

Report: How marine plastic pollution impacts countries that rely on tourism

May 2 2023, by India Glyde



A beach clean-up takes place in Kipumbwi in Tanzania. Credit: Professor Alistair McIlgorm/University of Wollongong

Pristine beaches full of plastic waste. Picturesque rivers clogged by rubbish and discarded objects. These are not the sights that you find in travel brochures.

But for many countries around the world, which rely on tourism to

support their gross domestic products (GDP), these are frequently becoming the sights that greet tourists.

Professor Alistair McIlgorm, from the Australian National Center for Ocean Resources and Security (ANCORS) at the University of Wollongong (UOW), said [marine plastic pollution](#) is becoming an increasingly urgent issue in the African coastal locations of Tanzania and Zanzibar, which rely on tourism to drive the local and national economies.

As the lead researcher and consultant on a recent World Bank PROBLUE study into the costs of environmental degradation from marine plastic pollution in Eastern Africa, Professor McIlgorm has seen the problem firsthand. He said, as with all plastic pollution, prevention is better than the cure.

Professor McIlgorm conducted the research alongside Dr. Jian Xie, Senior Environmental Specialist at The World Bank. Titled "[The Costs of Environmental Degradation from Plastic Pollution in Selected Coastal Areas in the United Republic of Tanzania](#)", the report was published by the World Bank last month.

The World Bank study sought to measure the environmental costs of marine plastic pollution in two sites—Dar es Salaam in Tanzania and Zanzibar Island in the Zanzibar Archipelago—by estimating the [economic impacts](#) on fisheries, aquaculture, tourism, health, and the marine ecosystem.

The World Bank is one of the world's largest sources of funding and knowledge for developing countries. ANCORS is the only multidisciplinary university-based center of its type in the Southern Hemisphere dedicated to delivering specialized research, advisory services, education and training in ocean law and policy, maritime

security, and marine resources management.

This is the first study of its kind that determines the cost of environmental degradation caused by marine plastic pollution.

"The project found that across the two sites, in 2019, there was a measurable impact of US\$28 million, two thirds of which is being borne by the [tourism industry](#)," Professor McIlgorm said.

"Zanzibar is a popular tourist destination, and the project used survey responses from tourists to show the impact—approximately US\$13.7 million—that marine plastic pollution has on how tourists feel about the destination. This study is a significant development in estimating the tangible impact of plastic on marine industries and the environment."

Both Tanzania and Zanzibar have experienced considerable population growth and urbanization in recent years, the report found, and with that has come an increased demand for products that contain plastic. However, Professor McIlgorm said, like much of the continent and indeed the world, there is not the infrastructure to support disposing of those mountains of plastic.

Sustaining healthy oceans and the responsible consumption of resources are both part of the United Nation's Sustainable Development Goals, and are central to a health future for countries and territories in East Africa.

While the study focused on Tanzania and Zanzibar, it is a problem that countless countries throughout the world, who rely on tourism, are grappling with.

"There are immediate actions that can be taken, such as beach cleaning in the tourist season. But in the longer term, the challenge is how to increase the effectiveness of waste management systems. How can hotels

reduce plastic in their operations? How can companies that host tourists better improve their [plastic waste](#) management?" Professor McIlgorm said.

"Plastic waste leakage contaminates beaches and marine ecosystems and creates economic losses in local economies. Globally, only ten percent of total plastic waste is recycled and 14 percent is burned. The rest is either buried or remains unmanaged, which is how it can so easily enter waterways and the ocean."

While the research is specific to the coast of East Africa, Professor McIlgorm said there are lessons that can be applied globally about the cost of marine plastic pollution to a town or country's economy, and the need to find ways to address this urgent global problem.

"One of the main problems in Tanzania and Zanzibar, and in many other parts of the developing world, is dealing with plastic before it enters the ocean. The Tanzania government introduced legislation banning the sale of single-use plastic bags in 2019 and this is reducing plastic waste volumes," Professor McIlgorm said.

"However, dealing with all plastic waste through improved solid waste management in Dar es Salaam, one of the fastest growing cities in Africa, will take significant efforts. This is an area where government, industry and NGOs can cooperate by encouraging extended producer responsibility.

"Throughout the world, marine plastic pollution imposes significant costs on economies and the environment, but these costs are avoidable. Preventing these costs can restore economic benefits, particularly for areas that rely heavily on tourism, and also go a long way towards restoring the health of our precious ocean."

UOW Deputy Vice-Chancellor and Vice-President (Research and Sustainable Futures) Professor David Currow said this research reflected the University's commitment to sustaining coastal and marine environments for generations to come.

"Congratulations to Professor McIlgorm and to World Bank PROBLUE on this important study, which captures the impact that marine plastic pollution has upon nations that rely on tourism for the livelihood of their citizens and their economy," Professor Currow said.

"Marine [plastic pollution](#) is an absolute scourge on our environment, and combating this is fundamental to creating healthy, sustainable oceans for our future."

Provided by University of Wollongong

Citation: Report: How marine plastic pollution impacts countries that rely on tourism (2023, May 2) retrieved 11 May 2024 from <https://phys.org/news/2023-05-marine-plastic-pollution-impacts-countries.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.