PROG
Partnership for Regional Ocean Governance

# PARTNERING FOR A SUSTAINABLE OCEAN

## The Role of Regional Ocean Governance in Implementing Sustainable Development Goal 14

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# Preface: The Ocean we want, the governance we need

The 2030 Agenda for Sustainable Development, adopted at the United Nations (UN) Sustainable Development summit in September 2015, was defined by the UN Secretary-General as an "Agenda for people". Its key component, the Sustainable Development Goals (SDGs), derived from an intergovernmental process are considered by some as the most democratic and inclusive accomplishment in the history of the UN.

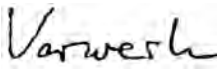
It is no surprise that a stand-alone SDG – SDG14 – is dedicated to the oceans and their conservation and sustainable use. The oceans cover two thirds of the planet, provide food for billions of people, play a key role in climate regulation, host a large portion of biological diversity and enable vital economic activities. The 2030 Agenda therefore puts a healthy ocean at the core of the global sustainable development agenda and sets targets for tackling some of the most pressing issues facing the ocean, including overexploitation of natural resources, climate change and pollution.

Adopting the SDGs was only the first step. Now States need to put the goals into action at national level and present their action plans at global level for review. The interconnectedness of all SDGs requires the adoption of new integrated ways of cooperation across SDGs and countries to make use of the vast potential of marine resources for food security, the reduction of poverty and better livelihoods. This is a particular challenge, but also an opportunity, for the implementation of the ocean-related SDGs. Therefore strengthened ocean action and governance that works across all sectors and jurisdictions will be a key issue for the United Nations Ocean Conference to be held in New York from 5 to 9 June 2017.

This report *Partnering for a Sustainable Ocean – The Role of Regional Ocean Governance in Implementing SDG14* is particularly timely, highlighting that the transboundary nature of the marine environment requires collective actions that can be initiated and supported by regional organisations. Effective regional cooperation for the conservation and sustainable use of the ocean is not only a cornerstone of ecosystem-based management, but the basis for intergovernmental organisations, states, research institutions, civil society and the private sector to collaborate from different angles and take into account the diverse interests of fisheries, nature conservation, tourism and the requirements for capacity development.

By launching this report at the UN Ocean Conference we hope to encourage partners to support implementation processes in different marine regions and to provide recommendations for next steps in strengthening ocean governance for sustainability.

This report highlights the opportunities of effective regional cooperation but also the perils of continued delay to take action. In line with this report, we are convinced that improving regional ocean governance is a key lever for successful implementation of SDG14 and we invite all interested stakeholders to further support efforts for regional ocean governance, including through the establishment of new partnerships and spaces for exchange.



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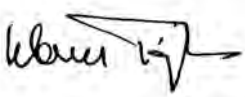

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# Contents

# Abbreviations

| | |
|---|---|
| **ABNJ** | Areas Beyond National Jurisdiction |
| **AIMS** | Africa Integrated Maritime Strategy |
| **AMCEN** | African Ministerial Conference on Environment |
| **AOSIS** | Alliance of Small Island States |
| **APEC** | Asia-Pacific Economic Cooperation |
| **ASEAN** | Association of Southeast Asian Nations |
| **AWGCME** | ASEAN Working Group on Coastal and Marine Environment |
| **AU** | African Union |
| **BCC** | Benguela Current Commission |
| **CARICOM** | Caribbean Community |
| **CBD** | Convention on Biological Diversity |
| **CBI** | Climate Bonds Initiative |
| **CD** | Capacity Development |
| **CFP** | Common Fisheries Policy |
| **COFI** | FAO Commitee on Fisheries |
| **COP** | Conference of Parties |
| **CReW** | Caribbean Regional Fund for Wastewater Management |
| **CRFM** | Caribbean Regional Fisheries Mechanism |
| **CTI-CFF** | Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security |
| **EAF** | Ecosystem Approach to Fisheries |
| **EBM** | Ecosystem-Based Management |
| **EBSA** | Ecologically or Biologically Significant Marine Area |
| **EEZ** | Exclusive Economic Zone |
| **EMFF** | European Fund for Maritime Affairs and Fisheries |
| **EU** | European Union |
| **EUSBSR** | European Union Strategy for the Baltic Sea Region |
| **FAO** | United Nations Food and Agriculture Organization |
| **GCC** | Guinea Current Commission |
| **GCF** | Green Climate Fund |
| **GEF** | Global Environment Facility |
| **GFCM** | General Fisheries Commission for the Mediterranean |
| **GPA** | Global Programme of Action for the Protection of the Marine Environment from Land-based Activities |
| **IATTC** | Inter-American Tropical Tuna Commission |
| **ICCAT** | International Commission for the Conservation of Atlantic Tunas |
| **ICES** | International Council for the Exploration of the Seas |
| **ICZM** | Integrated Coastal Zone Management |
| **IDB** | Inter-American Development Bank |
| **IMP** | Integrated Maritime Policy |
| **INTERPOL** | International Criminal Police Organization |
| **IOC** | Indian Ocean Commission |
| **IOTC** | Indian Ocean Tuna Commission |
| **IPOA-Capacity** | International Plan of Action for the Management of Fishing Capacity |

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|---|---|
| **IPOA-IUU** | International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing |
| **IUCN** | International Union for the Conservation of Nature |
| **IUU** | Illegal, unreported and unregulated (fisheries) |
| **LBSA** | Land-Based Sources and Activities |
| **LDC** | Least Developed Country |
| **LME** | Large Marine Ecosystem |
| **MAP** | Mediterranean Action Plan |
| **MC** | Micronesia Challenge |
| **MCS** | Monitoring, Control, and Surveillance |
| **MoU** | Memorandum of Understanding |
| **MPA** | Marine Protected Area |
| **MSC** | Marine Stewardship Council |
| **MSFD** | Marine Strategy Framework Directive |
| **MSP** | Marine or Maritime Spatial Planning |
| **MSR** | Marine Scientific Research |
| **MSY** | Maximum Sustainable Yield |
| **NEAFC** | North-East Atlantic Fisheries Commission |
| **NEPAD** | New Partnership for Africa's Development |
| **NGO** | Non-Governmental Organisation |
| **NOAA** | United States National Oceanic and Atmospheric Administration |
| **ODA** | Official Development Assistance |
| **PIMPAC** | Pacific Islands Managed and Protected Area Community |
| **PSSA** | Particularly Significant Sea Area |
| **REC** | Regional Economic Community |
| **RFB** | Regional Fisheries Body |
| **RFLP** | Regional Fisheries Livelihoods Programme |
| **RFMOs/As** | Regional Fisheries Management Organisations / Arrangements |
| **ROG** | Regional Ocean Governance |
| **RSP** | Regional Seas Programme |
| **SADC** | South African Development Community |
| **SAMOA** | SIDS Accelerated Modalities of Action |
| **SAP** | Strategic Action Plan |
| **SDG** | Sustainable Development Goal |
| **SEAFDEC** | Southeast Asian Fisheries Development Center |
| **SEAFO** | South East Atlantic Fisheries Organisation |
| **SIDS** | Small Island Developing States |
| **SIF** | Stop Illegal Fishing |
| **SPREP** | Secretariat of the Pacific Regional Environment Programme |
| **SPRFMO** | South Pacific Regional Fisheries Management Organisation |
| **SSC** | Sargasso Sea Commission |
| **TDA** | Transboundary Diagnostic Analysis |
| **UN** | United Nations |

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|---|---|
| **UN-OHRLLS** | United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States |
| **UNCLOS** | United Nations Convention on the Law of the Sea |
| **UNCTAD** | United Nations Conference on Trade and Development |
| **UNEP** | United Nations Environment Programme |
| **UNEP CAR-RCU** | United Nations Environment Programme Caribbean Environment Programme-Regional Coordination Unit |
| **UNESCO** | United Nations Educational, Scientific and Cultural Organization |
| **IOC-UNESCO** | Intergovernmental Oceanographic Commission of UNESCO |
| **UNFCCC** | United Nations Framework Convention on Climate Change |
| **UNFSA** | United Nations Fish Stocks Agreement |
| **UNGA** | United Nations General Assembly |
| **UNODC** | United Nations Office on Drugs and Crime |
| **VASAB** | Vision and Strategies around the Baltic Sea |
| **VME** | Vulnerable Marine Ecosystem |
| **VMS** | Vessel Monitoring System |
| **WCPFC** | Western and Central Pacific Fisheries Commission |
| **WCR** | Wider Caribbean Region |
| **WCS** | Wildlife Conservation Society |
| **WECAFC** | Western Central Atlantic Fisheries Commission |
| **WIO** | Western Indian Ocean |
| **WIO-C** | Consortium for the Conservation of Coastal and Marine Ecosystems in the Western Indian Ocean |
| **WIO-CC** | Western Indian Ocean Coastal Challenge |
| **WIOMSA** | Western Indian Ocean Marine Science Association |
| **WHO** | World Health Organization |
| **WSSD** | World Summit on Sustainable Development |
| **WTO** | World Trade Organization |
| **WWF** | World Wildlife Fund |

# Executive Summary

The ocean and coasts are fundamental for our collective wellbeing, providing essential ecosystem services, a vital food source, and many opportunities for sustainable economic growth. The ocean is also the foundation of international trade and many cultural and recreational activities. Yet, increased human activities in the ocean and around our coasts, combined with climate change and ocean acidification, are having a major impact on the health of marine ecosystems.

In September 2015, States adopted the 2030 Agenda for Sustainable Development (2030 Agenda), which provides a comprehensive framework for sustainability and sets ambitious global objectives. The ocean and coasts are the subject of a dedicated Sustainable Development Goal (SDG14), putting a healthy marine environment at the core of sustainable development and establishing targets for tackling some of the most pressing issues facing the ocean.

The implementation of the goals and targets of the 2030 Agenda is primarily the responsibility of UN Member States. However, the transboundary nature of marine resources and threats to the marine environment present unique challenges that cannot be effectively tackled by individual States working in isolation. Conservation and sustainable use of the ocean requires an integrated and coherent ecosystem-based approach that takes into consideration the interconnected nature of marine ecosystems and the cumulative impacts of human activities affecting them. This implies a responsibility for national governments to collaborate to achieve SDG14.

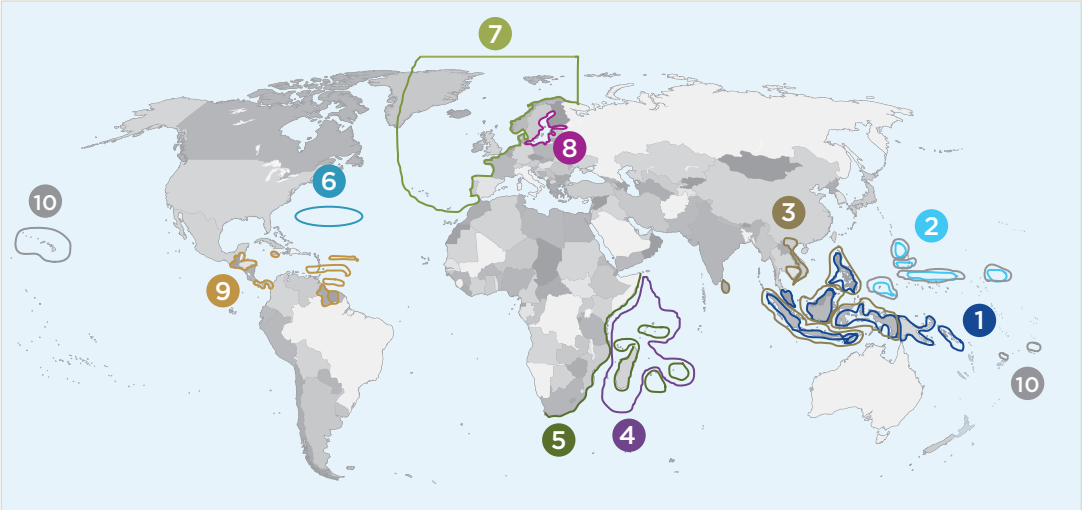
In this context, this report highlights the relevance of regional ocean governance (ROG) for the implementation of the 2030 Agenda, the achievement of SDG14, and the transition to ecosystem-based management more generally. The report assesses the roles and mandates of different regional approaches and frameworks, and showcases some pragmatic and practical examples of ROG efforts that may provide useful lessons for the implementation of SDG14. The report also highlights some of the key contributions that regional approaches can make to some of the overarching challenges of the 2030 Agenda, including capacity development, institutional transformation, and sustainable financing.

Efforts among countries to cooperate in managing their ocean, coasts, and marine resources vary widely in scope, mandate, and spatial extent. This diversity reflects the varied needs and priorities of different places, sectors, and marine ecosystems. Such efforts can take many forms, including: Regional Seas Conventions and Action Plans; Regional Fisheries Bodies; political and economic organisations that engage in ROG; leader-driven ROG initiatives; and Large Marine Ecosystem (LME) projects. Given this diversity, this report does not seek to restrictively define ROG, but instead focuses on good practice examples of multiple actors working across boundaries to advance the conservation and sustainable use of the marine environment.

In this report, two sets of case studies provide a detailed exploration of the contribution that regional approaches to ocean sustainability can make. Selected to highlight a variety of regions and a range of ROG types, eight of the case studies pertain to particular SDG14 targets, and five highlight the role that regional approaches can play in advancing integrated ocean governance overall. The case studies show that regional organisations have mandates covering most of the SDG14 targets and that they are already addressing a range of key issues, including marine pollution, sustainable management and production, fisheries, and conservation. At the same time, cross-cutting initiatives are starting to bring a new level of cooperation and coherence to a notoriously fragmented ocean governance system.

The case studies also confirm that regional approaches play a key role in the transition towards marine ecosystem-based management (EBM), in particular by:

- Allowing for the specific ecological, economic and social transboundary characteristics and challenges of marine regions to be properly addressed.
- Increasing the level of collective ambition and the diversity of solutions available.




1 Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security
2 Micronesia Challenge
3 The Regional Fisheries Livelihood Programme for South and Southeast Asia (RFLP)
4 Fish-I Africa
5 WIO Lab and WIO-C
6 Sargasso Sea Commission
7 Protected areas and cooperation in the North East Atlantic
8 European Union Strategy for the Baltic Sea Region
9 Caribbean Regional Fund for Wastewater Management
10 Pacific Islands Managed and Protected Area Community

**Figure 1: Map of case studies**

- Providing flexibility that can better ensure the participation of civil society stakeholders in adaptive decision-making processes.

