

# GOAL 14: LIFE BELOW WATER



## CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

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**ABSTRACT:** Oceans cover 71% of our planet's surface. They support the livelihoods of hundreds of millions of people around the globe. 183 countries have coastlines and 37 per cent of the world's population live in coastal communities. The coasts and marine ecosystems have an own touristic value. Tourism development and the resulting influx of tourists affect the coasts not only ecologically, but also have effects on the social, cultural and economic fabric of coastal communities. Special attention needs to be paid to Small Island Developing States (SIDS) which often depend on both their coasts and tourism.

### INTRODUCTION

Oceans are essential to all three pillars of sustainable development – economic development, social development, and environmental protection. They cover 71 percent of our planet's surface and make up 95 percent of all the space available to life. They support the livelihoods of hundreds of millions of people around the globe.

While the World Tourism Organization (UNWTO) stresses that tourism “has the potential to contribute, directly or indirectly” to all of the SDGs, they only cherry pick a few of them, including oceans: “Tourism development must be a part of integrated Coastal Zone Management in order to help conserve and preserve fragile ecosystems and serve as a vehicle to promote the blue economy, in line with target 14.7: “By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.”

However, UNWTO's “trickle down” approach is not adequate to deal with the range of impacts tourism has on coastal areas and the oceans, through climate change, pollution and man-made destruction. Oceans and coasts are at the heart of tourism, eighty percent of all tourism takes place in coastal areas. The sector therefore has a special responsibility to safeguard both high seas and coastal areas.

## The High Seas

The high seas are the 64 percent of the oceans lying beyond coastal waters. They are international waters, for which regulations exist, which are hardly enforced. Tourism plays a role in a number of threats the high seas face.

The atmosphere affects oceans, and vice versa. Air temperature rises, oceans absorb the heat and warm up. This higher temperature makes water expand and ice caps melt, with higher sea levels and more tropical storms as a result. Oceans also regulate the climate by absorbing CO<sub>2</sub>, which, by lowering the pH, causes acidification and de-oxygenation. Thus the oceans slowly suffocate, which is a threat to marine wildlife and all other life on the planet, since the oceans generate half of the oxygen on earth.

Tourism contributes to climate change through greenhouse gas emissions produced by aviation (>> Goal 13) and cruise ships. These huge cruise ships, with up to 4,000 passengers plus crew (and sometimes even more), are also a major source of marine pollution.

### Cruise Tourism

Cruises are a fast growing sector, from 20 to 23 million passengers between 2010 and 2016. Although some initiatives in the right direction are being taken, the business case of a cruise depends on a number of unsustainable practices. Cheap and dirty bunker fuels not only produce hazardous diesel particles, they create a carbon footprint for a cruise which is two to seven times larger than that of a long-haul flight (and often passengers will take a plane to join a cruise). A cruise generates large amounts of garbage, sewage, and oil-contaminated water. Ballast water, containing pathogens and invasive species, is dumped in fragile ecosystems. When garbage is taken into the port, it is often dumped in areas that lack storage or processing facilities. Cruise workers suffer from poor and exploitative working conditions. Benefits for the people in the harbour areas are minimal. Local communities are overrun and resources strained by thousands of passengers during a very short period.

Tourism Concern [www.tourismconcern.org.uk/?s=cruise](http://www.tourismconcern.org.uk/?s=cruise)

## Coastal Areas

183 countries have coastlines, 37 per cent of the world's population live in coastal communities and most of the commodities extracted from the ocean come from coastal regions. The coasts are not only where the sea meets the land, but also where water from the land enters the ocean. The beaches, estuaries, dune systems, mangroves, marshes, lagoons, swamps, reefs, etc. are two-way streets, all with their own value – ecologically, socially and economically. Tourism impacts coastal areas in several ways.

Rising sea levels and stronger storms have irreversible effects on the sensitive coastal ecosystems and major implications for their social and economic fabric. Climate change causes loss of protective ecosystems like coastal wetlands that protect shores from flooding. Thus touristic coasts becoming dangerous areas, as the 2004 Tsunami showed.

