

# Aquatic Health Information Brief: Tanzania



## Summary information

### Customs and borders

#### 1. International airports (3):

- Kilimanjaro,
- Zanzibar
- Dar es Salaam

#### 2. Official land border crossing points (16):

Murusagamba, Mutukula, Rusumo, Kabanga, Kanyigo, Sota, Sirari, Namanga, Holili, Tarakea, Horohoro, Kasumulo, Tunduma, Kasanga, Kigoma and Buhingu.

#### 3. Bordering countries (8):

Kenya, Uganda, Rwanda, Burundi, Democratic Republic of Congo, Zambia, Malawi, and Mozambique.

#### 4. Coastal customs ports (3):

Dar es Salaam, Zanzibar and Tanga.

## Key contacts supporting national aquatic health management

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## Main fish pathogens and health conditions detected in Tanzania

Recorded information of specific pathogens is relatively limited due to previous lack of specialised diagnostic laboratories. This list was established between Sokoine University of Agriculture and University of Dar Es Salaam.

**Bacterial:** Vibriosis, Staphylococcosis, Streptococcosis,

**Parasitic:** Trichodiniasis

**Fungal:** Saprolegniasis.

**Viral:** No current finfish or shrimp viral pathogens recorded.

## Private sector background

Tanzanian aquaculture development has a long history in finfish, seaweeds and crustacea, but has only recently begun to commercialise. As a result, finfish and shrimp diseases are not yet a significant issue for the private sector. Commercial cage culture of tilapia is now growing on Lake Victoria, along with some pond and tank-based tilapia production. RAS (Recirculation Aquaculture Systems) catfish farms have been developing around Dar Es Salaam and other urban areas. Some common in-water treatments [i.e. salt (NaCl), methylene blue, potassium permanganate, copper sulphate, and some use of formalin] are used in hatcheries and enclosed grow-out systems either prophylactically or for standard ectoparasite treatment. The use of in-feed antibiotics, probiotics or other herbal treatment remedies for finfish is unrecorded. No biosecurity measures are seen on small to mid-scale farms, but several of the larger commercial tilapia hatcheries use foot baths and restrict entry. The main fish farmers' group, the Aquaculture Association of Tanzania (AAT), is not active in fish health.

The seaweed cultivation sector is primarily based in Zanzibar. It started to develop in the mid-1990s with, primarily, women's groups setting up longline cultivation in shallow coastal areas. Initial results were good, leading to export to markets in Europe. However, these inner coastal systems have increasingly been affected by warming water temperatures and the associated "Ice Ice disease" which has significantly affected production and resulted in the development of deeper water raft systems which appear to suffer fewer disease issues.

Both Sokoine University of Agriculture SUA and University of Dar Es Salaam UDES have been involved in recent years in aquatic animal health related partnerships with DTU National Veterinary Institute Aarhus, Denmark, and the Norwegian School of Veterinary Science.

## Infrastructure and Legislation: FAQs

### 1. Does the government have a specialised unit for aquatic health?

No not as yet.

### 2. Are aquatic health diagnostics laboratories accessible and affordable to the majority of aquaculture farmers?

The only laboratories currently carrying out some level of diagnostics and research are in the two universities [Sokoine University of Agriculture (SUA) and University of Dar Es Salaam (UDES)] but primarily for research and teaching.

### 3. Does the government have any bans or limitation on introducing live fish into the country – or moving live fish within the country?

A ban was brought in 2003 for any live fish imports. This was implemented through the Fisheries Act No. 22 of 2003 and its following Regulations of 2009. The ban is still in legislature.

### 4. Does the government have any specialist legislation on aquatic health?

A national Aquatic Animal Health (AAH) strategy is currently under development through the support of FAO. See further reading below.

### 5. Additional information – capacity development

In Animal Disease Act No. 17 (2003) fish is defined as an aquatic animal. There are plans are to establish specific Aquaculture Regulations that will include aquatic animal health issues. The government has drafted a National Fish Health / Fish Diseases strategy but has not published yet.

## Further reading

1. Alexandra Mzula, Philemon N. Wambura, Robinson H. Mdegela, Gabriel M. Shirima, 2021. Present status of aquaculture and the challenge of bacterial diseases in freshwater farmed fish in Tanzania; A call for sustainable strategies. *Aquaculture and Fisheries*. Volume 6, Issue 3, May 2021, Pages 247-253. <https://www.sciencedirect.com/science/article/pii/S2468550X20300617>

2. Rusekwa, S.B., Campbell, I., Msuya, F.E. et al., 2020. Biosecurity policy and legislation of the seaweed aquaculture industry in Tanzania. *J Appl Phycol* 32, 4411–4422 (2020). <https://link.springer.com/article/10.1007/s10811-020-02194-1>

3. Pat Caplan, 2016. Sustainable Development? Controversies over prawn farming on Mafia Island, Tanzania. *Conservation & Society* Vol. 14, No. 4 (2016), pp. 330-344 (15 pages). [https://www.jstor.org/stable/26393256#metadata\\_info\\_tab\\_contents](https://www.jstor.org/stable/26393256#metadata_info_tab_contents)

4. Sadock Rusekwa, Iona Campbell, Flower E. Msuya, Amelia Buriyo, 2020. Biosecurity policy and legislation of the seaweed aquaculture industry in Tanzania. *Journal of Applied Phycology*, 32(6). [https://www.researchgate.net/publication/343512197\\_Biosecurity\\_policy\\_and\\_legislation\\_of\\_the\\_seaweed\\_aquaculture\\_industry\\_in\\_Tanzania](https://www.researchgate.net/publication/343512197_Biosecurity_policy_and_legislation_of_the_seaweed_aquaculture_industry_in_Tanzania)

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