- Allowing parties to cooperate by sharing expertise, developing joint processes, and coordinating and harmonising their governance efforts.

Nonetheless, ROG is continuously evolving and competent organisations and mechanisms face many challenges in working across national and sectoral boundaries. Many initiatives are unable to reach their full potential due to limited human and financial resources, which are often insufficient in relation to the ambitious goals and commitments set. At the same time, these regional efforts often take place against a backdrop of rapid economic and population growth that sees environmental concerns deprioritised, or political and institutional instability that can undermine efforts to collaborate and cooperate.

Some regions benefit from favourable enabling conditions that have allowed them to make impressive progress in spite of such challenges, while other regions have themselves created such conditions. These enabling conditions include:

- Strong existing legal and policy frameworks.

- A history of active engagement of States in regional processes.

- A clear and present economic or environmental imperative for improving cooperation.
- Long-term political and institutional stability.
- Stakeholder engagement processes and community buy-in.
- Availability of financing, partnerships, and/or resources for capacity development.

While regional contexts are highly diverse, a number of instructive lessons can be learned:

- Political support from regional champions can play a major role in successfully launching initiatives, maintaining momentum, and demonstrating continued political will.
- Financing best serves ocean governance efforts where it is long-term and flexible, and supports both specific projects and broader capacity development.
- Governance efforts work best where parties develop a common vision or purpose that prioritises the conservation and sustainable use of the marine environment.
- Successful initiatives require an institutional structure that is adapted to the particular circumstances and objectives.
- Targets and deadlines are necessary, but not sufficient. They can motivate parties and provide a common objective, but must be matched by adequate resources, political will, and action.

The 2030 Agenda is highly ambitious and requires concerted action at all levels. Regional initiatives and approaches to ocean governance should be considered a key part of the framework for the implementation of SDG14 and the 2030 Agenda and must be further developed and strengthened if they are to reach their full potential.

Some Member States have recognised the need for integrated approaches to ocean governance and highlight ROG in their 2030 Agenda implementation strategies. Several ROG organisations have started developing regional forums and other mechanisms for cooperation and coordination, and are actively exploring their potential role in the implementation and follow-up and review of the 2030 Agenda. However, as no regional organisation has a mandate covering the entire set of ocean-related SDG targets, cooperation and coordination across sectors and among competent regional organisations are crucial.

To that end, tailor-made and context-specific regional partnerships for sustainable management of the ocean could prove useful. Such partnerships could provide a platform for dialogue and exchanges on implementation challenges within a region, as well as create a mechanism through which countries and competent regional and global management organisations could cooperate towards a harmonised implementation across SDG14 targets and other ocean-related SDGs. Opportunities for region-to-region exchanges are also still largely absent from global governance processes. A mechanism for "inter-regional" and "region-to-global" cooperation could gather different regional organisations and further involve stakeholders, NGOs, and scientists in regional discussions. Such a mechanism could provide the opportunity to meet informally to share experiences and good practices, discuss common initiatives, highlight options to tackle key challenges, and identify pathways towards improved cooperation for ocean sustainability.

The 2030 Agenda for Sustainable Development calls on the international community to address sustainability issues as a whole. This requires us to go beyond traditional single-sector and state-centric approaches to governing the ocean and coasts, and move towards cooperation and integration. Efforts to advance regional ocean governance will play a crucial role in this ambitious transformation.

# 1.Introduction

### 1.1. The ocean and coasts in the global sustainability agenda

The ocean and coasts are fundamental for our survival and collective wellbeing. The ocean provides us with essential ecosystem services and food,[1] and is the backbone of international trade. The ocean is also at the heart of many recreational and cultural activities,[2] and presents a variety of opportunities for sustainable economic growth, from aquaculture to renewable energy.

There is, however, growing recognition that our use of the marine environment and its resources is unsustainable.[3] The intensive shift of societies and economic activities towards the ocean and coasts has a major impact on the integrity of natural ecosystems and on all associated ecosystem services.[4] Traditional maritime activities such as shipping and fishing have intensified and expanded, while a range of new activities have been developing, including in areas beyond national jurisdiction (ABNJ),[5] contributing to pollution, overexploitation of resources and destruction of habitats. Climate change and ocean acidification are compounding these impacts and placing further pressure on marine ecosystems.[6]

The adoption of the 2030 Agenda for Sustainable Development in September 2015 provides a comprehensive framework for sustainability and sets ambitious global objectives. The ocean and coasts are indispensable for achieving global sustainability and are the subject of a dedicated Sustainable Development Goal (SDG14) with targets corresponding to some of the most pressing issues confronting ocean sustainability. As such, the conservation and sustainable use of the ocean is now recognised as one of the world's most important sustainability challenges.

**Scramble for fish, Mayungu, Kenya's North coast**

© Patrick Kimani

[1] Seafood is a primary protein source for about 1 billion people worldwide, especially in low-income countries. See World Health Organization, 'Availability and consumption of fish', <http://www.who.int/nutrition/topics/3_foodconsumption/en/index5.html>.

[2] Smith et al., *Routledge Handbook of Ocean Resources and Management* (Routledge, 2014).

[3] Inniss et al., 'The First Global Integrated Marine Assessment (World Ocean Assessment I)' (2016).

[4] Ibid.; Moksness et al., *Global Challenges in Integrated Coastal Zone Management* (Wiley-Blackwell, 2013).

[5] Wright et al., 'The Long and Winding Road Continues: Towards a New Agreement on High Seas Governance' (IDDRI, 2016) <http://www.iddri.org/Publications/Collections/Analyses/ST0116_GW%20et%20al._high%20seas.pdf>.

[6] Gattuso et al., 'Contrasting Futures for Ocean and Society from Different Anthropogenic $CO_2$ Emissions Scenarios' (2015) 349 Science 4722; Hoegh-guldberg, 'The Impact of Climate Change on the World's Marine Ecosystems' (2010) 328 Science 1523.

| Target | Indicator |
|---|---|
| **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 resilience, and take action for their restoration in order to achieve healthy and productive oceans | **14.2.1** Proportion of national exclusive economic zones managed using ecosystem-based approaches |
| **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 recognises 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 the United Nations Convention on the Law of the Sea, 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 |

**Table 1: SDG14 targets and indicators**

**Source:** Transforming our world: the 2030 Agenda for Sustainable Development.

Many of these targets are not entirely new, but restate and consolidate targets and commitments already made under the auspices of existing instruments, for example:

- Target 14.1 on the prevention and reduction of marine pollution draws on many international and regional agreements, including the United Nations Convention on the Law of the Sea (UNCLOS) and the conventions of the International Maritime Organization.[7]

- Target 14.4 on restoring fish stocks at least to levels that can produce maximum sustainable yield is inspired by the 2002 Johannesburg Plan of Implementation.

- Target 14.5 on the conservation of at least 10 per cent of coastal and marine areas partly recalls Target 11 of the 2010 Aichi Biodiversity Targets.[8]

However, SDG14 for the first time groups key ocean issues into a cohesive package, increasing their visibility and role in the sustainable development agenda.

The health of the ocean, coasts and marine resources is crucial for achieving many other SDGs because they provide vital services to people and the planet. SDG14 and its targets have a crosscutting role in the agenda, being a critical enabler, especially for poverty alleviation, environmentally sustainable economic growth, and social wellbeing.[9]

**Co-benefits of achieving targets for Sustainable Development Goal 14: Life Below Water**

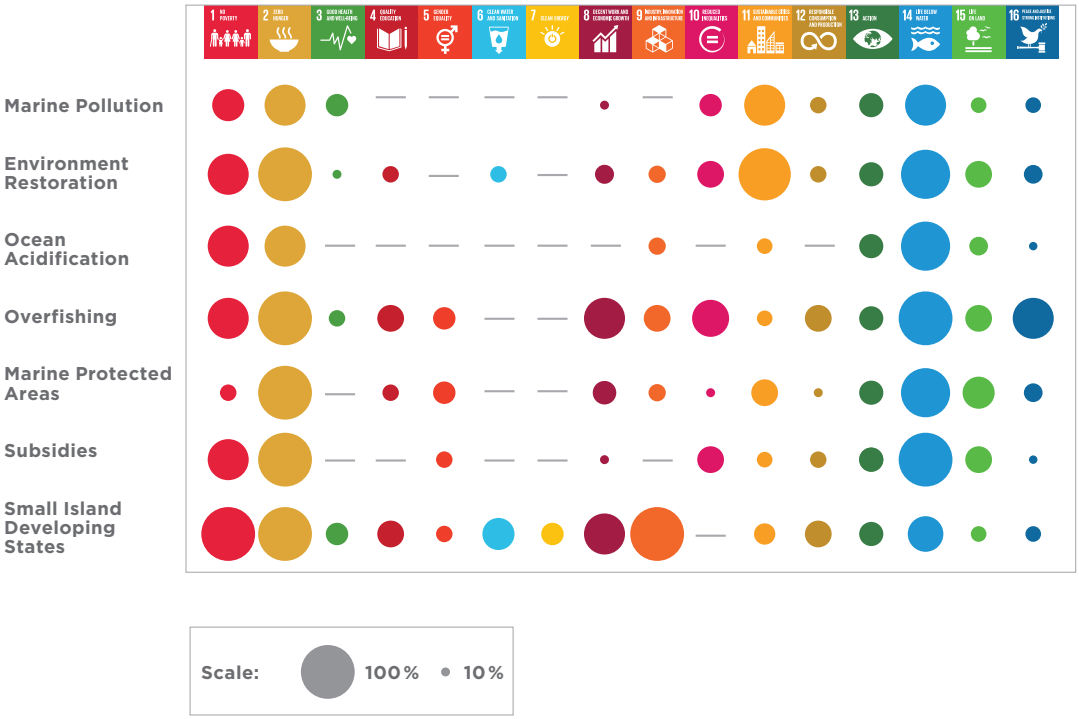



**Figure 2: Co-benefits of achieving SDG14 targets**

**Source:** Nereus Program[10]

[7] E.g. The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (London Convention) and the International Convention for the Prevention of Pollution from Ships 1973 (MARPOL).

[8] I.e. That "By 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape."

[9] Schmidt et al. in Griggs et al. (eds), A Guide to SDG Interactions: *The Science Perspective* (International Council for Science, 2017).

[10] Available online at: nereusprogram.org/wp-content/uploads/2017/02/SDGs-Comparisons-Feb-27-17-update-01.png

For instance, Target 14.7 (increasing the economic benefits to Small Island Developing States (SIDS) and Least Developed Countries (LDCs)) and Target 14.b (access for small-scale artisanal fishers to marine resources and markets) can contribute to delivering SDG1 (no poverty). In the same way, Target 14.4, restoring fish stocks at least to levels that can produce maximum sustainable yield, is essential to achieving SDG2 (zero hunger) in many coastal regions and island States. The increased cooperation and coordination demanded by SDG14 will also contribute to enhancing global partnership, which is at the heart of the 2030 Agenda (SDG17).

## Ocean health is central to global sustainable development

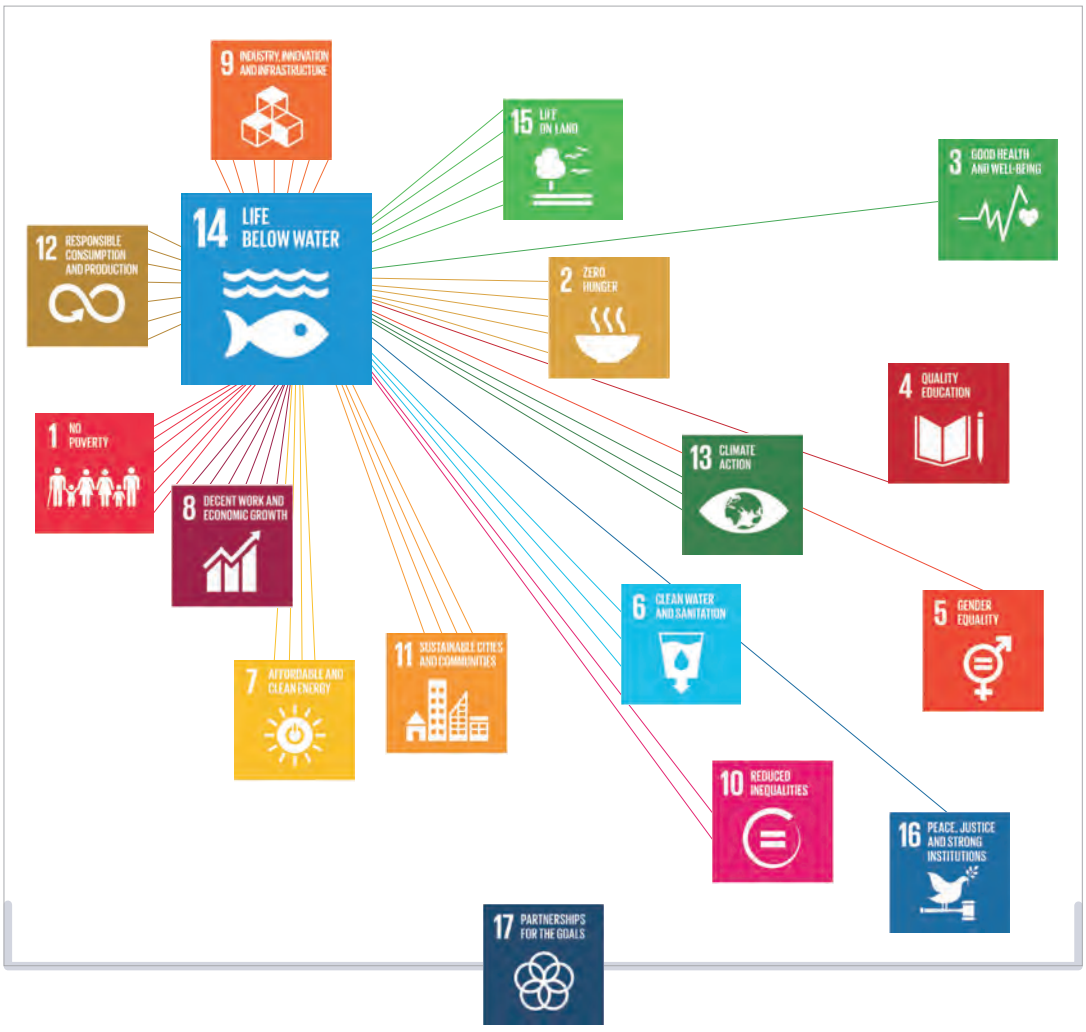



**Figure 3: Relationships between SDG14 Targets and other SDGs**

**Source:** IASS Policy Brief 1/2017

The Goal for the Oceans occupies a central role within the 2030 Agenda. Its targets link to Sustainable Development Goals across the full extent of the Agenda. These interdependencies offer opportunities for the development of synergies and require actors to balance trade-offs carefully.

