UNITED
NATIONS

EP

United Nations
Environment
Programme

UNEP (DEPI)/VW.1 /INF.7.

Original: ENGLISH

Regional Seas Visioning Workshop,
Geneva, Switzerland, 3-4 July 2014

# Regional Seas Visioning Ocean Goals

Oceans in the Post-2015 Agenda and Sustainable Development Goals

**Introduction**
The outcome document from the last Sustainable Development Conference held in Rio in 2012 (Rio+20), "The Future We Want" provides an unprecedented 20 paragraphs on member states commitments to reverses the degradation of oceans and seas including its living resources and ecosystems services. Since then the General Assembly through the establishment of the Open Working Group for Sustainable Development Goals (OWG) is developing the goals and targets for sustainable development for the next 10 years and the ocean is included in this process.

The OWG called on the assistance of UN Agencies in the form of Technical Support Teams (TST) in the development of various goals, and UNEP is participating in most of these TSTs, and in the Oceans TST UNEP is a co-lead with FAO and UNESCO-IOC. In support of the inclusion of oceans as either a stand alone goal or cutting across the other goals, the TST drafted a brief for the OWG which was subsequently shared with member states (Annex 1).

**The Ocean Goal**
Throughout the process to date there have been increasing calls for a stand alone oceans goal and associated targets which are currently subject to discussions to consolidate the targets. As recently as the week of 16 June 2014 most member states rejected the notion of combining the proposed ocean goal with other goals. The proposed goal is:

***14. Attain conservation and sustainable use of marine resources, oceans and seas***

**The Targets**
There are 11 targets within the current goal under discussion and there have been calls to reduce the number and where possible combine the targets and express others as indicators within a target. The targets are:

| Target | |
|---|---|
| 14.1 | by 2030, reduce by x% marine pollution of all kinds, including from land-based activities |
| 14.2 | by 2020, sustainably manage, restore and protect marine ecosystems from destruction, including by strengthening their resilience, and support relevant scientific research |
| 14.3 | address and prevent further ocean acidification |
| 14.4 | by 2020, effectively regulate harvesting and end overfishing to restore by 2030 fish stocks to ecologically safe levels that can produce maximum sustainable yield |
| 14.5 | support sustainable small-scale fisheries and aquaculture, including by providing equitable access of small-scale and artisanal fishers to fisheries and markets |
| 14.6 | ensure the full implementation of existing regional and international regimes for managing oceans and seas by their state parties |
| 14.7 | by 2020, eliminate illegal, unreported and unregulated (IUU) fishing and destructive fishing practices |
| 14.8 | By 2020, conserve at least 10% of coastal and marine areas, including through establishing effectively managed marine protected areas, consistent with international law and based on best available scientific information |
| 14.9 | by 2020, eliminate subsidies which contribute to overcapacity and overfishing, and refrain from introducing new such subsidies, taking into account the need of developing countries, notably least developed countries and SIDS |
| 14.10 | by 2030, increase the economic returns to SIDS and LDCs from the sustainable development of coastal and marine resources from within their jurisdictions |
| 14.11 | implement integrated and participatory coastal management to increase resilience of coastal ecosystems |

The TST was asked to recommend which targets were the most important, and the top 4 that were selected are shaded in the above table. In the most recent consultations of the OWG many member

states indicated that targets should include or make reference to: biodiversity, overfishing, seabed minerals and petroleum, and areas beyond national jurisdiction. Some countries did not want the targets to deal with the issue of subsidies which are being dealt with in the WTO.

Next Steps:
The co-chairs may ask the TST to review and revise the current recommended targets to address the above concerns for discussion and the upcoming General Assembly.

