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## **Oceans**

#### 1. Introduction

This brief is aimed at providing an overview of international commitments, implementation successes, remaining gaps, challenges and emerging issues in the area of oceans, with a view to facilitating constructive discussion around oceans and marine resources in the course of the preparation for UNCSD.

The 1982 United Nations Convention on the Law of the Sea (UNCLOS), also called "Constitution of the oceans", has 161 parties, including 135 coastal states, and sets out the legal framework within which all activities in the oceans and seas must be carried out. It established three institutions: the International Tribunal for the Law of the Sea, the International Seabed Authority and the Commission on the Limits of the Continental Shelf. The work under the auspices of the Law of the Sea and the Commission on Sustainable Development has become more closely linked in recognition of the importance of oceans and marine life in achieving sustainable development goals. In addition, several United Nations agencies such as the Food and Agriculture Organization of the United Nations (FAO), the International Oceanographic Commission (IOC) of the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the United Nations Environment Programme (UNEP) have undertaken work in order to promote sustainable ocean development and the protection of marine resources.

#### 2. Importance of oceans

Oceans, comprising 72% of the Earth's surface, constitute a major part of the planet that supports life, drives the climate and hydrological cycles and provides vital resources. As noted in the Johannesburg Plan of Implementation, oceans, seas, islands and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical for global food security and for sustainable economic prosperity and the well-being of many national economies, particularly in developing countries.<sup>1</sup>

In 2008, fish provided 3 billion people with at least 15 per cent of their animal protein. The same year, fish and aquatic plant sales amounted to \$106 billion, and the fisheries industry provided livelihoods for about 540 million people, or 8 per cent of the world's population. Apart from food and livelihood provision, oceans represent a natural resource with respect to the travel and tourism, mining, telecommunication and transportation

industries. In addition, some marine species have been analysed and tested for pharmaceutical use, among others in the area of cancer, HIV and malaria treatment. Oceans also play an important role in the global climate system by generating oxygen and absorbing about 30% of global  $\rm CO_2$  emissions. Due to their significant economic, social and environmental benefits, a focus on ensuring healthy and productive oceans is a vital component for achieving sustainable development.

#### 3. Implementation to date and remaining gaps

Though the importance of oceans for sustainable development is widely recognized by the international community and embodied in Agenda 21<sup>6</sup>, the Johannesburg Plan of Implementation and various decisions taken by the Commission on Sustainable Development, progress in implementing international decisions to further the sustainable development of the oceans has been slow. In addition to Agenda 21 and JPOI, ocean-related decisions, agreements, resolutions and initiatives to date include:

- (a) 1994: Barbados Programme of Action for the Sustainable Development of Small Island Developing States was adopted by the Global Conference on the Sustainable Development of Small Island Developing States, which explicitly identified coastal and marine resources as an area requiring urgent action. Its implementation was reaffirmed by the Mauritius Declaration and the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States in 2005.
- (b) 1995: United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks ("United Nations Fish Stocks Agreement") was established to ensure their long-term conservation and sustainable use while calling for more effective enforcement by flag States, port States and coastal States of the conservation and management measures adopted for such stocks. It currently has 78 States parties, including the European Union. The Agreement, by its articles 8 and 10, identified regional fisheries management organizations (RFMOs) and arrangements as the main mechanism for the adoption of conservation and

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<sup>&</sup>lt;sup>1</sup> JPOI, para 30.

<sup>&</sup>lt;sup>2</sup> Report of the Secretary-General on Oceans and the law of the sea, A/66/70/Add.1, p. 30

<sup>&</sup>lt;sup>3</sup> FAO, World Review of fisheries and aquaculture, 2010, pp. 6-7

<sup>&</sup>lt;sup>4</sup> Report of the Secretary-General on Protection of coral reefs for sustainable livelihoods and development, A/66/298, p. 9

<sup>&</sup>lt;sup>5</sup> Burke and others, Reefs at Risk Revisited, pp. 21-37

<sup>&</sup>lt;sup>6</sup> Chapter 17

management measures and set out an extensive list of functions to be performed by those organizations and arrangements.<sup>7</sup>

The advantage of RFMOs in comparison to international action is that they can deal with region-specific challenges with respect to the sustainable management of fishery resources in a particular region of international waters, or of highly migratory species. One example is the Indian Ocean Tuna Commission (IOTC) which is an intergovernmental organization mandated to manage tuna and tuna-like species in the Indian Ocean and adjacent seas. Its objective is to promote cooperation among its Members with a view to appropriate management, ensuring, through conservation and optimum utilisation of stocks and encouraging sustainable development of fisheries based on such stocks.