### Goal 14 targets address:

**14.1** Marine Pollution | **14.2** Healthy Oceans | **14.3** Ocean Acidification
**14.4** Sustainable Fisheries | **14.5** Marine Protected Areas | **14.6** Fisheries Subsidies
**14.7** Economic benefits for Small Island Developing States & Least Developed Countries | **14.a** Knowledge & Technology | **14.b** Small Scale Fisheries
**14.c** Law Development & Implementation

At the same time, efforts to achieve the other SDGs can be complementary to SDG14. For example, implementation of Target 2.4 (sustainable food production systems) and Target 8.4 (resource efficiency) could potentially benefit the achievement of Target 14.1 (marine pollution). Conversely, measures to boost economic growth and create jobs (Targets 8.1 & 8.3) might impair marine restoration and conservation efforts.

### 1.2. The role of regional approaches in advancing ocean sustainability

National governments have agreed to take action for the full implementation of the SDGs, especially through public policies and the effective use of domestic resources, as well as by engaging in systematic follow-up and review to track progress. While this national commitment to the SDGs is critical, the ocean presents challenges that are best tackled by States acting collectively. Marine ecosystems and resources do not respect national borders and threats to sustainability are often transboundary in nature (e.g. fish stocks and marine pollution) – States cannot effectively manage these resources and threats working in isolation.

In this regard, efforts at the regional level already play a crucial role in delivering ocean sustainability by providing for cooperation and coordination by States across territorial and, increasingly, sectoral boundaries.[11] The possibility for cooperation and coordination through existing regional frameworks is recognised in the 2030 Agenda, with the United Nations General Assembly (UNGA) acknowledging "the importance of the regional and subregional dimensions (...) in sustainable development"[12] and drawing attention to the regional level with regard to the follow-up and review process.[13]

Conservation and sustainable use of the ocean requires an integrated and coherent ecosystem-based approach that takes into consideration the interconnected nature of marine ecosystems and the cumulative impacts of human activities affecting them. Skilled and well-equipped institutions with adequate financial and human resources are needed to implement such an approach. At the same time, cooperation between all actors, including governments, non-governmental organisations (NGOs), the private sector, and civil society, is critical to achieving effective governance.

### 1.3. Report objectives and methodology

The objective of this report is to highlight the relevance of regional approaches to ocean governance for the implementation of the 2030 Agenda.[14] In particular, the report aims to:

- Assess the roles and mandates of different regional approaches and frameworks with regard to sustainable ocean management.
- Showcase good practice examples of how different types of regional efforts already contribute to SDG14 targets.
- Discuss case studies on integrated ROG approaches from different marine regions.
- Provide options for the further development of ROG as a key element for the implementation of SDG14.

[11] Freestone et al., 'Can Existing Institutions Protect Biodiversity in Areas beyond National Jurisdiction? Experiences from Two on-Going Processes' (2014) 49 Marine Policy 167; Billé et al., 'Regional Oceans Governance: Making Regional Seas Programmes, Regional Fishery Bodies and Large Marine Ecosystem Mechanisms Work Better Together' (UNEP, 2016).

[12] UNGA Resolution A/RES/70/1, 'Transforming our world: the 2030 Agenda for Sustainable Development' (25 September 2015), §21.

[13] Ibid, §80.

[14] There is no globally agreed definition of "ocean governance". For the purpose of this report, ocean governance comprises the rules, practices, policies and institutions that shape how humans interact with the ocean. Ocean governance includes all actors that have a role in managing and using the ocean and its resources, from governments to non-governmental organisations (NGOs), the private sector, and civil society. In this report, we do not seek to restrictively define the term "regional ocean governance". Instead, we focus on good practice examples of multiple actors working across boundaries at the regional scale to advance the conservation and sustainable use of the marine environment, regardless of the form that it may take.

This report is not intended to provide a comprehensive set of general guidelines nor advocate a "one size fits all" approach for how regional efforts can contribute to delivering ocean sustainability. Rather, this report:

1. Highlights the role of regional ocean governance for integrated and effective implementation of SDG14.

2. Showcases some pragmatic and practical examples.

3. Highlights some lessons learned that can help to ensure regional ocean governance can reach its full potential for the implementation of the 2030 Agenda.

This report was elaborated through a review of the scientific and grey literature, as well as interviews and discussion with a range of experts and ROG practitioners. Discussions held during the 2016 Potsdam Ocean Governance Workshop also contributed greatly to several of the ideas developed in this document.[15]

The following section provides a brief overview of ROG approaches, presenting key types of regional organisations and mechanisms. Section 3 discusses the potential contribution of regional efforts to the achievement of each of the ten SDG14 targets, while Section 4 uses case studies to highlight broader opportunities and challenges for regional implementation of the 2030 Agenda. Section 5 provides an overview of three key building blocks for successful SDG14 implementation: ecosystem-based management, financing, and capacity development. Section 6 offers some concluding thoughts on how regional approaches can reach their full potential and support effective implementation of SDG14.

[15] The Potsdam Ocean Governance Workshops bring together experts and representatives from governments, international organisations, scientific institutions, civil society and business to advance creative thinking on ocean governance issues. The 2016 Workshop focussed on the implementation challenges of SDG14.

# 2. Regional ocean governance: a brief introduction

Regional ocean governance (ROG) – efforts among countries to work together to manage their ocean, coasts, and marine resources – vary widely in scope, mandate, and spatial extent. This diversity reflects the varied needs and priorities of different places, settings, sectors, and marine ecosystems.

At the global level, ROG is articulated in several instruments including the United Nations Convention on the Law of the Sea (UNCLOS),[16] the United Nations Fish Stocks Agreement (UNFSA),[17] and the Convention on Biological Diversity (CBD).[18] Under article 197 of UNCLOS for example, States are encouraged to cooperate "as appropriate, on a regional basis, directly or through competent international organisations for the protection and preservation of the marine environment, taking into account characteristic regional features". UNCLOS also makes particular mention of regional cooperation with regard to enclosed and semi-enclosed seas,[19] high seas living resources[20] and regional marine scientific and technological centres.[21] The UNFSA encourages States to cooperate directly or through subregional or regional fisheries management organisations or arrangements (RFMO/As), taking into account the specific characteristics of the subregion or region within their respective jurisdictions.[22] These regional cooperation aspects of fisheries are further highlighted in the FAO Code of Conduct for Responsible Fisheries.[23] While the CBD does not explicitly refer to the regional level, the Strategic Plan for Biodiversity 2011–2020[24] and the Aichi Biodiversity Targets[25] adopted by the CBD's Conference of Parties (COP) in 2010 highlight the need for regional biodiversity strategies and targets. Furthermore, the adoption of the Agenda 21 by the United Nations Conference on Environment and Development, held in Rio de Janeiro in 1992,[26] and "The Future We Want" at Rio+20[27] in 2012 called on States to cooperate on a regional basis for the protection of the ocean and to apply the ecosystem approach.

This overview briefly describes the evolution of ROG and offers a typology of approaches, including long-standing and well-established mechanisms, newer innovations in the field, and some general instruments that may be relevant to ocean sustainability. This section also examines how UN Member States can advance the implementation of the 2030 Agenda in relation to the ocean and coasts by engaging in various types of ROG. This analysis is further expanded in Sections 3 and 4.

The core types of ROG are:

- Regional Seas Conventions and Action Plans
- Regional Fisheries Bodies (RFBs)
- Political and economic communities that engage in ROG
- Leader-driven initiatives
- Large Marine Ecosystems (LMEs)

[16] United Nations Convention on the Law of the Sea (1982) (UNCLOS).

[17] 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 (8 September 1995) (UNFSA).

[18] Convention on Biological Diversity (1992).

[19] UNCLOS, Article 123.

[20] Ibid, Section 118.

[21] Ibid, Article 276.

[22] Ibid, Article 8(1).

[23] FAO, Code of Conduct for Responsible Fisheries (1995).

[24] CBD, COP 10, Decision X/2, 'Strategic Plan for Biodiversity 2011–2020 and Aichi Biodiversity Targets' (2010).

[25] Ibid.

[26] UN Conference on Environment & Development, 'Agenda 21' (1992), Chapter 17 <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>.

[27] UN Conference on Environment & Development, 'The Future We Want' (2012), Paragraph 158 <http://www.un.org/disabilities/documents/rio20_outcome_document_complete.pdf>.

### 2.1. Regional Seas Conventions and Action Plans

The UNEP governing council made the ocean a priority action area early on[28] and created the Regional Seas Programme (RSP).[29] More than 143 countries now participate in Regional Seas programmes across the globe.[30]

Regional Seas programmes function through Action Plans that serve as the basis for regional cooperation.[31] Most are underpinned by a legal framework composed of regional framework conventions and specific protocols. Regional Seas Conventions and Action Plans focus mainly on pollution and measures for the conservation of marine living resources. Regional Seas conventionally have no management or regulatory mandate in relation to fisheries, which are covered by Regional Fishery Bodies (RFBs). Recently, Regional Seas programmes and RFBs have sought to overcome longstanding sectoral divisions to enhance cooperation,[32] but few of these efforts have been formalised (e.g. in memorandums of understanding (MoUs) or other arrangements).

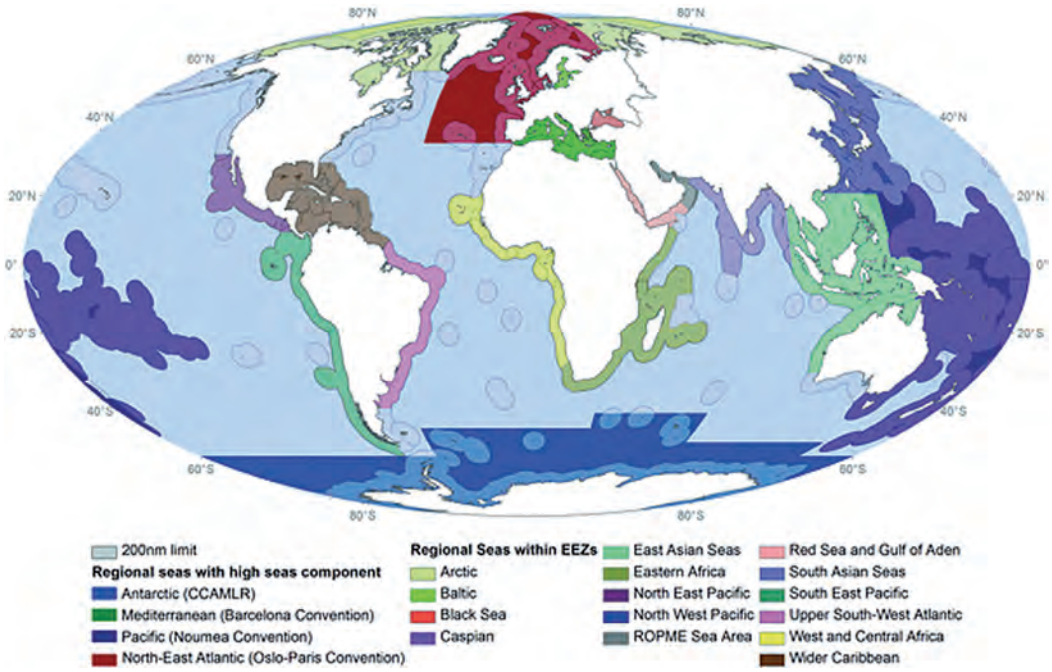



**Figure 4: Regional Seas programmes**

**Source:** Ban et al. 2014[33]

[28] UNEP, 'Report of the governing council on the work on its first session, 12–22 June 1973' (United Nations, 1973).

[29] UNEP, 'Report of the governing council on the work on its second session, 11–22 March 1974' (United Nations, 1974), Decision 8(II). In this report, we use 'Regional Seas Programme' (RSP) to refer to the overarching UNEP Programme/concept and 'Regional Seas' or 'Regional Seas programmes' to refer to any of the 18 Regional Seas Conventions and Action Plans established pursuant to the RSP concept.

[30] Seven Regional Seas programmes are directly administered by UNEP (i.e. UNEP administers their financial and cooperating agreements, while the Secretariats are administered independently); another seven are associated with the UNEP RSP; four Regional Seas programmes independent of UNEP are invited to participate in UNEP's regional seas coordination activities through the global meetings of the RSP (see Annex 1).

[31] These Action Plans outline the strategy and substance of the Regional Seas programme in question and and generally includes: environmental assessment; environmental management; environmental legislation; institutional arrangements; and financial arrangements.

[32] See, e.g. the case of the Northeast Atlantic (the OSPAR Commission and the North-East Atlantic Fisheries Commission, discussed on page 55).

[33] Ban et al., 'Systematic Conservation Planning: A Better Recipe for Managing the High Seas for Biodiversity Conservation and Sustainable Use' (2014) 7 Conservation Letters 41.

## 2.2. Regional Fisheries Bodies

Regional Fisheries Bodies (RFBs) are a mechanism through which States or organisations that are party to an international fishery agreement or arrangement work together to manage one or more fisheries.[34] RFBs therefore have a key role to play in regional collaboration and joint action in the conservation and management of fisheries and associated biodiversity. RFBs vary widely in terms of their geographical coverage, species addressed, and functions.[35] Some RFBs have only an advisory mandate and provide advice, decisions, or coordinating mechanisms that are not legally binding on their members.[36] By contrast, Regional Fisheries Management Organisations (RFMOs) have a management mandate and adopt fisheries conservation and management measures that are legally binding on their members.[37] Many RFBs have been established under the FAO Constitution (under Articles VI and XIV), while others remain outside the UN framework (though FAO monitors progress of all RFBs).

