance Act to distribute funding to women to avail small entrepreneurs with infrastructure to support their business. If the act is implemented, it is expected to apply to the fisheries sector as well. Women are also at the forefront of fisheries reform—working to create safer working conditions, economic opportunities, change fisheries governance and protect the rights of vulnerable fish workers. ^{72,73}				
Key frameworks promoting gender equality and their ratification status	✓ Convention on the Elimination of Discrimination Against Women (CEDAW) ratified in 1985 and its Optional Protocol in 2006. However, the country lacks a CEDAW related enabling legislation ⁷⁴ , with many laws still discriminating against women. In 2015, the CEDAW Committee ruled that the United Republic of Tanzania had violated its obligation under CEDAW. ^{75,76}				
	 Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women (also known as the "Maputo Protocol") ratified in 2007. 				
	Beijing Platform for Action (1995) with national review submitted in 2005. ⁷⁷				
	✓ The United Republic of Tanzania is one of 12 countries that have signed the Agreement Amending the SADC Protocol on Gender and Development in 2016 to align it to the Post-2015 Sustainable Development Goals and Targets, the African Union Agenda 2063, and the Beijing Plus 20 Review Report. The United Republic of Tanzania has also implemented the East African Community Gender Policy 2018. ⁷⁸				

Social Institutions and Gender Index (SIGI)

Higher SIGI values indicate higher inequality and ranges from 0 for no discrimination to 1 for very high discrimination. With an aggregated index value of 0.5 in 2023, the United Republic of Tanzania was ranked as having overall high levels of gender discrimination in social institutions.

Year	Total aggregated index value (Category)	Discrimination in the family	Restricted physical integrity	Restricted access to productive & financial resources	Restricted civil liberties
2014 ⁷⁹	0.2504 (High)	0.7166 (v. High)	0.5415 (High)	0.5913 (High)	0.2554 (Low)
2019	0.461 (High)	0.806 (v. High)	0.285 (Med.)	0.300 (Med.)	0.352 (Med.)
2023	0.5	0.869	0.349	0.314	0.351

Africa Gender Index (AGI)

Value (2019)80

(on a scale from 0 to 1, with a score of 1 representing parity between women and men)

Rank (2019)
12
(out of 51 countries)

Gender Inequality Index (GII)

Value (2021)⁸¹

(on a scale from 0, where women and men fare equally, to 1, where one gender fares as poorly as possible in all measured dimensions) Global Rank (2019) 146 (out of 170 countries)

Gender in fisheries governance

The United Republic of Tanzania is committed to mainstreaming gender in all its policies and processes and the gender equality principle is enshrined in almost all national-level policies. The legislative and regulatory framework governing Tanzania's promotion of gender equality is based on the country's 1977 constitution (Article 12 and 13) which guarantees equality between men and women and supports their full participation in social, economic and political spheres.

However, to date, the United Republic of Tanzania has not ratified the International Labour Organization C188 (Work in Fishing) Convention, which protects the living and working conditions of fishers on board vessels for all types of commercial fishing. However, even this convention does not consider workers across the entire value chain and therefore would not cover most women's working conditions. In addition, other existing legal frameworks do not include provisions to protect women as workers in the fisheries sector.

MAINLAND TANZANIA

In mainland Tanzania, the commitment to gender equality is articulated in national strategies, plans and policies, such as the Tanzania Development Vision 2025, the National Five-year Development Plan (see below), and the National Strategy for Growth and Reduction of Poverty (NSGRP) which also refers to Zanzibar and the Women and Gender Development Policy of 2000.⁸²

Tanzania's Five-Year Development Plan (2021/22 – 2025/26) seeks to ensure access to capital, expertise, skills, knowledge and fishing gears for small-scale fishers and women through their respective social groups.⁸³ There is a call for gender mainstreaming and the need for "measures that address gender inequalities against women and girls; increased opportunities for girls' education and training; swift measures against discrimination in matters of land ownership and inheritance, violence against women, and intensified voice against archaic cultural biases against women." Associated interventions include improving access and participation in tertiary learning institutions, meeting specific nutrition needs of women, and economic empowerment via soft loans for women entrepreneurs. "BMU guidelines require each BMU executive committee to have at least 30% women among its membership."