Higher sea levels will also mean less space for tourists at the beach. This however is only the least of the problems. Stronger storms and higher sea levels increase the rate of coastal erosion and threaten all lower lying land. Not only touristic beaches and marine ecosystems are being destroyed, but entire cities come under threat (Barcelona, New York City, Venice), which will also lead to a loss of tourist attractions.

Special attention needs to be paid to Small Island Developing States (SIDS) which often depend on both their coasts and tourism. The number of international tourists visiting SIDS destinations has increased significantly and reached more than 43 million in 2015. Tourism accounts for over 40 percent of the export value in half the SIDS.

## MAJOR CHALLENGES

Eighty percent of marine pollution comes from land through sewage drains and rivers, dumping of toxic chemicals like fertilizers (causing eutrophication and algal bloom that destroy marine life) and dumping of garbage like plastic bags, glass bottles, or packaging material. Tourists and tourism businesses generate a lot of this waste which not only comes back to shore, polluting beaches, but also finds its way into our food chain.

### **Destruction of coastal areas by development of tourism infrastructure**

The development of coastal tourism infrastructure threatens vulnerable marine ecosystems. There are numerous examples of mangroves, corals, marshes and sea grass meadows having been removed for the construction of hotels or to create open beaches, piers, and other structures. After tourism facilities have been built as close as possible to the water, they then need artificial coastal protection like dykes and dams which disrupt the natural coastal dynamics and threaten ecosystems like mangroves and marshes.

### **Effects of activities and behaviour of tourists**

After the construction of tourism infrastructure the tourists arrive, who bathe, dive, snorkel, fish, boat and collect marine souvenirs, with an impact on coastal areas, especially when these activities lead to overconsumption and overfishing. The scarcity of clean drinking water, the lack of water purification systems and the relatively high consumption of water at tourism facilities (not only hotels, but also golf courses etc.) are especially problematic in delicate, fragile coastal ecosystems.

### **Impacts on coastal communities**

Tourism development and the resulting influx of tourists affect the coasts not only ecologically, but also have effects on the social, cultural and economic fabric of coastal communities. Through conversion of land use and destruction of ecosystems, habitats are lost for people, flora and fauna. Traditional activities of harvesting food and other resources from the shoreline and the sea become impossible. Local communities are often denied access to their (communal) lands, to their beaches, or in the worst case they are evicted.

Tourism resorts and hotels put a tremendous strain on land, local resources and infrastructure. Land grabbing (in this case of coastal lands also known as ocean grabbing) is a serious human rights violation as it excludes communities from the coast near their fishing grounds and therefore puts in jeopardy their livelihoods and survival. Concentrated in rather confined areas, the impact of a massive influx of tourists badly affects the lives

of local people, not only in small coastal villages, but also in big coastal cities like Venice and Barcelona (>> Goal 11). Although the authenticity of these communities often is their core capital, tourism can leave them impoverished and their culture, environment and livelihoods endangered. One particular concern is the rise of prostitution (and invariably, sexual exploitation of children >> Goal 16c) around cruise ports.

These effects combined can lead to serious violations of human rights, such as the right to territory, education, health services, and food security, and also undermine the respective SDGs.

### Fisheries and Tourism

Tourism often uses the most attractive strips of coastline. Prices of land tend to go up and local inhabitants are encouraged (or forced) to sell their properties. This can reduce the space available for fishing and other traditional activities. Uncontrolled sports fishing can reduce the fish stocks essential for the livelihood of fisher folk. Although one would expect that tourism would increase the demand for local fish, the industry often relies on “imported” food to offer the quality tourists are assumed to expect, in large quantities and at the lowest price. Uncontrolled development of tourism can bring waste and noise, which may have negative impacts on water quality and fishing activities. With the arrival of significant numbers of tourists, local inhabitants may come under pressure to adjust their crafts to the expectations of visitors: fishing not as a way to earn a living, but to entertain tourists.

