

A Sustainable Development Goal for the Ocean and Coasts:

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We argue for a focused SDG on Ocean and Coasts to:

“Secure blue wealth by ensuring a healthy and productive marine environment with all basic provisioning, support, regulation, and cultural services. Provide equitable access to ocean resources, and ensure that neither pollution nor the harvesting and extraction of animate and inanimate resources impair the basic functions of the ecosystem. Facilitate the development of sustainable and resilient coastal communities. Harmonize national and regional maritime policies, and encourage cooperation in coastal and global marine spatial planning”.

Specific targets should include:

- 1) Ensure the basic life-sustaining and regulating functions of the ocean (oxygen production, key processes in the climate system and in the hydrological cycle).
- 2) Ensure a healthy and productive marine environment to sustain all provisioning and non-provisioning (i.e. supporting and regulating) services of ocean and coasts.
- 3) Use mitigation and adaptation strategies, innovation, and sustainable development to build resilient coastal communities by sharing benefits and responsibilities.
- 4) Engage in integrated, multi-level, transparent, and effective ocean governance.

Background:

The ocean hosts the world’s largest connected ecosystem that provides humans with essential life supporting functions and amenities. They regulate our climate and are expected to provide an increasing amount of energy, food, materials and recreational and cultural services to societies worldwide.

Accordingly, environmental sustainability for the ocean is of universal concern, calling for a corresponding global forum for the formulation of sustainable development targets supported by indices and ocean policies and the monitoring of their success. The development of and commitment to a focused *Sustainable Development Goal (SDG)* for the ocean and coasts could trigger greater international cooperation towards achieving good environmental status of the ocean and coasts, securing blue wealth, and providing equitable access to ocean resources and at the same time support the development of resilient coastal communities.

Today's situation with a multitude of piecemeal national and regional approaches and policies can neither effectively address the difficulties the environment and especially the ocean face in a coherent manner nor monitor global progress. The idea to shape the development of the post-2015 area by a set of SDGs is based on the recent UN Conference on Sustainable Development, where member states agreed to launch a process where such goals are defined. These goals are expected to be based on *Agenda 21* and the *Johannesburg Plan of Implementation* and to build on the Millennium Development Goals (MDGs). The ocean received significant attention in the 2013 Rio+20 declaration: "The Future We Want"¹ demonstrating the increased awareness of ocean issues in the global dialogue.

The establishment of a specific and focused *SDG Ocean and Coasts*, although legally non-binding, would be beneficial in giving a new impetus to international cooperation and negotiations required to protect the marine environment and promote the sustainable use of marine resources in a way that meet the needs of present and future generations. The implementation of an *SDG Ocean and Coasts* would encourage the development of new instruments that are binding under international law, the modification or extension of existing ones, and the monitoring of the implementation of, and compliance with, current and future international targets for all maritime zones, explicitly including the areas beyond national jurisdiction, i.e., the high seas and the ocean floor beyond the continental shelves.

Furthermore, the implementation of an *SDG Ocean and Coasts* would allow to integrate the economic, social and environmental dimension of sustainable development and therefore overcome deficits of sector specific goals or approaches. In contrast, the Millennium Development Goals devote little explicit attention to the ocean. They have also been criticized for putting only limited weight to the economic or ecological dimension of sustainable development and neglecting therefore the importance of sound natural resource management for poverty alleviation. On the contrary, existing management approaches for the fishery sector, for example, pay too little attention to the social dimension of natural resource management in terms of food supply, food security, or human welfare and social justice in general. Consequently, integrating the three dimensions of sustainability would be an essential element for understanding, developing, managing, and sustaining blue wealth and to simultaneously accomplish three of the Millennium Development Goals: 1 (Eradicate extreme poverty and hunger), 7 (Ensure environmental sustainability), and 8 (Develop a global partnership for development).

Certainly, the number of SDGs has to be limited because any extra SDG comes at the costs of lowering attention to the other goals. For that reason, the goals should not only be essential for sustainable development but also achievable. While many other global challenges and relevant areas can be addressed by a combination of specific approaches, the challenge to sustain blue wealth requires per definition a global framework within which local solutions can be effectively implemented. The global framework needs to include harmonization mechanisms to ensure that the sum of activities add up to a holistic approach. Most countries have parts of their economic and social development based on healthy and productive coasts and the ocean. For many countries, this blue wealth is already of crucial importance now and even more looking towards the future. Significant gains in terms of wealth and poverty alleviation can be expected from ocean sustainability

¹ The Future We Want: Outcome document adopted at Rio+20
<http://www.uncsd2012.org/content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf>

by protecting the marine biodiversity, securing equitable access to ocean resources while wisely managing their utilization, and the reduction of marine pollution.

To be effective, an *SDG Ocean and Coasts* must be specific with respect to goals, targets, indicators and instruments. Visbeck et al. (2014 under review) have suggested the following goal: *“Secure blue wealth by ensuring a healthy and productive marine environment with all basic provisioning, support, regulation, and cultural services. Provide equitable access to ocean resources, and ensure that neither pollution nor the harvesting and extraction of animate and inanimate resources impair the basic functions of the ecosystem. Facilitate the development of sustainable and resilient coastal communities. Harmonize national and regional maritime policies, and encourage cooperation in coastal and global marine spatial planning”*.

They also provide a list of overarching targets:

- 1) Ensure the basic life-sustaining and regulating functions of the ocean (oxygen production, key processes in the climate system and in the hydrological cycle).
- 2) Ensure a healthy and productive marine environment to sustain all provisioning and non-provisioning (i.e. supporting and regulating) services of ocean and coasts.
- 3) Use mitigation and adaptation strategies, innovation, and sustainable development to build resilient coastal communities by sharing benefits and responsibilities.
- 4) Engage in integrated, multi-level, transparent, and effective ocean governance.

This provides a rich context for research into marine sustainability: How to best balance wealth generation and protection of the environment? How to establish efficient government procedures and regimes? How to transform current practices and behaviors towards a more sustainable pattern? How to ensure equitable access to ocean resources for all? This comprehensive approach to environmental research involving researchers from the natural and social sciences and stakeholders are promoted by the newly developed research program “Future Earth: Research for Global Sustainability” (www.futureearth.info).

Each of these targets needs to be supported by several specific recommendations. A first step in this regard provides the recently proposed ocean health index by Halpern et al. (2012) which could provide the basis for developing more consistent, comprehensive and complete set of indicators which should be part of the overall SDG process (Griggs et al. 2013). However, advances in ocean governance to improve ocean sustainability need to be initiated, developed and implemented at the national and regional level.

The global connectivity of the ocean requires more international coordination for regional approaches to be effective when compared to addressing land-based challenges in the area of environmental protection and securing of eco-system services. There is a danger that the sustainable development of ocean and coast will be supported by a distributed set of targets and measure spanning several more generic SDG. Such an approach has not served the ocean and coastal regimes well in the past and there is little evidence or reassurance that this might be different in the future.

We therefore argue strongly for a comprehensive ocean and coast focused SDG. Addressing 70% of our planet’s surface and the largest connected ecosystems through a small number of non-comprehensive targets spread through several more generic SDG will not ensure universal cooperation on the largest global common of our planet: The ocean and its coasts.

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