"Tanzania is one of the few countries actively engaged in developing a NPOA for the implementation of the SSF Guidelines." The **National Beach Management Units (BMU) Guidelines,** which were developed within the context of the FAO Code of Conduct for Responsible Fisheries⁸⁴ and the Harmonized Beach Management Unit Guidelines on Lake Victoria⁸⁵, set out procedures for mainstreaming gender in BMUs. The BMU guidelines support the government development objectives of poverty eradication, gender equity and social inclusion. They also provide clear guidance for ensuring inclusive community participation in these decision-making processes tied to reef livelihoods and the sustainable use of reef resources. For instance, BMU guidelines require each BMU executive committee to have at least 30% women among its membership.

The MPA and Reserve Act restricts women to fishing in intertidal zones within park boundaries. Recent fisheries closures, such as in the Mbarakuni Marine Reserve, protect several reef areas from fishing for certain months of the year. However, as this is an intertidal area, it predominantly limits women from their fishing activities (gleaning), whereas the remaining open access reefs are subtidal in nature, requiring skin diving for octopus and thus predominantly letting men engage in the fishery. Broadly, there are concerns that small-scale fishers, particularly those occupying often disadvantaged segments of the fish value chain (e.g., fishing crews, women, small-scale fish traders etc.), are inadequately involved in establishing and running Collaborative Fisheries Management Areas. In Rufiji, Mafia, and Kilwa, a recent study showed that most small-scale fishers were only informed of the areas subject to closure after the decisions had been made by their leaders. This means that they are not involved in the decisionmaking process but only in implementing the actions, resulting in resource use conflicts.86

The Government of Tanzania, with FAO support, is one of the few countries actively engaged in developing a National Plan of Action (NPoA) for the implementation of the SSF Guidelines.⁸⁷ Through the consultative process to develop the NPoA-SSF Guidelines, gender-related challenges were identified and activities proposed for responding to these, such as increasing participation by women in SSF decision-making, scaling up micro-credit access for women and creating awareness on gender equality. This process has involved developing a National Task Team and the establishment of the Tanzanian Women Fish Workers Association - a recommendation emerging from a mapping study the Team undertook of women and non-state actor's organization in SSF. TAWFA is an organization under the pan-African Women Fish Processors and Traders Network (AWFISHNET) that protects the rights of women fish workers. Additionally, the Ministry of Livestock and Fisheries Development now has a 'Gender Desk', which acts as a point of connection between the government and TAWFA⁸⁸, supports other capacity building activities focused on gender equality within the Ministry and helps address sectoral issues and challenges facing women and men in the fisheries sector.⁸⁹ Other initiatives include the establishment of the Fishworkers' Network of Tanzania (COWOFNET) in coastal communities. These developments have been very important in improving sensitivity to gender in the overall governance of the sector in mainland Tanzania.90

The **Fisheries Sector Master Plan** 2021/22 – 2036/37 seeks to align with the NPOA-SSF Guidelines. Operational objectives to do so include increasing involvement of women in fisheries management and development overall, via enhancing extension services, establishing aquaculture field schools, and supporting aquafarmer cooperatives for women. Intersectionality is recognized, with communicable diseases, climate change, limited involvement of women in fisheries management, and inadequate social services in fishing communities being identified as cross-cutting.

"Existing policy instruments predominantly consider gender as a special privilege rather inherent value."

"Zanzibar's Gender Strategy and Action Plan clearly lays out the risks and opportunities of a Blue Economy for women in SSF and seaweed farming." While the **Fisheries Act 22** (2003) ensures access by the community to fishing grounds in a non-discriminating and non-restricting way, it makes no specific mention of women or gender.⁹⁰ This lack of inclusion or specific mention of women means that they can be inadvertently excluded from their fishing grounds and practices while men likely are not as impacted. Similarly, the Fisheries Regulations of 2009 include no specific mention of women or gender. However, the National Fisheries Policy 2015 does outline gender mainstreaming and awareness as a policy objective to ensure that gender issues are considered and integrated in fisheries and aquaculture interventions, further emphasizing that the government shall promote equity in the access of fisheries production and benefits. However, the specifics on what interventions and methods would be used to do so are not detailed.