Adapted from the Farnet guide No. 9 Fisheries and Tourism – Creating benefits for the community

### Coral Reefs

More than half of the world’s reefs are suffering from man-made and natural damage, some of it directly and indirectly caused by tourism. Scuba diving and snorkelling can cause damage by breaking corals and by kicking up sediment. Recreational fishing and collecting shells, lobsters, conches and corals lead to over-exploitation.

In the construction of hotels, marinas, and airports, and in the building and restoration of (artificial) beaches, sedimentation results from dredging and infilling. Sedimentation reduces light levels and increases stress on corals leading to „bleaching“, suffocation and death. Hotels and marinas with cruise ships, motor boats and yachts cause pollution through disposal of solid waste (especially plastics) which contains toxic substances that harm corals. In marinas we find chemical waste from inappropriate disposal of oils, fuel, and paint residues. Hotels with (legal and illegal) sewage disposal and fertilizer runoff contribute to nutrient enrichment which favours algae at the expense of corals.

## TANGIBLE WAYS FORWARD

The World Bank and the United Nations have urged for action to be taken to reverse the negative trends regarding the oceans and coasts for more than 25 years, for example at the Earth Summit in Rio and its Agenda 21. Implementation is long overdue. Global strategies on emissions reductions are urgently needed, especially related to bunker fuels in international aviation and cruises.

When developing tourism, marine and coastal areas should be protected, left intact and managed as ecosystems. Construction close to the shore should be prohibited and no construction should happen without proper management of water, sewage and waste. Educating tourists and especially people doing water sports may contribute to reducing impacts on ecosystems.

Safeguarding the livelihood of coastal communities needs to be given priority over the interests of tourists and tourism businesses, with strategies for the sustainable use of marine resources, including for small-scale artisanal fisheries. Tourism should support food security and social equity. Meaningful linkages with coastal economic sectors such as agriculture, fisheries and services can significantly increase local value added.

Any tourism development must start with codetermination and the participation of local communities. Research and capacity building help to build on local knowledge and develop innovative solutions.

Subsidies for bunker fuels and the most damaging modes of transport and sources of energy must be abolished. Prices must reflect the real costs, including social and ecological costs.

Appropriate coordinating mechanisms for integrated policies and international cooperation and coordination need to be established or strengthened. Effective governance structures need to set goals with realistic and applicable criteria and monitoring. International cooperation can help guarantee sustainable development of the areas beyond national jurisdiction, including international waters, and needs to be enhanced.

### Ocean-grabbing in Sri Lanka

The National Fisheries Solidarity Movement of Sri Lanka, together with the Swiss Society for Threatened Peoples (GfbV), have been taking a strong stand against ocean-grabbing in Sri Lanka. Fisher folk are under threat since the arrival of new tourism projects. In the North and East of Sri Lanka, they are being denied access to the beaches which they have used for generations. Basic human rights are being violated, but since the military owns a lot of the tourism business and is involved in land and ocean grabbing for tourism projects, it is hard for local people to take action.

<http://oceangrabbing.ch/>



## Marine protected areas for sustainable use of land and sea in Brazil

Extractive Reserves in Brazil are among the types of sustainable use of protected areas defined by law in 2000, which established the National System of Conservation Units (SNUC). The reserves protect the livelihood and culture of traditional populations, ensuring sustainable use of natural resources on land and sea and the right to use the territory. Today, there are over 20 Marine Extractive Reserves which guarantee the exclusive access and use of the area, with fishing rights, agriculture and exploration of commercial activities like tourism. Traditional populations like fisher folk, indigenous people and descendants of slaves have the right to ask the government for the demarcation of their land, which will give them legal protection from land grabbing and the right to manage the use of coastal resources. Several Marine Extractive Reserves already promote community-based-tourism as a complementary income to fishing and other activities.

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