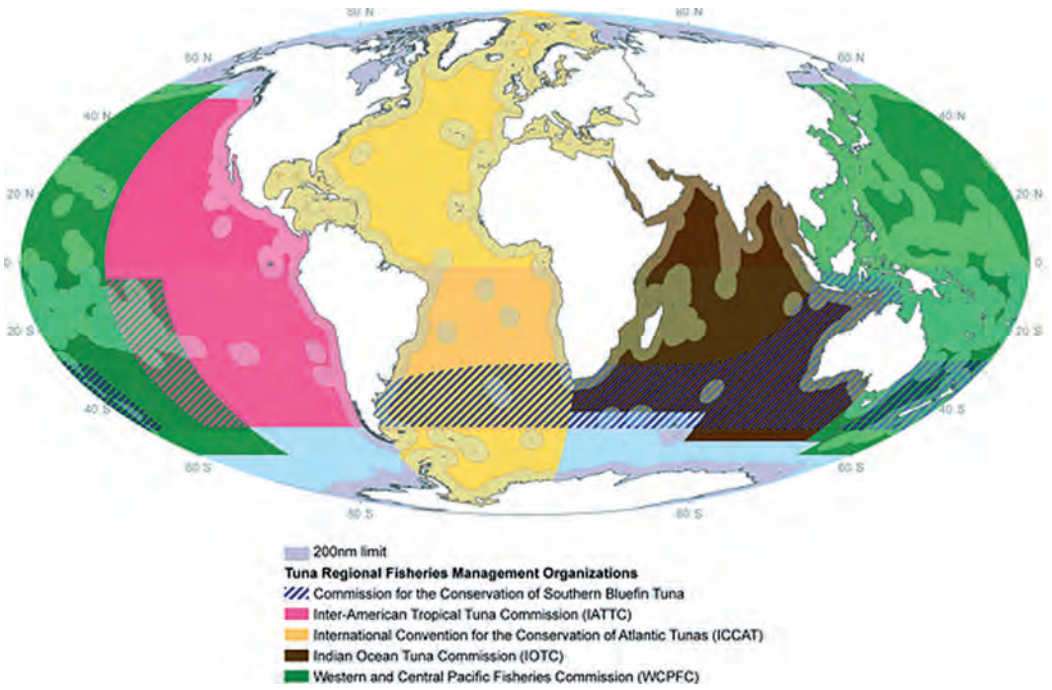



**Figure 5: Tuna RFMOs**[38]

**Source:** Ban et al. 2014[39]

[34] See FAO Fisheries and Aquaculture Department, 'Regional Fishery Bodies' (FAO) <http://www.fao.org/fishery/rfb/en>.

[35] Rochette et al., 'Regional Oceans Governance Mechanisms: A Review' (2015) 60 Marine Policy 9.

[36] E.g. The South Western Indian Ocean Fisheries Commission (SWIOFC) and the South East Asia Fisheries Development Center (SEAFDEC).

[37] Examples of RFMOs include: the Northwest Atlantic Fisheries Organization (NAFO) and the North-East Atlantic Fisheries Commission (NEAFC) in the North Atlantic Ocean; Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR) in the Southern Ocean; South Pacific Regional Fisheries Management Organisation (SPRFMO) in the South Pacific Ocean; South Indian Ocean Fisheries Agreement (SIOFA) in the Southern Indian Ocean; and the General Fisheries Commission for the Mediterranean (GFCM) in the Mediterranean and the Black Sea.

[38] Areas in light blue indicate no RFMO exists; all fisheries in the Southern Ocean are managed by CCAMLR.

[39] Ban et al. (2014) n 33.

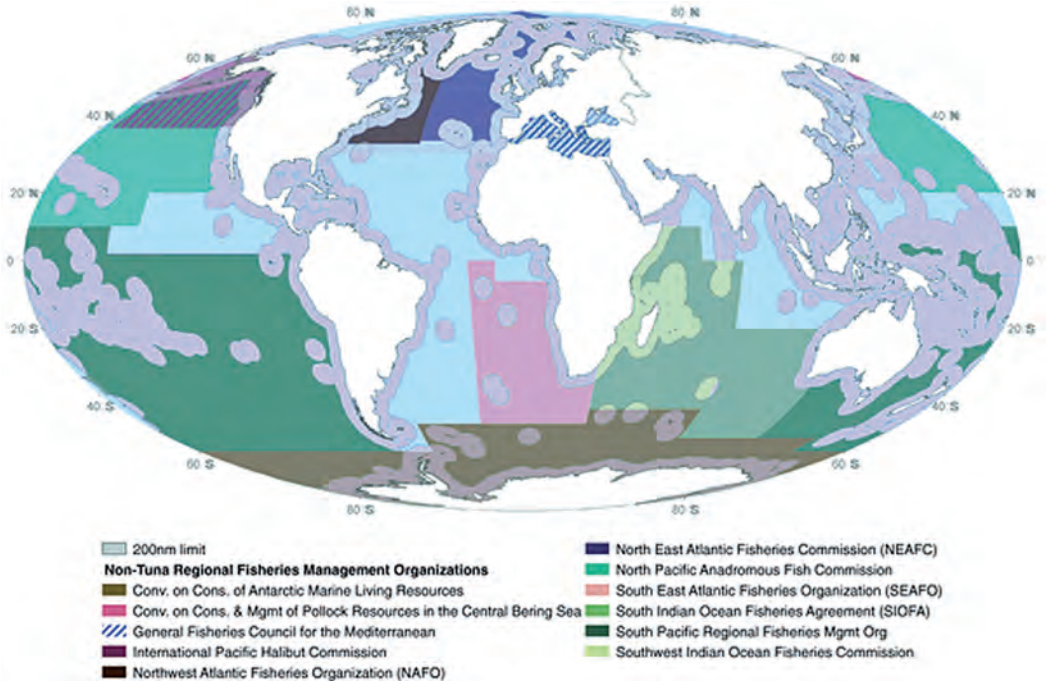



**Figure 6: Non-tuna RFMOs**

**Source:** Ban et al. 2014[40]

Many commentators have noted the limited implementation of conservation measures by RFBs and the challenges they face in incorporating biodiversity and conservation concerns into their work.[41] Such challenges include: mandates traditionally focussed on fisheries management and exploitation, rather than conservation and sustainable use of marine biodiversity and resources as a whole; limited financial and human resources; limited cooperation from Member States; and challenges in cooperating and coordinating with other management organisations. RFBs have had varying levels of success in protecting fisheries and fisheries-related ecosystems, though several are moving towards more ecosystem-based approaches. In the Northeast Atlantic, for example, the competent regional sea convention (OSPAR) and RFMO (NEAFC) have cooperated for some years in area-based management.

## 2.3. Regional political and economic organisations

Many political and economic organisations have sought to address marine issues at the regional level, including the European Union (EU), the African Union (AU), the Association of Southeast Asian Nations (ASEAN), and the Caribbean Community Secretariat (CARICOM). The scope, approach, successes, and challenges of these various regional efforts are as varied as the regional and economic organisations themselves.

### The European Union (EU)

The EU has developed a comprehensive ocean policy covering a spectrum of issues including maritime affairs, ocean uses, conservation and research. In recent years, existing regional governance structures and mechanisms have been increasingly recognised and complemented primarily through the Integrated Maritime Policy (IMP),[42] the Marine Strategy Framework Directive (MSFD),[43] Common Fisheries Policy (CFP)[44] and the Maritime Spatial Planning (MSP) Directive.[45]

[40] Ibid.

[41] Garcia et al., *Governance of Marine Fisheries and Biodiversity Conservation: Interaction and Co-Evolution* (Wiley-Blackwell, 2014).

[42] Commission of the European Communities COM(2007) 575 final, 'Conclusions from the Consultation on a European Maritime Policy' (10 October 2007); Commission of the European Communities SEC(2007) 1278, 'An Integrated Maritime Policy for the European Union' (10 October 2007).

[43] Directive of the European Parliament and of the Council 2008/ 56/EC, 'Establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)' (17 June 2008).

[44] Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy.

[45] Directive of the European Parliament and of the Council 2014 /89 /EU, 'Establishing a framework for Maritime Spatial Planning' (23 July 2014).

EU ocean policy has focussed on EBM and bridging sectoral divides. Under the IMP for example, regional sea basin strategies have been established to translate maritime policy at the supranational level to the sub-regional level on the basis of geographical and environmental criteria and to coordinate different sectors and actors to complement existing single sector-based policies. The MFSD, as the environmental pillar of the IMP, has translated the EBM approach into practice for EU waters, while the CFP enables Member States with an interest in a specific fishery or sea region to provide joint recommendations on conservation and management measures (e.g. discard or multi-annual plans) for adoption by the EU Commission. Furthermore, instruments that facilitate integrated policy- and decision-making at the regional sea basin level have been adopted under EU law. For example, the MSP Directive establishes a cross-sectoral framework for MSP that requires Member States to coordinate their planning through regional cooperation structures such as Regional Seas Conventions and/or networks or structures of Member States' competent authorities. The Directive also provides for cooperation with third countries through international forums or regional institutions.

### The African Union (AU)

In its continental Vision and Action Plan, Agenda 2063: The Africa We Want,[46] the AU has recognised the ocean as an important pillar for economic growth. In this regard, the 2050 Africa Integrated Maritime Strategy (AIMS 2050) identifies long-term opportunities and plans of action for wealth creation from the sustainable utilisation for Africa's maritime domain.[47] AIMS 2050 also addresses multifaceted challenges such as insecurity, illegal, unreported and unregulated (IUU) fishing, natural disasters, marine environmental degradation, and climate change. The AIMS 2050 promotes regional maritime governance within existing Regional Economic Communities (RECs), RFMOs, and other regional initiatives.[48]

At the 15th session of the African Ministerial Conference on Environment (AMCEN), held in 2015, African Ministers agreed to develop an African Ocean Governance Strategy and recognised the four African Regional Seas programmes as the regional platforms for implementing AIMS 2050 and Agenda 2063[49] to achieve EBM approaches for marine resources in the exclusive economic zones and adjacent waters. Additionally, the AU has executed the marine and coastal component of its Action Plan on the Environment Initiative[50] to support the Nairobi and Abidjan Conventions.[51] As such, Regional Seas programmes in Africa are seen as playing a crucial role in delivering and implementing the 2030 Agenda for the ocean and coasts.

### Association of South East Asian Nations (ASEAN)

ASEAN has developed sectoral regional policies and institutional arrangements on the conservation and sustainable use of biological diversity (including marine biodiversity) and fisheries. Through the ASEAN Centre for Biodiversity and the ASEAN Working Group on Coastal and Marine Environment, Member States coordinate their actions regionally, as well as with other regional and international bodies. ASEAN States have also successfully economically liberalised their fisheries and integrated a regional single market by the removal of tariffs and non-tariff measures to enhance intra-ASEAN fisheries trade and investment.[52] Additionally, since the mid-1990s, ASEAN has developed a collaborative regional approach with the Southeast Asian Fisheries Development Center (SEAFDEC) to develop com-

[46] African Union Commission, 'Agenda 2063. The Africa We Want' (African Union Commission, 2015) <http://www.un.org/en/africa/osaa/pdf/au/agenda2063.pdf>.

[47] African Union, '2050 Africa's Integrated Maritime Strategy (2050 Aim Strategy)' (African Union, 2012) <http://www.cggrps.org/wp-content/uploads/2050-AIM-Strategy_EN.pdf>.

[48] Ibid. §60.

[49] African Ministerial Conference on the Environment (AMCEN), 'Cairo Declaration on Managing Africa's Natural Capital for Sustainable Development and Poverty Eradication' (AMCEN, March 2015) <http://www.un.org/en/africa/osaa/pdf/au/cap_naturalcapital_2015.pdf>.

[50] New Partnership for Africa's Development (NEPAD), 'Action Plan for The Environment Initiative' (NEPAD, October 2003) <http://www.nepad.org/resource/action-plan-environment-initiative-0>.

[51] Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean Region (Nairobi Convention) (30 May 1996); Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region (Abidjan Convention) (5 August 1984).

[52] ASEAN Sectoral Integration Protocol for Fisheries (2004) <http://www.asean.org/?static_post=asean-sectoral-integration-protocol-for-fisheries>.

mon policies. For example, the Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices has been agreed to by ASEAN and SEAFDEC countries to promote such practices in the South China Sea, the Sulu-Sulawesi Seas, and the Arafura-Timor Seas.[53]

### Caribbean Community (CARICOM)

In 2003, the Caribbean Community (CARICOM) Fisheries Unit was formally replaced by the Caribbean Regional Fisheries Mechanism (CRFM)[54] as an independent advisory RFB. A Common Fisheries Policy has since been elaborated by CARICOM and CRFM to establish a cooperative platform for the transformation of the fisheries sector[55] (though it has not yet been signed as a formal inter-governmental agreement). The CRFM aims to: promote the sustainable development of fishing and aquaculture industries; harmonise measures and operating procedures for sustainable fisheries management; improve the welfare and livelihoods of fishers and fishing communities; prevent, deter and eliminate IUU fishing; and develop the market for, and trade in, fisheries resources.

## 2.4. Leader-driven initiatives

Heads of State and other leaders have have launched a number of ROG initiatives as complements to existing regional platforms (e.g. Regional Seas, RFBs, and regional economic forums), aiming to address ocean issues holistically and in a transboundary manner. These initiatives often focus on advancing joint management, capacity building, and sustainable financing.

Leader-driven initiatives have originated among countries and jurisdictions with shared resources, concerns, and contexts, and tend to address challenges to their coastal and marine environment from integrated, ecosystem-based, and people-focused perspectives.[56] The decade-old Micronesia Challenge is considered the first of such efforts – the participating jurisdictions were brought together by their shared heritage and common interest in conservation (see section 4.4). In the Coral Triangle, six countries cooperate to protect biodiversity, ensure food security, and address common threats like climate change (see section 3.3).

Such initiatives include:

- The Micronesia Challenge.
- The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security
- The Pacific Oceanscape
- The Western Indian Ocean Coastal Challenge
- The Caribbean Coastal Challenge Initiative

## 2.5. Large Marine Ecosystems

Large Marine Ecosystems (LMEs) are vast areas of ocean (approximately 200,000 square kilometres or greater) adjacent to the continents in coastal waters and where primary productivity is generally higher than in open ocean areas. Based on a concept developed by the United States' National Oceanic and Atmospheric Administration (NOAA), 66 LMEs have been identified.[57] The physical extent of an LME and its boundaries are based on four linked ecological, rather than political or economic, criteria: (1) bathymetry; (2) hydrography; (3) productivity; and (4) trophic relationships.