# Annex 1: TST Issues Brief: Oceans and Seas[1]

## 1. Stocktaking

Oceans, seas and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical to sustainable development. The oceans cover more than two-thirds of the earth's surface and contain 97% of the planet's water.[2] In "The Future We Want", Member States stressed the importance of "the conservation and sustainable use of the oceans and seas and of their resources for sustainable development, including through their contributions to poverty eradication, sustained economic growth, food security and creation of sustainable livelihoods and decent work, while at the same time protecting biodiversity and the marine environment and addressing the impacts of climate change".[3] This statement refers to the strong linkages between the oceans and other priority areas currently under consideration while developing the future sustainable development agenda. Member States have consistently recognized in the General Assembly resolutions on oceans and the law of the sea the important contribution of the sustainable development and management of the oceans and seas to the achievement of international development goals, including those contained in the United Nations Millennium Declaration.[4]

Oceans contribute to poverty eradication by creating sustainable livelihoods and decent work in fisheries and marine aquaculture, shipping and shipbuilding, ports, tourism, oil, gas, mining, and maritime transportation industries. At least 90 % of the volume of global trade is seaborne.[5] Over three billion people depend on marine and coastal resources for their livelihoods.[6] Women represent the majority in secondary activities related to marine fisheries and marine aquaculture, such as fish processing and marketing. In many places, employment opportunities have enabled young people to stay in their communities and have strengthened the economic viability of isolated areas, often enhancing the status of women in developing countries.[7] Coastal tourism and recreation contribute to economic growth in both developing and developed countries by creating job opportunities and providing an important source of income and foreign exchange earnings. Approximately half of all international tourists travel to coastal areas. In some developing countries, notably Small Island Developing States (SIDS), tourism can account for over 25% of GDP.[8] Oceans also hold considerable potential to provide economic growth and jobs in emerging sectors such as offshore renewable energy[9] as alternative to carbon-based energy, as well as in transitioning to more sustainable shipping, fishing and marine aquaculture operations.

Oceans are crucial for global food security and human health. They provide food and nutrition, directly through fishing and marine aquaculture, and indirectly through animal feeds. As a valuable source of nutrition globally, fish provide 4.3 billion people with about 15 per cent of their intake of animal protein.[10] The protein and trace elements present in animal feeds and derived from aquatic sources make intensive food production systems possible. With one in eight people in the world today being undernourished and approximately two billion suffering from micronutrient deficiencies[11], combined with the anticipated growth in the world population to 9.6 billion people by 2050[12], responsible and sustainable fisheries and marine aquaculture have an essential role to play in ensuring food security and nutrition for all. Fish also contain important trace elements that are critical for brain development and growth in children. The potential value of marine biotechnology is considered high, but has yet to be estimated accurately.[13]

[1] The Technical Support Team (TST) is co-chaired by the Department of Economic and Social Affairs and the United Nations Development Programme. Preparation of this issues brief has been co-led by DESA, ESCAP, FAO, UNDP, UNEP, UNESCO-IOC, World Bank, with contributions from CBD Secretariat, IAEA, ILO, IMO, OLA/DOALOS, OSAA, UNOOSA, UN Women, WMO and WTO. [2] UNDP (2012): *Catalyzing ocean finance – Volume 1*. [3] A/RES/66/288 (2012): *The Future We Want – Outcome Document of the Rio+20 Conference*. [4] See for example General Assembly resolutions 63/111, 64/71, 65/37 A, 66/231 and 67/78. [5] IMO (2012): *International Shipping Facts and Figures: Information Resources on Trade, Safety, Security, Environment*. [6] Secretariat of the Convention on Biological Diversity (2012): *Booklet: Biodiversity for Development and Poverty Alleviation*. [7] FAO (2012): *The State of World Fisheries and Aquaculture*. [8] UNWTO, Secretariat of Ramsar Convention on Wetlands (2012): *Destination Wet Lands: Supporting Sustainable Tourism.*

[9] Mechanical energy from tides, wind and waves; thermal energy. [10] FAO (2012): *The State of World Fisheries and Aquaculture*. [11] FAO (2012): *The State of Food Insecurity in the World*. [12] UNDESA (2012): *World Population Prospects: the 2012 Revision*. [13] Millennium Ecosystem Assessment Series (2005): *Ecosystems and Human Well-Being*: *Current state and trends*.