It is important to note that SSF in mainland Tanzania are a common foundation of rural livelihoods, food security and sustainable development. However, although gender equality commitments to the fisheries sector have surged, the attention to "gender" is often limited to a narrow focus on women, i.e., an instrumentalist approach with a tendency to focus on 'reaching' women (e.g., through physical inclusion) or 'benefiting' women (e.g., increasing income potential), overlooking men and gender relations.^{39,91} In so doing, efforts tend to treat the 'symptoms' rather than address the fundamental structural power and relational barriers which deny access to resources and opportunities for women (i.e., gender transformative approaches).^{92,93} Existing policy instruments predominantly consider gender as a special privilege rather than inherent value. This has resulted in societal, communal and household levels of governance being under-considered opportunities to address gender equality.

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The **Zanzibar Fisheries Act** 2010 recognizes the rights of all persons irrespective of institution or sex, but is otherwise largely gender blind. The **Zanzibar Draft Fisheries Policy** 2014 that delineated the implementation of the fisheries governance strategy was also largely gender blind. It is unclear how its successor, the **Zanzibar Fisheries Master Plan** 2019-2033, which is undergoing approval, will revert this trend.

In Zanzibar, foot fishing/gleaning is invisible in policies (e.g., the Fisheries Act 2010 does not define it as SSF), data collection protocols and indicators despite its importance for nutrition and food security as well as an economic activity⁴⁰, representing a double burden of invisibility for the many women engaged in it.

In contrast, the recently formulated **Zanzibar Blue Economy Policy** (2020) explicitly includes as an objective the empowerment of local communities, specifically women and youth, in blue economy activities and aims to broaden gender equitable participation in blue economy governance. To confirm its commitment to the principles of gender equality and empowerment enshrined in the Blue Economy Policy, the Revolutionary Government of Zanzibar has worked together with UN Women (the United Nations entity dedicated to gender equality and the empowerment of women) to develop a Gender Strategy and Action Plan aimed at strengthening gender mainstreaming at all levels in the priority areas of the Blue Economy, including capture fisheries and aquaculture. The formulation of this document, currently under review, followed a bottom-up, consultative process which gave a voice to many women fishers and seaweed farmers in policy making for the first time. The document clearly lays out the risks and opportunities of Blue Economy development initiatives for women engaged in small-scale fisheries (gleaning, processing and trading) and seaweed farming.

The Revolutionary Government of Zanzibar is also engaging with FAO to develop its own NPOA-SSF (under elaboration).

Legislative Text	Year
Fisheries Act No.22	2003
Fisheries Regulations No. 308	2009
Fisheries Act No. 7, Zanzibar	2010
National Fisheries Policy	2015
Tanzania Fisheries Research Institute Act No.11	2016
Fisheries (Amendment) Regulations	2020
Tanzania Five Year Development Plan (2021/22 - 2025/26)	2021
Fisheries Sector Master Plan (2021/22-2036/37)	2021
National Plan of Action for Implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries (NPOA- SSF Guidelines)	2021
Zanzibar Fisheries Act 2010	2010
Zanzibar Draft Fisheries Policy	
Zanzibar Fisheries Master Plan 2019-2033	2022
Zanzibar Blue Economy Policy	

Threats and drivers of change in fisheries

Several key threats to and drivers of change in the United Republic of Tanzania's coastal ecosystems and examples of how these may be addressed are outlined below. While threats and drivers of change to fisheries may (or may not) have specific gender dimensions associated with them, gender integration is necessary in efforts to navigate them, improve adaptation, and foster resilience in the face of change.

Illegal, unreported and unregulated fishing by artisanal and industrial (including deep sea fishing) fleets, is thought to be taking as much as 20% of the country's fish and costing the economy USD 400m a year.94 Many vessels operate illegally or under false identities, catches can be transferred at sea and are not recorded, and fish landings data registered at marketplaces is often not exact. Several illegal fishers use destructive methods such as blast fishing, using dynamite from the mining and construction industries, or using homemade devices as explosives. The practice was declared illegal in the 1970s, but continues to be used in parts of Bagamoyo, Tanga, Pangani, Rufiji, Temeke, Mtwara, Kilwa and Zanzibar.⁹⁵ Blast fishing provides fish for commercial and consumption purposes, with a single explosion capable of killing as much as 400kg of fish in a radius of 100ft, worth up to USD 1,800, but the practice has led to the significant large-scale destruction of reef and other critical habitats.95 Poverty indicators such as food insecurity, low household expenditure, limited capital and lower material standards of living have been shown to be associated with destructive fishing methods in the United Republic.⁹⁶ Low rates of enforcement and prosecution, aggravated by