[53] Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region (May 2007).

[54] Agreement Establishing the Caribbean Regional Fisheries Mechanism (4 February 2002) <http://www.caricom.org/about-caricom/who-we-are/our-governance/about-the-secretariat/offices/office-of-the-general-council/treaties-and-agreements/agreement-establishing-the-caribbean-regional-fisheries-mechanism-crfm>.

[55] Agreement Establishing the Caribbean Community Common Fisheries Policy (4 February 2002) <http://www.crfm.int/-uwohxjxf/images/Agreement_Establishing_the_CCCFP.pdf>.

[56] See Johnson et al., 'Building the Regional Perspective: Platforms for Success' (2014) 24 Aquatic Conservation: Marine and Freshwater Ecosystems 75.

[57] See 'The Large Marine Ecosystem Approach' in The Ecosystem Approach e-Newsletter 4 (October 2009) <http://www.cbd.int/ecosystems/newsletters/ea-2009-10.htm>.

LME mechanisms aim to implement EBM by collating and developing knowledge of human activities and their impacts and developing appropriate governance strategies. Since 1995 the Global Environment Facility (GEF)[58] has been instrumental in promoting the LME concept.[59] As of 2013, the total GEF funding for 21 LME projects involving 110 countries amounted to USD 3.1 billion.[60]

The LME approach has proved to be a useful addition to the ROG landscape, especially for providing a space for interaction between science and policy with a view to advancing EBM.[61] To date, three approaches have been tested for maintaining and advancing LMEs beyond the GEF project cycle:

- Creation of a specific governance mechanism: The Benguela Current LME project led to a Convention in 2013 that established the Benguela Current Commission (BCC) as a permanent intergovernmental organisation.[62]

- Establishment of an LME Commission within an existing institutional framework: The Guinea Current Commission (GCC) is to be established by a dedicated protocol under the Abidjan Convention.[63]

- Cooperative governance: In the Mediterranean, existing international organisations (UNEP, the World Bank) are responsible for the implementation of the two Strategic Action Plans (SAPs)[64] in partnership with regional bodies (Mediterranean Action Plan [MAP], General Fisheries Commission for the Mediterranean [GFCM]).[65]

While the Transboundary Diagnostic Analyses (TDAs) and Strategic Actions Programmes (SAPs) elaborated under the auspices of LME projects are widely recognised for their added value, there is further scope to strengthen the governance dimension of LME mechanisms.[66] In particular, coordination between activities conducted under LME projects and other ROG mechanisms, such as the Regional Seas programmes and RFMOs, could be improved.

[58] The GEF is a multi-lateral financing mechanism, operating as a partnership of 18 agencies, including UN agencies, multilateral development banks, national entities, and international NGOs. The GEF also acts as the financial mechanism for 5 major international environmental conventions (the Minamata Convention on Mercury, the Stockholm Convention on Persistent Organic Pollutants (POPs), the CBD, the United Nations Convention to Combat Desertification (UNCCD) and the United Nations Framework Convention on Climate Change (UNFCCC)).

[59] While the GEF is usually the financial mechanism for the implementation of a particular global convention, the marine and coastal sub-component of its International Waters (IW) focal area is based on the LME concept.

[60] Sherman, 'Introduction' in IOC-IUCN-NOAA Large Marine Ecosystem 15th Consultative Committee Meeting; 10 July 2013; Paris, France (2013).

[61] Rochette et al. (2015) n 35.

[62] Angola, Namibia, and South Africa are members.

[63] See Abidjan Ministerial Declaration (2012) <http://www.gclme.iwlearn.org/documents-centre/legal-documents/the-abidjan-declaration/view>.

[64] The Strategic Action Programme for the conservation of Biological Diversity (SAP-BIO) and the Strategic Action Programme to Address Pollution from Land-based Activities (SAP-MED).

[65] UNEP-MAP / GEF Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem (MedPartnership), 'Inception Report' (21 May 2010) <http://www.wedocs.unep.org/bitstream/handle/20.500.11822/4492/10wg345_3_eng.pdf>.

[66] See Rochette et al. (2015) n 35 and Billé et al. (2016) n 11.

# 3. Tackling SDG14 targets at the regional level

This section presents the issues at stake in each of the SDG14 targets and identifies how the mandates of regional organisations could contribute to their achievement. In addition, the section highlights good practice examples of efforts and initiatives led by regional organisations that are making a tangible contribution to advancing ocean sustainability.

### 3.1. Target 14.1. Marine pollution

> *"By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution."*

#### Issues at stake

According to UNCLOS, marine pollution refers to "the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities".[67] This includes pollution from: land-based sources (e.g. chemicals, particles, industrial, agriculture and residential waste); vessels; exploration and exploitation of natural resources; atmospheric pollution; and dumping.

The vast majority of marine pollution, around 80%, comes from land-based sources.[68] Marine pollution often originates from diffuse sources ("non-point sources") such as agricultural runoff, wind-blown debris and dust. Air pollution also plays a role in transporting pesticides or dirt into the ocean. Eutrophication (the enrichment of waters by nutrients) is a result of such pollution and causes algal blooms, while potentially toxic chemicals are taken up by plankton and concentrated upward within ocean food chains.[69] This can lead to the development of dead zones in coastal areas, which have doubled in extent every decade since the 1960s.[70] Another source of pollution is underwater noise, originating mainly from shipping, but also from the construction of wind-farms, coastal infrastructure, and seismic and military activities.

**Littered beach in Bali, Indonesia**

© Lawrence Hislop

[67] UNCLOS, Article 1–1(4).

[68] UNGA, 'Oceans and the Law of the Sea, Report of the Secretary-General' (2011), §154.

[69] Global Partnership on Nutrient Management, 'Building the Foundations for Sustainable Nutrient Management' (UNEP, 2010).

[70] Jabour et al., 'UNEP Year Book, New Science and Developments in our Changing Environment' (UNEP, 2009).

The advent of inexpensive and durable plastics has precipitated a marked increase in plastic pollution.[71] As most plastics do not enter waste recycling systems, large quantities are deposited in land and marine ecosystems. Living organisms are affected through direct ingestion of plastic waste, or through exposure to chemicals within plastics that affect biological functions. Larger marine animals can also be affected through entanglement. There is also growing scientific understanding of the deleterious effects of so-called microplastics, i.e. fragments of plastic, often invisible to the human eye, that are easily ingested and accumulated in the bodies and tissues of many marine organisms.[72] Additionally, marine litter is known to damage and degrade habitats and is a possible vector for the transfer of alien species.[73]

### Mandates of regional organisations

UNCLOS encourages States to cooperate and coordinate to fight marine pollution, stipulating that States "shall take, individually or jointly as appropriate, all measures (...) that are necessary to prevent, reduce and control pollution of the marine environment (...) and they shall endeavour to harmonize their policies in this connection".[74]

Marine pollution has long been a driver behind increased regional cooperation. Shortly after the oil tanker 'Torrey Canyon' broke up off Cornwall in 1967, spilling 117,000 tonnes of oil, the eight states bordering the North Sea signed the first Agreement for Cooperation in Dealing with Pollution of the North Sea by Oil (Bonn Agreement). Marine pollution and the regional approach have since gone hand in hand.[75]

Actions to tackle marine pollution were the first to be carried out by Regional Seas programmes,[76] and they remain one of their major activities. In this context, a range of conventions,[77] protocols,[78] strategies[79] and projects have been adopted to prevent, reduce and combat the different sources of marine pollution.[80] For example, the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), an inter-governmental programme to address the land-based sources of pollution and land-based activities, is being implemented through regional mechanisms: nine protocols on land-based sources of pollution have been adopted under the auspices of Regional Seas Conventions. Additionally, some Regional Seas Conventions have articles and/or protocols that regulate dumping of wastes and other matter into the ocean.[81]

Many other regional organisations have mandates to cooperate on tackling marine pollution, including economic organisations. For instance, the EU has passed many regulations relevant to the control of marine pollution[82] and ASEAN's Working Group on Coastal and Marine Environment (AWGCME) has adopted Marine Water Quality Criteria. The Indian

[71] Derraik, 'The Pollution of the Marine Environment by Plastic Debris: A Review' (2002) 44 Marine Pollution Bulletin 842; UNEP, 'Marine Plastic Debris and Microplastics: Global Lessons and Research to Inspire Action and Guide Policy Change' (2016) <https://europa.eu/capacity4dev/file/30185/download?token=1E4NFLyW>; Thevenon et al. (eds), 'Plastic Debris in the Ocean: The Characterization of Marine Plastics and their Environmental Impacts, Situation Analysis Report' (IUCN, 2014) <https://portals.iucn.org/library/sites/library/files/documents/2014-067.pdf>; Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), 'Sources, Fate and Effects of Microplastics in the Marine Environment: A Global Assessment' (2015) <http://www.ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/pdf/GESAMP_microplastics full study.pdf>.

[72] GESAMP (2015), ibid.

[73] See HELCOM, 'Marine Litter' <http://www.helcom.fi/action-areas/marine-litter-and-noise/marine-litter/>.

[74] UNCLOS, Article 194.

[75] Alhéritière, 'Marine Pollution Control Regulation: Regional Approaches' (1982) 6 Marine Policy 162.

[76] Rochette et al. (2015) n 35.

[77] E.g. Bonn Agreement for cooperation in dealing with pollution of the North Sea by oil and other harmful substances (1969).

[78] E.g. protocols aimed to reduce, prevent and combat pollution from land-based sources and activities, pollution resulting from the exploration of the continental shelf, and pollution by dumping from ships.

[79] E.g. OSPAR Strategy with regard to hazardous substances.

[80] Billé et al. (2016) n 11.

[81] E.g. Nairobi, Abidjan, OSPAR and HELCOM Conventions.

[82] E.g. EU Marine Strategy Framework Directive 2008/56/EC; EU Nitrates Directive 91/676/EEC; Regulation, Evaluation, Authorization and Restriction of Chemicals (REACH) Regulation (EC) No 1907/2006.

Ocean Commission (IOC) has been promoting many projects dealing with the sustainable management of natural resources and the prevention of marine pollution.[83] LME projects regularly include a component dedicated to marine pollution.[84] Few regional organisations have the mandate to regulate diffuse land-based pollution sources, e.g. nutrient influx from agriculture or litter. Whilst there is a clear track record in reducing marine pollution (other than noise) from sea-based sources, e.g. from dumping or operational discharges from the oil and gas industry, reducing land-based pollution from diffuse sources remains a challenge.

### Example: The WIO-LaB Project on pollution from land-based sources

The Western Indian Ocean (WIO) is one of the most biodiverse ocean areas in the world and is home to diverse sea and plant life, including endangered species such as sea turtles and sharks. The countries of the WIO region are signatories to the Nairobi Convention for the Protection Management and Development of the Coastal and Marine Environment of the Western Indian Ocean Region.[85]

#### Type/mandate

Regional Seas programme implementing a GEF-funded project.

#### Scope and objectives

The project was designed and implemented to address marine pollution and degradation from land-based activities and sources, including physical alterations and destruction of habitats.

#### Structure and governance

Funded by the GEF as a GPA demonstration project and executed within the framework of the Nairobi Convention. The project was implemented domestically by the participating states.

#### Timeline

2004–2009

#### Challenges

- Limited human and financial resources.
- Project implementation delayed in some countries due to political changes or unrest and/or institutional restructuring.

#### Enabling conditions

- Ownership of national focal point institutions involved in project implementation and their ability and willingness to champion land-based pollution issues (e.g. via the endorsement of the adoption of a SAP and a Land-Based Sources and Activities (LBSA) Protocol).
- Stakeholder engagement with issues surrounding LBSA through national coordination mechanisms and processes to develop national plans of action (NPAs).
- In several cases, the process of developing NPAs was integrated into broader environmental management initiatives, such as efforts to implement Integrated Coastal Zone Management (ICZM), allowing for LBSA issues to garner greater attention.

#### Outcomes

The WIO-LaB Project was successful in:[86]

- Enhancing understanding and cooperation among the participating countries on LBSA in the WIO.
- Strengthening the legal basis for combating land-based pollution in the region, notably through the adoption of a Protocol on LBSA to the Nairobi Convention, an amended Nairobi Convention, and a Strategic Action Plan (WIO- SAP).
- Developing regional capacity and strengthening institutions, including through the development of the Nairobi Convention Clearinghouse and Information Sharing System.

[83] See Commission de l'Océan Indien <http://www.commissionoceanindien.org>.

[84] Ibid.

[85] Somalia, Kenya, Tanzania, Mozambique, South Africa and the island states of Mauritius, Comoros, Seychelles, Madagascar and France (La Réunion).

[86] UNEP Evaluation Office, 'Terminal Evaluation of UNEP/DGEF Project GF/6030-04-11 (4792) Addressing Land Based Activities in the Western Indian Ocean (WIO-LaB)' (2010).

- Supporting the development of a number of demonstration projects intended to showcase innovative and cost-effective approaches to addressing LBSA (e.g. natural solutions to wastewater management, such as a wetland-lagoon system for wastewater management at a correctional facility in Mombasa, Kenya, and a system of algal ponds for sewage treatment facilities in South Africa).

- Supporting the development of other projects focused on solid waste management, the use of traditional species to control soil erosion, and the enhancement of the ecological function of mangroves.

- Raising the profile of the Nairobi Convention within the WIO region, including within national ministries and regional bodies such as the Indian Ocean Commission.[87]

**Outlook and next steps**

The institutional framework and governance mechanisms established by the project at regional and national level remain functional under the auspices of the Nairobi Convention, paving the way for long-term implementation. Another project for the implementation of the SAP is currently being started, as is another GEF project focused on issues such as marine ecosystem health. Both are being executed by the Nairobi Convention secretariat.

**Lessons learned**

- National leaders and champions can play a crucial role in taking regional processes forward and encouraging greater participation by others in the region.

- Integrating single-issue and time-limited projects into broader national and regional mechanisms and efforts can provide benefits for both.

- Importance of strengthening regional conventions.

- International donor agencies have the potential to create synergistic relationships between financing, regional projects and frameworks, and national implementation.