Oceans are the primary regulator of the global climate and an important sink for greenhouse gases. They provide us with water and the oxygen we breathe. Oceans have a role in climate change mitigation as they capture and store about 30% of carbon dioxide produced by humans.[14] They absorb a majority of the sun's radiation and their surface currents redistribute heat around the world, thus enabling humans to live on this planet. Marine phytoplankton produces 50% of the oxygen on Earth.[15] The majority of rain that falls on land originates in the oceans, giving us water for drinking, hygiene and sanitation, agriculture and industrial development.[16] In the future, desalinated seawater could become an important source of freshwater.

The manifold employment opportunities, as well as ecosystem services, including cultural services, provided by the oceans, create the conditions for a global oceans-based economy, which is estimated at between USD 3-6 trillion/year.[17]

Yet, there are increasing, complex challenges in preserving and maintaining healthy, resilient and productive oceans for the prosperity of present and future generations. Coastal regions and SIDS are particularly vulnerable to these challenges as the oceans play a central role in their culture, while at the same time being tightly linked to their economies. Main threats to the oceans can be divided into five broad categories:

1. Unsustainable extraction of marine resources, which includes overfishing, illegal, unreported and unregulated (IUU) fishing and destructive fishing practices as well as the usage of harmful subsidies that contribute to IUU fishing and overcapacity. Already today, 30% of the world's fish stocks are over exploited, while more than half are fully exploited.[18] Inappropriate deployment and deployment in the wrong areas of fishing gear can result in mortalities of endangered, threatened and protected species, including marine mammals (e.g. dolphins), sea turtles and birds, as well as in the damaging of critical and vulnerable marine habitats. Abandoned, lost and otherwise discarded fishing gear (ALDFG) also capture and kill through a process of ghost fishing, contribute to degradation of fishing grounds and habitats, and represent a threat to navigation and safety of life at sea. Unsustainable extraction of marine living resources, including by-catch, is an important threat to the food chain in the oceans and to global food security, health and sustainable livelihoods. The unsustainable extraction of marine non-living resources[1] (e.g. deep sea mining; offshore oil and gas drilling) is also cause for concern.

Marine pollution, which originates from a number of marine and land-based sources, including riverine discharges, agricultural and industrial run-off, urban outfalls, municipal or industrial wastewater, atmospheric deposition, illegal or indiscriminate dumping, accidents (e.g. oil spills), fishing operations, maritime transport and off-shore construction. Marine pollution occurs in the form of heavy metals, persistent organic pollutants (POPs), pesticides, nutrients (nitrogen and phosphorus), plastics, oil, hazardous substances, radioactive materials, and anthropogenic underwater noise. More than 80% of marine pollution is derived from land-based sources. Coastal settlements are growing, with some of the largest urban agglomerations based in coastal areas. Agriculture, in particular excessive and inefficient use of nitrogen fertilizers, can create low oxygen "hypoxic" conditions, harmful algal blooms and dead zones (over 500 globally).[19] At the same time, ocean-based sources such as ALDFG occur mostly in and around fishing grounds and become a hazard to marine life and navigation. Globally, an average of 13,000 pieces of plastic litter are estimated to be afloat on every square kilometer of ocean[20], with a potential to kill sea birds, sea mammals and fish each year, many of which are endangered, threatened or protected under national and international law.[21]

1 Alien invasive species, which have been transported into areas where they do not occur naturally (e.g. jellyfish), for example in ship ballast water or by attaching to exterior hulls, as 'hitch-hikers' clinging to scuba gear or packaging, carried by other organisms and via the aquarium industry. In favorable conditions, they may outcompete local marine species, in most cases threatening complex food webs and/or fouling marine infrastructure with negative impacts on marine ecology, local economies, food security and human health.

