



SDG 14: Life Below Water

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

An Overview

Oceans cover three quarters of the Earth's surface and contain 97% of the Earth's water and contain nearly 200,000 identified species, but actual numbers may lie in the millions. Over 3 billion people depend on marine and coastal biodiversity for their livelihoods. Globally, the market value of marine and coastal resources and industries is around \$3 trillion per year, or about 5% of global GDP. They also absorb about 30% of carbon dioxide produced by humans, buffering the impacts of global warming. Oceans also serve as the world's largest source of protein, with more than 3 billion people depending on the oceans as their primary source of protein. Marine fisheries directly or indirectly employ over 200 million people.

Careful management of this essential global resource is therefore essential for a sustainable future, however there is continuous deterioration of our oceans. Open Ocean sites show current levels of acidity have increased by 26% since the start of the Industrial Revolution, and coastal eutrophication is expected to increase in 20% of large marine ecosystems by 2050. Subsidies for fishing are contributing to the rapid depletion of many fish species and are preventing efforts to save and restore global fisheries (SDG 2) and related jobs (SDG 8), causing ocean fisheries to generate US\$50 billion less per year than they could.

Marine protected areas need to be effectively managed and well-resourced and regulations need to be put in place to reduce overfishing, marine pollution and ocean acidification in order to protect the oceans on which life relies.

SDG 14 Keywords

This list is comprised of the Scopus queries generated by Elsevier in order to identify research that supports SDG 14, as part of the assessment undertaken by the global THE Impact League.

| Marine / ocean / sea / coast / mangrove and | | | | | | | |
|---|----------------------------------|---------------------------------|------------------------------|--|--|--|--|
| water cycle | biogeochemical cycle | oceanic circulation models | ice-ocean | | | | |
| eutrophication | coral bleaching | coastal management | coastal habitat | | | | |
| marine debris | ocean acidification | overfishing | sustainable yield | | | | |
| marine protected area | marine conservation | ecotourism | community based conservation | | | | |
| marine land slide | marine pollution | nutrient runoff | coastal ecotourism | | | | |
| destructive fishing | local fisheries | artisanal fishers | fisheries rights | | | | |
| species richness | traditional ecological knowledge | small Island development states | marine quota | | | | |
| marine economy | marine policy | | | | | | |

SDG 14 Targets & Indicators

Consider if your research could support a specific target in order to maximise impact.

| TARGETS | | INDICATORS | |
|---------|---|------------|--|
| 14.1 | By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution | 14.1.1 | Index of coastal eutrophication and floating plastic debris density |
| 14.2 | By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their | 14.2.1 | Proportion of national exclusive economic zones managed using ecosystem-based approaches |

| | resilience, and take action for their restoration in order to achieve healthy and productive oceans | | |
|-------|--|--------|---|
| 14.3. | Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels | 14.3.1 | Average marine acidity (pH) measured at agreed suite of representative sampling stations |
| 14.4 | By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics | 14.4.1 | Proportion of fish stocks within biologically sustainable levels |
| 14.5 | By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information | 14.5.1 | Coverage of protected areas in relation to marine areas |
| 14.6 | By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation | 14.6.1 | Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing |
| 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 | 14.7.1 | Sustainable fisheries as a percentage of GDP in small island developing States, least developed countries and all countries |
| 14.A | Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries | 14.A.1 | Proportion of total research budget allocated to research in the field of marine technology |
| 14.B | Provide access for small-scale artisanal fishers to marine resources and markets | 14.B.1 | Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries |
| 14.C | Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want | 14.C.1 | Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nation Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources |

Useful Links

FAO Fisheries and Aquaculture

- **UNEP Ecosystem Management**
- Convention on Biological Diversity
- **UN-OCEANS**
- UNESCO Intergovernmental Oceanographic Commission
- UNDP Water and Ocean governance
- Ocean Conference 2020
- UN Division for Ocean Affairs and Law of the Sea
- UNDP Oceans UNEP Oceans