## 3.2. Target 14.2. Sustainable management and protection

*"By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans".*

### Issues at stake

Coastal and marine ecosystems are threatened by a range of human activities, both on land and at sea, including fishing, tourism, shipping, oil and gas exploration and extraction, aquaculture, and mining. Coral reefs are threatened by rising temperatures and destructive fishing practices,[88] coastal forests and mangroves are endangered by agricultural expansion, unsustainable use, and bush fires,[89] and large-scale damming of rivers affects estuarine systems by altering water flows and sediment loads.[90]

### Mandates of regional organisations

Sustainable management and protection of the marine environment is a core component of the mandates of Regional Seas programmes, especially those that have adopted protocols regulating activities and promoting sustainable development in coastal zones (e.g. the protocol on ICZM in the Mediterranean).

As fisheries have a clear impact on the marine environment, RFMOs also have a crucial role to play. In this regard, "while some of the older regional fisheries bodies were exclusively aimed at the sustainable utilisation and conservation of target species", some have now included the ecosystem approach to fisheries (EAF) in their objectives.[91] For instance, the objective of South Pacific Regional Fisheries Manage-

[87] An increase in member contributions to the Convention was attributed to this increased visibility and acknowledgement of the value and relevance of the Convention.

[88] Bellwood et al., 'Confronting the Coral Reef Crisis' (2004) 429 Nature 827.

[89] Saenger et al., 'Global Status of Mangrove Ecosystems' (1983) 3 Environmentalist.

[90] Rosenberg et al., 'Global-Scale Environmental Effects of Hydrological Alterations: Introduction' (2000) 50 BioScience 746.

[91] Billé et al. (2016) n 11.

ment Organisation (SPRFMO) is, "through the application of the precautionary approach and an ecosystem approach to fisheries management, to ensure the long-term conservation and sustainable use of fishery resources and, in so doing, to safeguard the marine ecosystems in which these resources occur". Incorporating similar objectives, the EU's Common Fisheries Policy manages fisheries based on ecosystem considerations, establishing a series of regulations[92] and policies[93] to avoid and minimise negative environmental impacts of fisheries and aquaculture.[94]

Regional Seas Conventions assess which species and habitats need to be protected and develop lists of threatened and/or declining species that can assist in developing protective measures (e.g. OSPAR or HELCOM).[95] Other regional organisations have also developed regulations and activities dealing with the sustainable management and protection of the marine and coastal environment (e.g. ASEAN[96] and the EU[97]), and many projects have been developed by ad hoc regional mechanisms (e.g. LMEs,[98] and the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security[99]).

### Example: Baltic Maritime Spatial Planning (MSP) Roadmap

The Baltic Sea is a shallow brackish-water basin situated in northern Europe bordered by Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia, and Sweden. All of these countries work together within the framework of the Helsinki Commission (HELCOM). Maritime activities and shipping, industrial activities, agriculture, fishing, and other activities have resulted in eutrophication, build-up of hazardous contaminants, and depleted natural resources. Due to the intense pressures from human activities, the Baltic Sea has seen significant ecosystem changes that have been described as an ecosystem regime shift. Efforts to reverse these impacts have been partly successful (e.g. improved status of large predatory vertebrates), though many problems persist, including eutrophication despite considerable reduction of nutrient inputs (especially of phosphorus from point sources to the sea).

#### Type/mandate

Roadmap developed under the auspices of a Regional Seas programme.

#### Scope and objectives

The roadmap aims to develop coherent MSP throughout the Baltic by 2020, based on the ecosystem approach.

#### Structure and governance

Parties are responsible for domestic implementation. Funding for the Roadmap was provided by the EU Strategy for the Baltic Sea Region (EUSBSR) technical assistance funds to support the work under EUSBSR Horizontal Action Spatial Planning. The Roadmap was negotiated within a joint MSP working group of HELCOM and VASAB (Vision and Strategies around the Baltic Sea). The University of Eastern

[92] European Commission COM(2016) 134 final, 'Proposal for a Regulation on the conservation of fishery resources and the protection of marine ecosystems through technical measures' (11 March 2016).

[93] Commission of the European Communities COM(2008) 187 final, 'The role of the CFP in implementing an ecosystem approach to marine management' (11 April 2008).

[94] Regulation (EU) No 1380/2013 n 44.

[95] OSPAR Commission, 'List of Threatened and/or Declining Species & Habitats' <http://www.ospar.org/work-areas/bdc/species-habitats/list-of-threatened-declining-species-habitats>; HELCOM, 'HELCOM lists of threatened and/or declining species and biotopes/habitats in the Baltic Sea area' (2016) 113 Baltic Sea Environmental Proceedings <http://www.helcom.fi/Lists/Publications/BSEP113.pdf>.

[96] E.g. the ASEAN Socio-Cultural Community Blueprint 2009–2015 included a section on "Promoting the Sustainable Use of Coastal and Marine Resources", with the objective of ensuring sustainable management, protection, and public awareness. The Blueprint specified a number of actions to this end, including: enhancing inter-agency and inter-sectoral coordination; building capacity; and establishing a representative network of protected area. See ASEAN Cooperation on Environment, 'ASEAN Working Group on Coastal and Marine Environment (AWGCME)' <http://www.environment.asean.org/46-2/>.

[97] E.g. through the ambitious Marine Strategy Framework Directive, the objective of which is to more effectively protect Europe's marine environment.

[98] Various LME projects aim to assist States in adopting a science-driven, ecosystem-based approach to the management of human activities and move towards practical joint governance institutions and mechanisms to achieve place-based management. See Rochette et al. (2015) n 35.

[99] E.g. the 10-year CTI-CFF Regional Plan of Action (CTI RPOA) adopted in 2009 aims to, inter alia, strengthen the management of seascapes, promote an ecosystem approach to fisheries management, and establish and improve effective management of marine protected areas.

Finland Law School provided expert input to the drafting process.

### Timeline

2013–2020

### Challenges

- Considerable differences exist in the capacities and approaches among the participating countries.
- Different levels of adoption and implementation of the MSP tools developed.
- Potential issues with coherence across borders in cases of insufficient transboundary consultation, or across sectorial policies, partly owing to the fact that agriculture and fisheries are the responsibility of the EU and measures in these areas are dependent on EU processes.[100]

### Enabling conditions

- HELCOM is a well-established and longstanding Regional Seas programme with a history of high political will and cooperation.
- The Baltic Sea region plays host to "a burgeoning and unusually mature set of policy networks encompassing efforts to clean up and protect the Baltic Sea".[101]
- The ecosystem approach was adopted by the Contracting Parties in HELCOM in 2003 and since then its application has advanced to serve as the framework for efforts aimed at achieving good ecological status of the Baltic Sea.[102]
- HELCOM has previously been successful in reversing environmental decline through improving the availability of relevant information, identifying parties that are struggling to implement recommendations, and helping target policy-making and support to key areas.[103]
- An established willingness of more advanced countries to work with the other countries to enhance capacity.

### Outcomes

The HELCOM-VASAB MSP working group, and its overarching roadmap, is the only formal cooperation on MSP at the sea basin scale in Europe that involves all riparian States. The Roadmap outlines the regional level actions to be taken by members, structured around seven thematic steps: (1) intergovernmental cooperation; (2) public participation; (3) the ecosystem approach; (4) information and data; (5) education; (6) national and regional frameworks for MSP; and (7) evaluation and follow-up.

Concrete steps towards implementation have already been taken:

- The Baltic Sea broad-scale MSP Principles have been tested through projects in 2010–2012 and have proven to be relevant and well suited to establishing MSP in the region.
- The regional Guideline for the implementation of ecosystem-based approach to MSP in the Baltic Sea, as well as Guidelines on transboundary consultations, public participation, and co-operation, have been adopted and establish a common approach on these issues among the countries.[104]

### Outlook and next steps

The roadmap is a package of steps toward establishment of MSP in the region and parties continue to progress toward their ambitious 2020 goal. HELCOM members will update the Roadmap as necessary and assess implementation on a biennial basis. The history of cooperation in the region and considerable ongoing efforts suggest a positive outlook for the future of MSP implementation in the Baltic.

[100] HELCOM established a Fisheries-Environment forum in 2008 as a platform for regional exchanges between the EU, fisheries and environment Ministries in the region, and EU Directorate Generals. This forum may help to bridge this gap.

[101] Van Deveer, 'Networked Baltic Environmental Cooperation' (2011) 42 Journal of Baltic Studies 37.

[102] HELCOM Extraordinary Ministerial Meeting, 'HELCOM Baltic Sea Action Plan' (15 November 2007) <http://www.helcom.fi/Documents/Baltic%20sea%20action%20plan/BSAP_Final.pdf>; HELCOM, 'Ecosystem Health of the Baltic Sea 2003–2007: HELCOM Initial Holistic Assessment' (2010) 122 Baltic Sea Environmental Proceedings <http://www.helcom.fi/Lists/Publications/BSEP122.pdf>.

[103] Selin and VanDeveer, 'Baltic Sea Hazardous Substances Management: Results and Challenges' (2004) 33 Ambio 153.

[104] HELCOM, 'MSP Guidelines' <http://www.helcom.fi/action-areas/maritime-spatial-planning/msp-guidelines/>.

**Lessons learned**

- Intra-regional capacity building efforts can help support implementation of ambitious ocean governance policies.
- Regional processes can create synergies through sharing expertise, developing joint processes, and harmonising efforts.
- Roadmaps can be an effective means of stimulating action towards shared goals.

### 3.3. Target 14.3. Ocean acidification

*"Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels."*

#### Issues at stake

The release of carbon dioxide ($CO_2$) from human activities has increased the amount of $CO_2$ in the atmosphere. As the ocean absorbs $CO_2$ from the atmosphere, this increase has resulted in the gradual acidification of seawater – a 30% increase between 1750 and today.[105]

The potential impacts of ocean acidification are wide ranging. A number of species-specific impacts have been identified, with many organisms showing adverse effects, including: reduced ability to form and maintain shells and skeletons; reduced survival rates; slower growth rates; and impeded larval development.[106] Large parts of the polar ocean will become corrosive to the unprotected shells of calcareous marine organisms in the coming decades, and changes in carbonate chemistry of the tropical ocean may hamper or prevent coral reef growth.[107]

Gattuso et al. (2015) note that "impacts on key marine and coastal organisms, ecosystems, and services are already detectable, and several will face high risk of impacts well before 2100, even under the low-emissions scenario (...) These impacts will occur across all latitudes, making this a global concern beyond the north/south divide".[108]

Though considerable uncertainties remain, there is growing scientific evidence that ocean acidification will affect key resources and ecosystems services,[109] thereby requiring changes to marine, coastal, and fisheries management.[110] The effects of ocean acidification are likely to have far-reaching negative impacts on biodiversity, food webs, aquaculture, and fisheries. For example, global fish catch potential is expected to decrease, though regional impacts will vary as fish stocks have started shifting in latitude or depth. Additionally, ecosystem impacts of ocean acidification, and how to govern them, cannot easily be isolated from the range of impacts from climate change and ocean change.[111]

#### Mandates of regional organisations

While ocean acidification is a global concern, the mandates of some regional organisations may provide them with a basis for contributing to the response to this issue, particularly through scientific cooperation, harmonisation of national actions, and adaptation. However, ocean acidification has not yet been considered in-depth at the regional level.

Whereas mitigation of ocean acidification is largely outside the regulatory scope of ocean governance institutions and instruments, Regional Seas programmes can address the impacts of ocean acidification through activities related to adaptation or measures that can help to support resilience of ecosystems. To date, few activities have been developed in this

[105] The average pH of ocean surface water has decreased from a calculated value of 8.2 in 1750 to a measured value of approximately 8.1 today. The pH scale is logarithmic, so the 0.1 decline represents a much greater increase of acidity overall: Ocean Health Index, 'Ocean Acidification' <http://www.oceanhealthindex.org/methodology/components/ocean-acidification>.

[106] Doney et al., 'Ocean Acidification: The Other CO 2Problem' (2009) 1 Annual Review of Marine Science 169; IGBP, UNESCO-IOC and SCOR, 'Ocean Acidification: Summary for Policymakers' (2013) <http://www.cdc.gov/injury/images/lc-charts/leading_causes_of_death_by_age_group_2013-a.gif>.

[107] Ibid.

[108] Gattuso et al. (2015) n 6.

[109] Howes et al., 'The Oceans 2015 Initiative, Part I: An Updated Synthesis of the Observed and Projected Impacts of Climate Change on Physical and Biological Processes in the Oceans' (2015) <http://www.iddri.org/Publications/Collections/Analyses/ST0215.pdf>; Weatherdon et al., 'Observed and Projected Impacts of Climate Change on Marine Fisheries, Aquaculture, Coastal Tourism, and Human Health: An Update' (2016) Frontiers in Marine Science.

[110] See, e.g. Heenan et al., 'A Climate-Informed, Ecosystem Approach to Fisheries Management' (2015) 57 Marine Policy 182.

[111] Ibid.

area, though notable exceptions include: (1) the parties to the Mediterranean Action Plan, which have adopted a regional climate change mitigation and adaptation strategy;[112] and (2) the Coral Triangle region, where regional ocean acidification and its impacts have been integrated into policy on climate change adaptation (CCA), regional fisheries management, and marine protected area (MPA) management.

As ocean acidification impacts the species they manage, fisheries bodies will need to develop knowledge and possibly adopt management measures, as appropriate. For example, relevant monitoring and environmental impact assessments may need to be introduced or revised, or catch allowances may need to be adjusted to take ocean acidification into account. RFMO members are advised by their respective scientific bodies but, to date, it seems that they have not included ocean acidification into their advice or scientific strategies.[113]

To begin to fill this gap, the Pacific Community's Oceanic Fisheries Program undertook a two-year project to model the expected impact of ocean acidification on yellowfin tuna in the Pacific Ocean.[114] The results were reported to the Scientific Committees of the relevant RFMOs[115] in order to help them make more informed decisions regarding management of tuna resources. In this regard, the Scientific Advisory Committee of the Inter-American Tropical Tuna Commission (IATTC) at its 6th meeting in 2015 advised that the potential impacts of ocean acidification on the development, survival and growth of yellowfin eggs and larvae should be an important consideration in future assessments of tunas and in the development of spawning-habitat indices.[116]

Other ROG organisations have also started addressing ocean acidification. The Coral Triangle Initiative, through its Regional Plan of Action, is working on harmonising the approaches of six countries to ocean acidification and has made efforts to link regional acidification monitoring to global initiatives, the global political agenda (by providing a common regional position to various international conferences and processes), and to fisheries management and climate change adaptation planning and strategies at various levels.[117] In the same way, the Pacific Islands Partnership on Ocean Acidification, a regional initiative funded by New Zealand and implemented by the Secretariat of the Pacific Regional Environment Programme (SPREP), aims to strengthen the resilience of Pacific island nations to identify and carry out practical adaptation actions.[118] Additionally, regional measures will play an important role in implementing the recently adopted Voluntary Work Plan for Biodiversity in Cold Areas under the CBD to identify and protect habitats that have not been affected by the impacts of ocean acidification. These can act as refugia sites, and enhance the adaptive capacity of cold-water ecosystems.[119]

[112] The Regional Climate Change Adaptation Framework for the Mediterranean Marine and Coastal Areas (RCCAF).