- (c) 1995: <u>Code of Conduct for Responsible Fisheries</u> ("Code of Conduct") was adopted as a voluntary instrument by the 28th session of the Conference of the Food and Agriculture Organisation of the United Nations (FAO), which established principles for responsible fishing and fisheries activities, taking into account relevant biological, technological, economic, social, environmental and commercial aspects, and promotes the contribution of fisheries to food security and food quality.
- (d) 2000: <u>United Nations Informal Consultative Process on Oceans and the Law of the Sea</u> (ICP) was established following a decision taken at the seventh session of the Commission on Sustainable Development to enhance the effectiveness of the annual review of developments relating to the United Nations Convention on the Law of the Sea undertaken by the General Assembly. It has since then improved coordination and cooperation among States.
- (e) 2003: <u>UN-Oceans</u><sup>8</sup> was created following a decision taken at the World Summit on Sustainable Development and building on previous inter-agency efforts on oceans. It is an interagency coordination mechanism on ocean and coastal issues aimed at promoting the coherence of United Nations system activities on oceans and coastal areas as well as supporting the integrated management of oceans at the international level.
- (f) 2004: Ad Hoc Open-ended Informal Working Group was established by the General Assembly to address gaps in the UN Convention on the Law of the Sea. It examines issues relating to the conservation and sustainable use of marine

- biological diversity beyond areas of national jurisdiction. In 2011, the Working Group recommended that a process be initiated by the General Assembly, with a view to ensuring that the legal framework for the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction effectively addresses issues by identifying gaps and ways forward, including through the implementation of existing instruments and the possible development of a multilateral agreement under UNCLOS.
- (g) 2004: International Convention for the Control and Management of Ships Ballast Water and Sediments was established, which is under the auspices of the International Maritime Organization (IMO) and aims to prevent, minimize and ultimately eliminate the transfer of harmful aquatic organisms and pathogens through the control and management of ships' ballast water and sediments.
- (h) 2005: The Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic Aspects (regular process), was established by the General Assembly following decision taken at the World Summit on Sustainable Development (WSSD) to strengthen the regular scientific assessment of the state of the marine environment in order to enhance the scientific basis for policymaking. In 2005, the General Assembly launched the start-up phase to the Regular Process, called the "assessment of assessments", which concluded in 2009. In 2008, the General Assembly established an Ad Hoc Working Group of the Whole to recommend a course of action for the Regular Process. At its sixty-fifth session in 2010, the General Assembly decided that the Regular Process would be an intergovernmental process and set up an initial programme of work.
- (i) 2006: Resolution 61/105 on sustainable fisheries was adopted calling upon all States, directly or through regional fisheries management organizations and arrangements, to apply widely, in accordance with international law and the Code of conduct, the precautionary approach and an ecosystem approach to the conservation, management and exploitation of fish stocks, including straddling fish stocks, highly migratory fish stocks and discrete high seas fish stocks.
- (j) 2009: Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing was approved by the FAO Conference at its thirty-sixth session<sup>9</sup>. It aims to prevent illegally caught fish from entering international markets through ports. Under the terms of the agreement, foreign vessels will provide advance notice and request permission for port entry, countries will

 $<sup>^{7}</sup>$  Report of the Secretary-General on Oceans and the law of the sea, A/66/70/Add.1

<sup>&</sup>lt;sup>8</sup> http://www.oceansatlas.org/www.un-oceans.org/Index.htm

<sup>&</sup>lt;sup>9</sup> through Resolution No 12/2009, under Article XIV, paragraph 1 of the FAO Constitution

conduct regular inspections in accordance with universal minimum standards, offending vessels will be denied use of port or certain port services and information sharing networks will be created. The Agreement was open for signature at FAO by all States and regional economic integration organizations until November 2010 and was subject to ratification, acceptance or approval by the signatories. Now, the Agreement is open for accession by any State or regional economic integration organization.