corruption, have been identified as a contributing factor to blast fishing. Interviewed fishers have highlighted that inconsistencies in fisheries management approaches to address dynamite fishing as well as the lack of organization among involved actors, kinship ties, and migrant fishers have played an important role in allowing dynamite fishing to persist.⁹⁶ Recent work near a marine protected area (MPA) in Mtwara, also highlights that unresolved tensions between the local MPA authorities and local fishers surrounding enforcement practices, unfulfilled gearexchange-related promises, and allegations of poor governance, are important contextual factors in the persistence of dynamite fishing.97 While it is important for fishers to be meaningfully involved in actions against dynamite use, to effectively combat blast fishing, government support is also needed. However, where strict enforcement has been possible, through regular government patrols, naval enforcement actions and political pressure, dynamite fishing has been significantly reduced. This has in large part been the result of the establishment of the National Multi-Agency Task Team (NMATT), set up in 2015 to tackle wildlife crime, illegal timber trade and blast fishing, and their shift in enforcement focus from fishermen to the networks sourcing explosives.⁹⁸ Such efforts have resulted in a substantial drop in blast fishing between 2016 and 2018, and since mid-2018 blast fishing levels have been at their lowest for decades.⁹⁹ Spear guns, beach seines, and small-eye nets are considered illegal, yet are still commonly used.

- Seventy-five percent of fishers interviewed as part of a recent survey indicated that over the last decade they had changed fishing grounds, moving from nearshore to offshore areas. This change was due to the impression that nearshore areas had suffered major declines in fish stocks as a result of **overfishing** and environmental changes related to extreme climate- or weather events.¹⁰⁰ Overfishing in part due to an increasing number of fishers is putting pressure on coastal resources and leading to declines in catches over time. The increased number of fishers is in turn thought to be due to the lack of alternative sources of income among the youth who either completed or dropped out from school. Illiteracy and hotel owners' biased perceptions exclude many women and youth from opportunities in the tourism sector. In addition, crop failures from extended droughts driven by climate change are forcing people to to start fishing along the coast, which adds further pressure to declining fisheries resources.¹⁰¹
- Increases in sea surface temperatures as well as ocean acidification as a result of **climate change** are considered major threats to habitats that are important fish spawning and nursery grounds as well as feeding areas.¹⁰¹ For example, the 1997/1998 El Niño event had a tremendous impact on coral reefs in Zanzibar and the Indian Ocean.¹⁰² Survey respondents across several studies also indicated that climate change was associated with increased ocean turbulence reducing fishers' ability to go out to sea and meant that local knowledge used to predict monsoon winds is no longer reliable.¹⁰³ Adaptation strategies include going out further and deploying gears in deeper waters, fishing longer when the weather permits and pivoting to alternative livelihoods.¹⁰⁴ Recent work focused on interviews with women in Zanzibar showed that about 65% of women surveyed had difficulties relating to the question about what climate change is and what it means to them, yet had clear perceptions about environmental changes for a number of specific dimensions, such as changes in rainfall or temperature.⁴³ Overall their adaptive capacity was assessed as relatively low with adaptation to climate change being more reactive than proactive.⁴³ The red algae (genera Euchema and Kappaphycus) grown by women is very sensitive to changes in temperature and precipitation.¹⁰⁴ Strategies to support resilience to

"Interviews conducted in Zanzibar showed that about 65% of women surveyed had difficulties relating to the question about what climate change is and what it means to them." date have only managed to do so in the short term. Supporting resilience over the long term "requires coordinated support and investment by the government, the seaweed industry and other partners such as research organizations to develop seed banks and improved varieties, increase farmers' awareness of improved technologies and work with women and men farmers to strengthen their absorptive and adaptive capacities."¹⁰⁵ The severity of droughts in semi-arid regions have resulted in crop failures and already led to increases in the number of people moving to the coast and resorting to fishing for food and to secure household needs, further increasing pressure on coastal resources.¹⁰⁴ This trend is likely to continue to increase in the future. Rising seas associated with climate change also threaten coastal ecosystems (e.g., mangroves), groundwater resources, and coastal infrastructure, with adverse socio-economic effects.