[14] UNEP (2009): *The Natural Fix?: The Role of Ecosystems in Climate Mitigation*. [15] IOC/UNESCO, IMO, FAO, UNDP (2011): *A Blueprint for Ocean and Coastal Sustainability*. [16] UNEP (2009): *The Natural Fix?: The Role of Ecosystems in Climate Mitigation*. [17] IOC/UNESCO, IMO, FAO, UNDP (2011): *A Blueprint for Ocean and Coastal Sustainability*. [18] FAO (2012): *The State of World Fisheries and Aquaculture*. [19] Secretariat of the Convention on Biological Diversity (2010): *Global Biodiversity Outlook 3*. [20] FAO, UNEP (2009): *Abandoned, lost or otherwise discarded fishing gear*. [21] UNEP (2006): *Ecosystems and Biodiversity in Deep Waters and High Seas*.

4. Ocean acidification and climate change impacts, which are caused by increasing atmospheric greenhouse gas concentrations. Negative effects of climate change include increased frequency and intensity of weather and climate extremes[22], ocean warming, sea-level rise, as well as changes in ocean circulation and salinity. They hamper the life-sustaining and regulating functions of the oceans, threaten marine biodiversity and negatively affect the sustainable development of coastal communities. Ocean acidification has increased by 26% since the beginning of the industrial revolution[23] and may have potentially devastating impacts on marine ecosystems, including loss of shellfish, coral reefs and calcareous plankton, the base of much of the marine food chain. SIDS and coastal regions are particularly affected by sea-level rise, coastal flooding and erosion, and extreme events (e.g. tsunamis and storm surges) due to undermined natural protective barriers, low levels of development combined with rapid population growth in low lying coastal areas and inadequate capacity to adapt. Sea-level is expected to continue to rise due to a combination of thermal expansion of seawater, melting of glaciers and other snow/ice, and continued increases in groundwater extraction. These challenges require enhanced (gender-sensitive) vulnerability and impact assessments, mitigation and adaptation plans, resilience building and disaster risk reduction strategies. Significant progress has been made in the establishment of observation and early warning systems at the national and regional levels, which have, together with improved effective emergency preparedness and response planning, resulted in a significant reduction of lives being lost. However, not all coastlines are yet covered. Space technology and its applications, including climate products and services at the regional and sub-regional scale, can play an important complementary role.

5. Physical alteration and destruction of marine habitat, which are caused by unsustainable coastal area development (e.g. direct construction on reef platforms), submarine infrastructure (e.g. submarine cables), unsustainable tourism, fishing operations in fragile or vulnerable marine areas (e.g. seagrass beds, coral reefs) and physical damage from ship groundings and anchors. Major marine ecosystems have been degraded or are being used unsustainably.[24] An estimated 20% of global mangroves have been lost, 19% of coral reefs have disappeared, and 29% of sea grass habitat has vanished.[25]

Oceans host huge reservoirs of biodiversity. They are characterized by a number of complex ecosystems such as mangroves, coral reefs and wetlands, pelagic waters, seamounts, submarine ridges and the seafloor itself, which host marine life and form marine habitats. At Rio+20 Member States recognized the importance of the conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction. Under the MDG framework the oceans-related target 7.B of MDG7, which aimed to reduce the rate of biodiversity loss by 2010, has not been met. While progress has been made to develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks and time/area closures for the protection of nursery grounds and periods, further efforts will be required to reach Aichi target 11 that, by 2020, 10 per cent of coastal and marine areas are conserved. The achievement of Aichi targets 6 and 10 will also play an important role in reversing the alarming trend of biodiversity loss and overfishing.

Considerable progress has been made toward the oceans-related targets and goals set out in Agenda 21 and the Johannesburg Plan of Implementation (JPOI), particularly by enhancing scientific understanding and monitoring, and strengthening legal and policy frameworks, institutions and cooperation mechanisms. Nevertheless, further work is required building on previously made commitments. In this regard, it is recalled that United Nations Convention on the Law of the Sea (UNCLOS) lays down a comprehensive regime of law and order establishing rules governing all uses of the oceans and their resources. It enshrines the notion that all problems of ocean space are closely interrelated and need to be addressed as a whole, while at the same time providing the framework for further development of specific areas of the