[113] Herr et al., *Ocean Acidification: International Policy and Governance Options* (IUCN, 2014) <http://www.cmsdata.iucn.org/downloads/ocean_acidification_international_policy_and_governence_iucn_2014.pdf>.

[114] See SPC Ocean Fisheries Programme, 'Ocean acidification impacts' <http://www.spc.int/Oceanfish/en/major-projects/climate-change/ocean-acidification-impacts> and Pelagic Fisheries Research Programme of the JIMAR, 'PFRP Oceanography Projects Ocean Acidification. Impacts on Tropical Tuna Populations' <http://www.soest.hawaii.edu/PFRP/ocean/nicol_ocean_acid.htm>.

[115] WCPFC, IATTC and WPFMC.

[116] Margulies et al., 'Review of Research at the Achotines Laboratory' <https://www.iattc.org/Meetings/Meetings2015/6SAC/PDFs/SAC-06-10c-Research-at-Achotines-Laboratory.pdf>.

[117] CTI-CFF, 'Coral Triangle Initiative Regional Plan of Action' (1 September 2016) <http://www.coraltriangleinitiative.org/sites/all/modules/contrib/pubdlcnt/pubdlcnt.php?file=/sites/default/files/resources/CTI-CFF%20Regional%20Plan%20Of%20Action%20(RPOA)%20.pdf&nid=6651>.

[118] Secretariat of the Pacific Regional Environment Programme, 'News Feature: Taking action on Ocean Acidification in the Pacific islands' <https://www.sprep.org/climate-change/news-feature-taking-action-on-ocean-acidification-in-the-pacific-islands>.

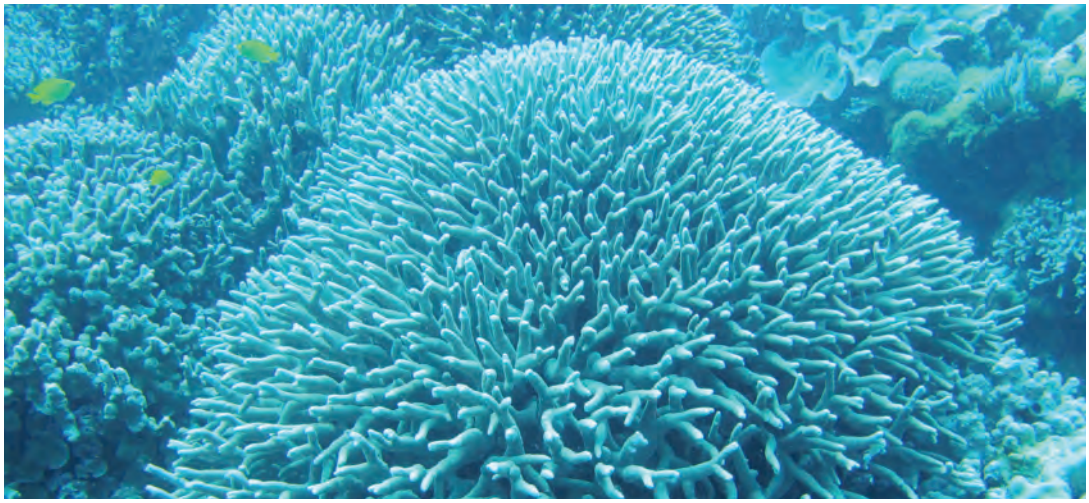
[119] CBD, COP13, CBD/COP/DEC/XIII/11, 'Key scientific and technical needs related to the implementation of the Strategic Plan for Biodiversity 2011–2020 and related research' (10 December 2016). Such measures could include Ecologically or Biologically Significant Marine Areas (EBSAs) designated under the CBD and Vulnerable Marine Ecosystems identified by RFMOs (see Dunn et al., 'The Convention on Biological Diversity's Ecologically or Biologically Significant Areas: Origins, Development, and Current Status' (2014) 49 Marine Policy 137; and Wright et al., 'Advancing Marine Biodiversity Protection through Regional Fisheries Management: A Review of Bottom Fisheries Closures in Areas beyond National Jurisdiction' (2015) 61 Marine Policy 134).

### Example: Ocean acidification within the Coral Triangle Initiative

The Coral Triangle is considered the global epicentre of marine biological diversity, which provides food security, economic security, livelihood, and culture to the peoples of the region. The participating countries – Indonesia, Malaysia, Papua New Guinea, the Philippines, Timor-Leste, and the Solomon Islands – are working together to address the impacts of ocean acidification as part of a holistic approach to climate change adaptation within the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF).

#### Challenges

- Rapid economic and population growth.
- The region has a wide range of social ecological conditions, cultures, histories, and capacities.
- Inherent challenges of developing robust institutions across diverse national contexts.
- Varied levels of implementation of national action plans in different jurisdictions.



**Coral Reef, Siquijor Island, Philippines**



#### Type/mandate

Multilateral partnership.

#### Scope and objectives

The CTI-CFF aims to accelerate efforts to safeguard coastal and marine resources and communities. Ocean acidification and its impacts are addressed through a comprehensive set of regional-to-local approaches.

#### Structure and governance

The CTI-CFF is a multilateral partnership with a permanent Secretariat, supported by member States, international donor organizations and governments, and local and international NGOs.

#### Timeline

2009–ongoing

#### Enabling conditions

- CTI-CFF is an ambitious initiative backed by strong political will and cooperation between member countries, and considerable international support and funding.
- CTI-CFF leaders believe climate change will dramatically affect coastal communities and ecosystems in the Coral Triangle and that understanding the extent of these changes and their impacts as well as identifying early adaptation actions are essential to protecting communities and marine and coastal resources.
- Actions aimed at local, sub-national, national, and regional scales.
- Ocean acidification is integrated holistically into actions and approaches under the CTI-CFF, as one of a range of issues posed by climate change.

- Participants in the implementation of CTI-CFF actions report that they place a high level of importance on the regional level of marine governance.

**Outcomes**

A number of concrete actions on ocean acidification have been taken under the CTI-CFF:

- Establishment of ocean acidification monitoring in Timor-Leste, Philippines, and Indonesia.
- Training marine management practitioners in the use of climate and ocean acidification monitoring data in decision-making.
- Integrating ocean acidification science and information into management decision-making into the Coral Triangle System of MPAs and other MPAs across the region.
- Outreach to local governance officials and local communities about ocean acidification and its impacts to coastal communities.
- Fostering peer-to-peer scientific partnerships among the countries, as well as international scientific partnerships.
- Adoption of the Ecosystem Approach to Fisheries Management Regional Framework, which includes an objective dealing explicitly with ocean acidification.[120]

**Outlook and next steps**

The development of ocean acidification actions and policies within the framework of the CTI-CFF are in the relatively early stages of development and implementation, but these innovations are very promising and highlight the region as a global leader on this issue. The ambitious integrated approach of the CTI-CFF is at the forefront of regional marine resource management, while the emergence of a "Coral Triangle identity" and improved cooperation between partners during the life of the Initiative bodes well for future development and implementation.

**Lessons learned**

- Developing countries can effectively pool their resources to successfully tackle key marine issues.
- In spite of uncertainties, ROG initiatives can integrate activities on ocean acidification into their programmes of work and begin to take action.
- Strong leadership, combined with a pressing environmental imperative for action, can ensure that emerging issues are taken into consideration in ROG processes.

### 3.4. Target 14.4. Sustainable fisheries

*"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."*

**Issues at stake**

Target 14.4 aims to improve the sustainability of fisheries, especially through action on overfishing, IUU fishing, and destructive fishing practices. The FAO reports that the proportion of stocks fished within biologically sustainable levels has declined from 90% in 1974 to 71.2% in 2011.[121] In 2011, 28.8% of fish stocks were estimated to be overfished, while a further 61.3% of stocks were fully fished. Furthermore, the FAO collates and publishes catch data self-reported by States; other studies estimate that true catches are much higher.[122]

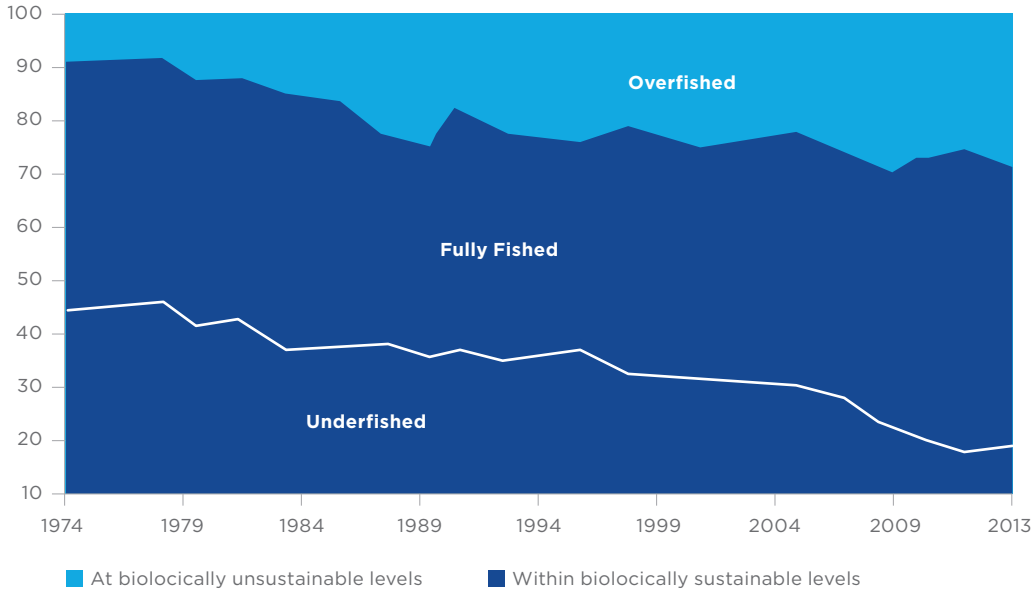
The World Bank estimates that annual lost fisheries revenues in 2012 were $83 billion. These "sunken billions represent the potential annual benefits that could accrue to the sector following both major reform of fisheries governance and a period of years during which fish stocks would be allowed to recover to a higher, more sustainable, and more productive level".[123]

[120] "By 2015, enhance the adaptation and/or resilience of fishers and coastal communities from the impacts of climate change and ocean acidification on fisheries and marine ecosystems by implementing the EAFM Framework" (XX)

[121] FAO, 'The State of World Fisheries and Aquaculture 2016' (FAO, 2016) <http://www.fao.org/3/a-i5555e.pdf>.

[122] In particular, Pauly and Zeller use reconstructed catch data to argue that global catches peaked at 130 million tons, rather than the 86 million tons in 1996 reported by the FAO, and that catches are declining much more strongly than FAO data suggests. This underreporting is partly due to the lack of attention paid to small-scale fisheries, discarded bycatch, and IUU fishing (Pauly and Zeller, 'Catch Reconstructions Reveal That Global Marine Fisheries Catches Are Higher than Reported and Declining' (2016) 7 Nature Communications 10244).

[123] World Bank, 'The Sunken Billions Revisited: Progress and Challenges in Global Marine Fisheries' (2015) <http://www.worldbank.org/en/topic/environment/brief/the-sunken-billions-revisited-progress-and-challenges-in-global-marine-fisheries>.




Notes: Dark Shading = within biologically sustainable levels; light shading = at biologically unsustainable levels. The light line divides the stocks within biologically sustainable levels into two subcategories: fully fished (above the line) and underfished (below the line).

**Figure 7: Global Trends in the State of World Marine Fish Stocks since 1974**

**Source:** FAO[124]

IUU fishing[125] contributes to the problem.[126] Though difficult to precisely estimate, IUU fishing has escalated in recent years and is thought to account for somewhere between 11–26 million tonnes per year, i.e. an average loss of 18% across all fisheries and a loss of value of between US$10–23.5 billion.[127] IUU fishing results in the direct loss of the value of the catches that could be taken by local fishermen and can have a significant impact on the sustainability of the targeted species, bycatch species and the marine ecosystem.

In addition to this overexploitation of fish stocks, certain fishing practices can be destructive to the marine environment, including: bottom trawling;[128] methods or target stocks that causes high levels of bycatch;[129] the use of poison and explosives; and ghost fishing, whereby abandoned or lost nets and gear continue to catch fish as they drift around the ocean.[130]

[124] FAO (2016) n 121.

[125] Illegal fishing refers to activities conducted by vessels: in foreign waters without the permission of that State or in contravention of its laws and regulations; flying the flag of States that are parties to a relevant RFMO but operate in contravention of the relevant conservation and management measures or international law; or in violation of national laws or international obligations. Unreported fishing refers to fishing activities, which have not been reported (or have been misreported) to the relevant national authority or RFMO. Unregulated fishing refers to fishing activities conducted by unflagged vessels, or by vessels flying the flag of a State not party to the applicable RFMO, in a manner that is not consistent with or contravenes the relevant conservation and management measures. See FAO, 'International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing' <http://www.fao.org/fishery/ipoa-iuu/en>.

[126] Costello et al., 'Status and Solutions for the World's Unassessed Fisheries' (2012) 338 Science.

[127] Agnew et al., 'Estimating the Worldwide Extent of Illegal Fishing' (2009) 4 PLoS ONE.

[128] Althaus et al., 'Impacts of Bottom Trawling on Deep-Coral Ecosystems of Seamounts Are Long-Lasting' (2009) 397 Marine Ecology Progress Series 279; Pusceddu et al., 'Chronic and Intensive Bottom Trawling Impairs Deep-Sea Biodiversity and Ecosystem Functioning' (2014) 111 Proceedings of the National Academy of Sciences 8861.