- **Tourism expansion** is putting a lot of Zanzibar's coasts under great pressure and changing the relationships between people and the environment, jeopardizing sustainability.¹⁰⁶ Increases in hotels and road networks and associated impacts such as sedimentation and land-use changes as well as large influx of foreigners wanting to consume local seafood have significantly altered the local social-ecological landscape. Increasing demand of seafood resources by tourists has also resulted in the increase of fish prices, causing the poor, including fishers, to consume less fish and other seafood, increasing their vulnerability to food insecurity especially among households with low purchasing power.¹⁰⁷ The tourism demand for fresh seafood has by and large also been met by men, as traditional value systems often do not permit women from getting tourism jobs and from selling fish directly to hotels and restaurants. On the island of Unguja, in southern Zanzibar, only a few women have managed to foster relationships that enable them to sell their products to restaurants catering to tourists.²⁶ Environmental degradation and restricted access rights, including to beaches used by women and men as fishing areas, are two areas of specific concern.^{43,108} Blocking off access to beaches tends to impact women more heavily as men can typically travel to reach fishing grounds further afield.
- Tanzania's centralized model of resource governance has meant that conservation efforts, mostly terrestrial to date, have often excluded local communities from the decision-making process. While there is an increasing desire to ensure greater integration of local communities into environmental management regimes, existing MPA implementation at Mnazi Bay-Ruvuma Estuary Marine Park for instance falls short on this ambition. Indeed, villagers are excluded from park governance, and efforts have tended to work against key relational values, including social cohesion, reciprocity, place, agency and self-determination to dismantle and disrupt the practices small-scale fishers viewed as fundamental to their livelihood and collective wellbeing.¹⁰⁹ Zanzibar is however showing that seaweed farming and marine conservation are not necessarily antagonistic objectives.¹¹⁰

Gender in ODA allocation for fisheries

Between 2010 and 2019, the United Republic received a total of USD 10.2 million in fisheries Official Development Assistance (ODA), USD 0.4 million (4%) of which was earmarked to support gender equality focused fisheries projects (i.e., tagged with gender markers 1 or 2). This latter sum represents 0.5% of gender-focused fisheries allocation to Sub-Saharan Africa. For the period under consideration, 96% of gender-focused financing was provided by Norway, with the remainder provided by Canada (3%) and Ireland (1%). The aim of funded activities included the sponsoring of an aquaculture

community project in the Pemba region, internships through the University of Newfoundland and activities to address "the challenges of globalisation to resource management, livelihoods and governance".

	Norway 96%	Canada 3%	Ireland 1%

Programmes or initiatives aiming to advance gender equality in fisheries

SIDA, the Swedish development and cooperation agency, in cooperation with Stockholm University, has funded a diversity of projects focused on coastal socio-ecological systems over several years. These projects have included gender analysis of women living in the coastal zone, SSF sustainability and governance, seaweed farming challenges and linkages between women's coastal livelihoods, climate change and dimensions of the global economy.

CARE-WWF Alliance is working with communities in the United Republic to empower women to improve their livelihoods and sustainably manage the natural resources on which they depend. In coastal communities, the alliance is focusing on empowering women economically through Community Microfinance Groups (CMGs) locally known as VICOBA – Village Community Banks. This initiative has helped to reduce the vicious cycle between poverty and environmental degradation. For decades, poverty and inequality have been key challenges for coastal communities, especially for women.¹¹¹ To promote conservation, WWF has worked in areas that offer opportunities for progress, sustainable income and development. Through conservation efforts, communities have been able to undertake small and medium enterprise developments based on their ocean and coastal resources.

In Zanzibar, coastal community network organisation MWAMBAO has been promoting greater equity in the fisheries sector for many years, while initiative and NGO 'Sea PoWer' promotes the use of innovative tubular nets for seaweed farming to empower women producers³⁸ and builds women's capacity in seaweed processing skills in partnership with the Zanzibar Seaweed Cluster Initiative (ZaSCI).

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Female fish traders at central fish market in Mtwara town. Photo: © Dana Baker



Seaweed farm on the east coast Zanzibar. Photo: © Dana Baker



Women gleaning shrimp with a mosquito net near Mnazi Bay Ruvuma Estuary Marine Park. Photo: $\textcircled{\mbox{ }}$ Dana Baker



Woman in Mnazi Bay gleaning at low tide for various bivalves and other marine snails. Harvests are frequently used for household consumption and cooked in a tomato and onion-based sauce called mchuzi and eaten with ugali, a porridge made with maize, or cassava. Photo: © **Dana Baker**

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