

The Leibniz Centre for Tropical Marine Research (www.leibniz-zmt.de) in Bremen is a member of the Leibniz Association, which is supported by the German Federal and State Governments. Through its research, ZMT contributes to developing science-based strategies for sustainable use of tropical coastal systems.

Master's Thesis project

available in the <u>TransTourism</u> Project in the <u>Deliberation</u>, <u>Valuation</u> & <u>Sustainability group</u>

Sustainable funding for sustainable tourism: Values and willingness to pay for tourism-generated wastewater management in Zanzibar, Tanzania

Tourism, particularly nature-based or eco-tourism, is promoted as an 'alternative livelihood' that can both enhance economic prospects and conserve natural landscapes and biodiversity. Tourism can be a powerful economic driver that is seen as an engine for sustainable development. However, poor wastewater management is a critical challenge in touristic areas, often leading to black (fecal) and grey (other household) wastewater entering streams and the ocean. When wastewater is untreated or minimally treated, bacteria and viruses, nutrients, and other pollutants enter the environment, affect drinking and bathing water quality, human health, the environment, and the economy. Tropical island nature tourism destinations face unique problems with wastewater, as the characteristics that make them ideal for sun, sea, and sand getaways also makes wastewater management more challenging. Further, wastewater flows underground and is largely invisible, and thus is often a low priority for tourists and tourism businesses. The effects of wastewater in groundwater and the sea are often difficult to measure and perceive, but once the impacts are obvious they can be irreversible.

The goal of this master's thesis is to quantify willingness to pay by tourists and people in the tourism sector, and explore the drivers for investment into sustainability with questionnaires and focus groups in Zanzibar, Tanzania.

Zanzibar has a rapidly growing tourism industry that has led to serious challenges of pollution and overall social and environmental sustainability. Despite regulation mandating waste treatment, raw sewage discharge is increasing. The Tanzanian government lists this pollution as a key priority in Zanzibar.

The thesis would consist of fieldwork on Zanzibar in Tanzania, with research design and data analysis supported by the TransTourism team of ZMT researchers. The student would make minor adaptations to an existing questionnaire (focusing on a discrete choice experiment and environmental psychology) and focus group protocol, and then conduct questionnaires and focus groups on Zanzibar in Tanzania. Focus groups would be conducted in cooperation with a second master's student in the project. In the course of the thesis, the student can contrast their results with similar work being done at other field sites in the TransTourism project, as well as gain experience being part of a large research project.

We are looking for a candidate (gender neutral) from a relevant study programme with

- An interest in values for the environment, non-market valuation methods, environmental psychology, questionnaires and focus groups
- An interest in building skills in quantitative social science
- Able to start in October 2024 and travel the field within the next few months
- Prior experience with the specific methods is not necessary but desirable. Training will be available and candidates should be motivated to learn and develop skills in the methods
- Enthusiasm to conduct field research on a tropical island
- Strong speaking and writing skills in English
- Swahili language skills are not necessary but please mention your language skills in the application

The successful candidate will closely cooperate with the working group Deliberation, Valuation, and Sustainability on an international and interdisciplinary project on sustainable tourism, and will receive field experience and some field and travel funding support for their master thesis. For questions or more details please contact Marie Fujitani (marie.fujitani@leibniz-zmt.de) with subject heading "Question Master Thesis 01_24".

To apply, send your CV and a short letter stating you specific interest and qualifications with the subject heading "Application Master Thesis 01_24: <Your Name>" to marie.fujitani@leibniz-zmt.de before 20. September 2024.

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