- (k) 2011: Resolution 65/150, entitled "Protection of coral reefs for sustainable livelihoods and development" was adopted by the General Assembly recognizing the importance of coral reefs and urging States to take all practical steps at all levels to protect coral reefs and related ecosystems for sustainable livelihoods and development as well as to implement integrated and comprehensive approaches for the management of coral reefs and related ecosystems. 10
- (I) Marine protected areas (MPAs): The establishment of marine protected areas (MPAs), another decision taken at WSSD, is increasingly taking place, among others in connection with the protection of coral reefs. One successful example is the Bonaire National Marine Park (BNMP), which is located approximately 100 km north of Venezuela in the Caribbean and was created in 1979 with the goal "to protect and manage the island's natural, cultural and historical resources, while allowing ecologically sustainable use, for the benefit of future generations". Through the introduction of an admission fee for visitors, the management organization STINAPA was able to raise sufficient funds to cover management costs as well as coral reef protection and conservation measures. As a result, the Bonaire National Marine Park is financially self-sufficient. 11

In addition, key commitments with regard to the sustainable development and use of the oceans were agreed as part of the outcomes of the nineteenth special session of the General Assembly on the programme for the further implementation of Agenda 21, the 2000 Millennium Summit of the United Nations, the 2002 World Summit on Sustainable Development and the 2010 High-level Plenary Meeting of the General Assembly on the Millennium Development Goals. <sup>12</sup> Several conventions, as for example the Convention on Biological Diversity (CBD), mention oceans and their marine resources and even establish ocean-related targets. <sup>13</sup>

<sup>10</sup> See also: Report of the Secretary-General on Protection of coral reefs for sustainable livelihoods and development, A/66/298

<sup>12</sup> A/66/70/Add.1

Despite these efforts, the WSSD target to restore fish stocks to their maximum sustainable yields by 2015 is likely to be unmet as are other targets including the reversal of biodiversity loss in the oceans and the elimination of destructive fishing practices.

The Secretary-General report on oceans and law of the sea A/66/70/Add.1 identified gaps regarding the implementation of the legal and institutional framework for the sustainable development of oceans and seas as well as with regard to adequate and comprehensive knowledge and scientific research. The report was the focus at the twelfth meeting of the UN Openended Informal Consultative Process on Oceans and the Law of the Sea which took place in June 2011 in New York. Several delegations were of the view that, in achieving sustainable development, fragmentation of the law of the sea should be avoided. They recalled that activities in the oceans were governed by the law of the sea as reflected in the 1982 United Nations Convention on the Law of the Sea, the integrity of which should be preserved. As of May 2011 there were 162 state parties under the Convention. It was recalled that ratification of the Convention was a very significant action a State could take towards sustainable development. The need to harmonize the vision of the international community and develop synergies in order to promote the sustainable management of the oceans was emphasized.

Many delegations noted with concern the gap between the adoption of commitments and their implementation. They noted that many of the commitments made at the United Nations Conference on Environment and Development and subscribed in the Johannesburg Plan of Implementation and the Millennium Development Goals, especially relating to coastal developing States and small island developing States, had not been met. A number of delegations emphasized the need for greater efforts in the implementation of existing agreements and commitments, particularly at the national level, in order to advance the sustainable development agenda. 14

## 4. Challenges and emerging issues

Regardless of the significant economic, social and environmental benefits of oceans, there are countless challenges in preserving and maintaining them for future generations. Some of the problems plaguing the oceans are overfishing and destructive fishing, loss of biodiversity, including the serious decline and/or depletion of certain fish stocks (e.g. tuna, cod, haddock, flounder, halibut and red hake), ocean acidification (among others causing coral bleaching), ocean warming, coral reef destruction, watershed-based and marine-based pollution (runoff and debris), including accidental oil spills and radioactive water from nuclear accidents as well as invasive species from ballast water.

<sup>&</sup>lt;sup>11</sup> Ibid.

<sup>&</sup>lt;sup>13</sup> See also: Strategic Plan for Biodiversity 2011-2020 which aims, inter alia, to minimize the multiple threats to coral reefs, and other vulnerable ecosystems by 2015 (target 10).

<sup>&</sup>lt;sup>14</sup> Report on the work of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at its twelfth meeting, A/66/186

Studies have shown that since the beginning of the industrial revolution, oceans have become 30 per cent more acidic and predictions show that, by 2050, ocean acidity could even increase by 150 per cent. This would give marine ecosystems a very small period of time for adaptation, as it would represent a rate of increase that is 100 times faster than that of any ocean acidity change experienced over the last 20 million years.

Tropical coral reefs offer habitat to 25 per cent of all known marine species while constituting only less than one tenth of 1 per cent of the marine environment. About one fifth of the global coral reefs have already been damaged beyond repair and it is predicted that 90 per cent of coral reefs will be threatened by 2030 and all coral reefs will be threatened by 2050, if no protective measures are taken. <sup>15</sup> A recent study assessing the world's oceans, including the deep sea, highlighted the significant damage caused by pollution, resource exploitation and climate change.

According to the Secretary-General report on oceans and law of the sea A/66/70/Add.1, other challenges identified by member states include maritime delimitation, implementation and enforcement, capacity-building, integrated management of oceans and seas, environmental vulnerability of Small Island and Developing States (SIDS), vulnerable marine ecosystems and ecologically or biologically significant areas, and crimes at sea.

Important emerging issues identified include marine genetic resources, coral reefs management, marine debris, nutrient over-enrichment and eutrophication, geo-engineering, ocean noise, renewable energy and environmental data exchange.

At the twelfth meeting of the UN Open-ended Informal Consultative Process on Oceans and the Law of the Sea, several delegations noted that the challenges affecting sustainable development were interlinked and could not be addressed in isolation. Many delegations re-emphasized the environmental vulnerability and isolation of small island developing States, whose culture, livelihoods and economies were being threatened by unsustainable uses of marine resources and by climate change. <sup>16</sup>

Potential economic, social and environmental impacts of these challenges are enormous, which highlights the urgency of taking action to ensure the sustainable management and use of oceans and their marine resources.

## <sup>15</sup> Report of the Secretary-General on Protection of coral reefs for sustainable livelihoods and development, A/66/298

#### 5. Way forward

The approaching United Nations Conference on Sustainable Development, to be held in Brazil from 20 to 22 June 2012, will bring together government representatives, civil society, academia, the scientific community and the private sector to discuss sustainable development issues, including the sustainable management and protection of oceans and marine resources. It represents a unique opportunity to speed up implementation and to take action on ocean-related emerging issues. The Conference will coincide with the thirtieth anniversary of the adoption of UNCLOS.

At the twelfth meeting of the UN Open-ended Informal Consultative Process on Oceans and the Law of the Sea in 2011, several delegations expressed the view that, for the 2012 Conference on Sustainable Development to be a success, it should deliver a strong outcome for oceans, fisheries and biodiversity. Oceans and seas, in the light of their economic, social and environmental significance, should feature prominently in the discussions and outcome of the United Nations Conference on Sustainable Development in 2012. The need for setting realistic targets and goals that would be fully implemented was also pointed out.<sup>17</sup>

One of the Rio+20 conference themes is "a green economy in the context of sustainable development and poverty eradication". However, the development of this "green economy" will rely in part on the sustainable management and use of oceans and their resources. At the twelfth ICP meeting as well as at the second preparatory committee for Rio+20 held in March 2011, various member states emphasized the importance of sustainable management of oceans and the conservation of ocean resources while referring to a so-called "blue economy" approach, in line with Agenda 21. Many Small Island Developing States (SIDS) specifically called for Rio+20 to provide support for sustainable ocean development and protection of marine resources. Therefore, the topic of oceans is expected to figure prominently at the Conference. Furthermore, there will be several preparatory meetings covering the topic. 18

The Commission on Sustainable Development, which is tasked to support the achievement of sustainable development, including the preservation of the seas, oceans, islands and coastal areas, is furthermore scheduled to undertake a two year review of oceans, marine life and SIDS in 2015—2016.

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Report on the work of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at its twelfth meeting, A/66/186

<sup>&</sup>lt;sup>17</sup> Ibid.

<sup>&</sup>lt;sup>18</sup> e.g. "High Level Expert Meeting on the Sustainable Use of Oceans", 28-30 November 2011, Monaco