[129] E.g. the FAO estimates that the world average bycatch to catch ratio for tropical shrimp trawling is 5.7:1, i.e. for each kg of shrimp caught, 5.7kg of bycatch is also caught (Clucas, 'A Study of the Options for Utilization of Bycatch and Discards from Marine Capture Fisheries' (FAO, 1997) 928 FAO fisheries circular FIIU/C928).

[130] See Ghost Fishing 'The Problem' <http://www.ghostfishing.org/the-problem/>.

### Mandates of regional organisations

Regional organisations are increasingly developing stock conservation and management policies based on the maximum sustainable yield (MSY) using science-based management plans as main instruments to regulate fishing activities according to their biological stock limits.[131]

The EU established a concrete MSY policy in the last reform of its CFP by adopting the objective to "restore and maintain fish stocks above biomass levels capable of producing maximum sustainable yield, by achieving the maximum sustainable yield exploitation rate by 2015 where possible and, on a progressive, incremental basis at the latest by 2020".[132] Science-based management plans have been a key instrument in European fisheries management since 2004, with almost all important stocks and fisheries currently subject to such a plan. These plans contain an objective for each of the fish stocks concerned, and in some cases are accompanied by a tailor-made roadmap for achieving the identified objectives. Some plans also include fisheries specific technical measures and/or control rules. In recent years, the EU has been moving from single-species to multi-species management plans, including through the use of discard measures.[133]

In ABNJ, RFMOs have a central role to play in regulating fisheries. Many have incorporated objectives aimed at ensuring sustainable exploitation, including through the use of MSY targets and the precautionary approach in their framework instruments. Several have also established science-based management plans to regulate the setting of catch quotas and/or fishing effort, together with technical and control measures.[134] RFMOs are also the "primary international bodies for development and adoption of market-related measures to combat IUU fishing" and "as stocks decline, a number of RFMOs have adopted increasingly stringent rules to manage the fisheries for which they are responsible".[135] Combatting IUU fishing has become an international priority and RFMOs have adopted a range of measures including:[136]

- Regional registers of authorised fishing vessels.[137]
- Other registers and information systems, including vessel blacklists.
- Improved monitoring, control and surveillance, including mandatory satellite vessel monitoring systems (VMS).
- Catch documentation systems.
- Inspection and enforcement.
- Cooperation with non-members.

[131] Though note that the use of MSY as a target has been criticised. See, e.g. Diz, *Fisheries management in areas beyond national jurisdiction: the impact of ecosystem based law-making* (Martinus Nijhoff Publishers, 2013). SDG14.4 is more aligned with the precautionary approach to fisheries (and the identification of precautionary reference points, as per UNFSA), under which MSY is the minimum, i.e. a limit that should be avoided, rather than a target.

[132] Regulation (EU) No 1380/2013 n 44.

[133] European Commission COM/2014/0614 final, 'Proposal for a Regulation of the European Parliament and of the Council establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks' (6 October 2014).

[134] Such as regimes involving spatial and/or temporal closures as well as other measures to limit the fishing footprint (e.g. exploratory fishing areas) by introducing stringent pre-conditions.

[135] Swan, 'Implementation of the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing: Relationship To, and Potential Effects On, Fisheries Management in the Mediterranean' (General Fisheries Commission for the Mediterranean (FAO), 2005) <http://www.fao.org/docrep/008/a0098e/a0098e00.htm>.

[136] Ibid.

[137] E.g. Tuna-Org, a collaboration between five tuna RFMOs, maintains a global list of authorised tuna fishing vessels. See Tuna-Org, 'Global List of authorized tuna fishing vessels' <http://www.tuna-org.org/GlobalTVR.htm>.

Some major market States and trading blocs have adopted legislative and administrative measures designed to stem the flow of IUU fish to the market. The EU has passed a regulation on IUU fishing[138] that shuts fishers out of the EU market if they do not comply with the rules.[139] Other provisions reinforce surveillance activities and the identification of IUU operators and improve the application of sanctions. ASEAN has developed guidelines for preventing the entry of fish and fishery products from IUU fishing activities into the supply chain.[140]

Other regional efforts have focused on improving monitoring, control and surveillance (MCS). The Indian Ocean Commission (IOC) signed a framework partnership with the EU in 2007, implementing a regional plan for fisheries surveillance in the South Western Indian Ocean. The Plan was designed to strengthen cooperation between the parties and facilitate the organisation of regional joint patrols. The Plan has helped to strengthen national surveillance efforts by pooling, coordinating and optimising the use of patrol vessels of IOC Member States. In the same way, the Southern African Development Community (SADC) is currently establishing a Regional Fisheries Monitoring Center with assistance from the African Development Bank that will set up a regionally harmonised fishing vessel register and vessel monitoring system. The centre will also facilitate data collections and sharing, as well as coordinate observer and surveillance efforts.

### Example: FISH-i Africa

The WIO is home to abundant fish resources that support local economies, providing food and jobs. The region is also a hotspot for IUU fishing, which threatens to undermine legitimate industry and national efforts to build sustainable ocean economies. The eight coastal countries participating in the Fish-i project – Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia and Tanzania – recognised that their combined waters of over 5 million square kilometres could not be effectively policed individually and sought to cooperate to better combat IUU fishing.

#### Type/mandate

Collaborative project between the eight participating States.

#### Scope and objectives

Improving cooperation and intelligence sharing in order to take action against IUU fishing operators.

#### Structure and governance

The eight Task Force countries work principally through national fisheries enforcement officers. Task Force meetings provide an opportunity for discussion, analysis, strategy building and planning. FISH-I Africa works in close cooperation with relevant regional organisations (e.g. Indian Ocean Tuna Commission (IOTC), IOC, SADC) and cooperates with international organisations active in the fight against IUU fishing (FAO, UN Office on Drugs and Crime (UNODC), INTERPOL). The project is coordinated by Stop Illegal Fishing (SIF) and supported by a number of international bodies and donors, including New Partnership for Africa's Development (NEPAD – the technical body of the African Union), The Pew Charitable Trusts, Fisheries Analytics Capacity Think-tank, and Nordenfjeldske Development Services.

#### Timeline

2012–present

#### Challenges

- Limited capacity and resources within national agencies responsible for MCS. This at times resulted in delayed action within the Task Force and slower progress on cases.

[138] Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing.

[139] See Leroy et al., 'The EU Restrictive Trade Measures against IUU Fishing' (2016) 64 Marine Policy 82.

[140] Southeast Asian Fisheries Development Center/Marine Fishery Resources Development and Management Department, 'ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain' (2015) <http://www.asean.org/storage/images/2015/November/AMAF/App 9 – ASEAN Guidelines IUU SSOM36th AMAF final.pdf>.

- Inherent complexity of building cases against IUU fishers demands a high level of cooperation and considerable time and resources.
- Political instability and domestic shifts sometimes hampered progress and influenced decision-making.
- In some cases, unclear or weak legal frameworks have presented challenges for interpretation and decision-making.

**Enabling conditions**

- A clear and present economic imperative for improving cooperation and enforcement.
- Regular meetings that provide an opportunity for discussion and analysis, while also building relationships, trust, and a sense of accountability between parties.
- Coordinating and Technical Advisory Teams providing essential and timely information to advance cases and support action.
- Establishment of a secure web-based information-sharing platform.

**Outcomes**

FISH-i has resulted in improved enforcement on the water and the members have been able to take legal action against illegal fishing operators. This has resulted in a range of successful enforcement actions, including:

- Denial of access to illegal fishing vessels.
- Uncovering fraudulent licenses.
- De-flagging of IUU listed fishing vessels.
- Discovery of false vessel identities.
- Tracking and location of escaped vessels.

This has been supported by a number of procedural advancements including:

- Systematic gathering, analysis and strategic use of information. Information and intelligence sharing through the online system.
- Information sharing on flagged and licensed fishing vessels and those active in their fishing zones and ports. Task Force countries can access intelligence and information that can help identify and track down illegal operators in their Exclusive Economic Zones (EEZs).
- Improved regional cooperation resulting in timely communication and provision of advice. This has facilitated more efficient and effective decision-making regarding potential cases of IUU fishing.
- Increased awareness and understanding of IUU fishing issues.

**Outlook and next steps**

The outlook for FISH-i Africa is positive, with the project having built trust among countries and developed new networks and modalities for cooperation. Next steps include:

- The FISH-i network cooperating with regional and international organisations.
- Increasing information sharing within the Task Force to include additional information, such as vessel monitoring information, full and up-dated licence and registration lists, exit and entry reports, and inspection and violation reports.
- Strengthening inter-agency cooperation nationally and regionally and improving strategic and integrated approaches to developing cases.
- Greater political support.
- Encouraging harmonisation of fisheries legal frameworks to increase coherence and deterrence.

**Lessons learned**

- Political support from regional champions helped in successfully launching the initiative, maintaining momentum and demonstrating a strong will to bring illegal operators to justice.
- Regular communication between Task Force members through the online FISH-i communications platform facilitated information sharing and transparency.
- The power of media and communications as a means to spur action, to keep the momentum in compliance cases, and to gain buy-in at operational and political levels.

- Several cases demonstrated that this is a global issue requiring transboundary cooperation – vessels move and trade internationally and the fight against illegal fishing must also be international.
- Ratifying and implementing regional, continental, and international agreements on fishery related issues is important to facilitate national actions against IUU fishing operators (e.g. the 2009 FAO Port State Measures Agreement and the IOTC 2010 Resolution on Port State measures).


**Figure 8: The FV Premier, a South Korean purse seine fishing vessel illegally breaking a moratorium on fishing in Liberian waters, was tracked and held accountable with the support of FISH-i Africa. A US$2million settlement payment was ultimately-made to Liberia.**

**Source:** FISH-i Africa[141]

### 3.5. Target 14.5. Conservation

*"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."*

#### Issues at stake

While sustainably using and managing resources is an essential component of effective management of marine ecosystems, there is widespread scientific consensus that conservation of areas is also necessary. This target to some extent echoes CBD Aichi Biodiversity Target 11, which states that by 2020, at least 10 per cent of coastal and marine areas should be "conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures". Marine conservation, management and planning tools, especially MPAs, have typically been the preferred method for policy-makers to achieve conservation objectives.

#### Mandates of regional organisations

Regional Seas programmes have a mandate on environmental protection and many of them have instituted protocols to allow for the designation of MPAs. In the Mediterranean, the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol)[142] has established the List of Specially Protected Areas of Mediterranean Importance in order to promote cooperation in the management and conservation of natural areas, while HELCOM has established a MPAs network, under which the nine States parties have designated 174 conservation sites.[143]

[141] Available online at: fish-i-africa.org/image-gallery/

[142] Protocol concerning specially protected areas and biological diversity in the Mediterranean (Protocol to the Convention for the Protection of the Mediterranean Sea against Pollution, 1976 – Barcelona Convention).

[143] HELCOM, 'Marine Protected Areas' <http://www.helcom.fi/action-areas/marine-protected-areas>.

In 2006, the UNGA adopted a resolution aimed at ensuring the long-term sustainability of deep-sea fish stocks and vulnerable marine ecosystems (VMEs), which require specific measures to be taken, including closure of areas to bottom fishing where VMEs are known or likely to occur.[144] As a result, RFMOs have since instituted a variety of measures, including bottom fisheries closures.[145] In the Northeast Atlantic, the OSPAR Commission and the North-East Atlantic Fisheries Commission (NEAFC) are cooperating through a "collective arrangement" to establish a framework for coordinated management (see page 55).[146]

There are also regional initiatives outside Regional Seas and RFMOs that aim to coordinate national efforts. These include: the Coral Triangle MPA System, which aims to place 20% of each major marine and coastal habitats in the Coral Triangle under protected status by 2020 by scaling up and linking individual MPAs;[147] and the EU's Natura 2000 network, the largest coordinated network of protected areas in the world, which covers almost 6% of the EU's marine territory.[148]

### Example: OSPAR MPA Network

The Northeast Atlantic is a heavily industrialised sea that makes a significant contribution to the economies of the countries that bound it. OSPAR began in 1972,[149] and in 1998 ministers from OSPAR Contracting Parties agreed to promote the establishment of a network of MPAs. In 2003, a formal Recommendation was adopted to establish an ecologically coherent and well-managed network of MPAs in the Northeast Atlantic.[150]

**Type/mandate**

Network of MPAs under a Regional Seas programmes.

**Scope and objectives**

The OSPAR network of MPAs aims to:

- protect, conserve and restore species, habitats and ecological processes that have been adversely affected by human activities;
- prevent degradation of the marine environment, following the precautionary principle; and
- protect and conserve representative areas in the OSPAR Convention area. OSPAR aims to ensure an ecologically coherent and well-managed network of MPAs.

**Structure and governance**

OSPAR works on a collaborative basis, with a work programme driven and delivered by its Contracting Parties. MPAs are established at the national level (implementing and taking into account OSPAR Decisions, Recommendations, and Guidelines) and are then nominated for inclusion in the OSPAR network.

**Timeline**

2004–present

[144] UNGA Resolution A/RES/61/105, 'Sustainable fisheries, including through the 1995 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, and related instruments' (2006). Section 83(c) reads: "In respect of areas where vulnerable marine ecosystems (...) are known to occur or are likely to occur based on the best available scientific information, to close such areas to bottom fishing and ensure that such activities do not proceed unless conservation and management measures have been established to prevent significant adverse impacts on vulnerable marine ecosystems".

[145] Wright et al. (2015) n 119.

[146] Hoydal et al., 'Regional governance: the case of NEAFC and OSPAR' in Garcia et al. (2014) n 41, Chapter 16: 225–238.

[147] Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security, 'Collaboration: Marine Protected Areas' <http://www.coraltriangleinitiative.org/collaboration-marine-protected-areas>.

[148] European Commission, 'Natura 2000' <http://www.ec.europa.eu/environment/nature/natura2000/index_en.htm>.

[149] OSPAR began its life as the 1972 Oslo Convention, which was combined with the 1974 Paris Convention in 1992. See OSPAR Commission, 'History' <http://www.ospar.org/about/history>.

[150] OSPAR Commission, 'OSPAR Recommendation 2003/3 on a Network of Marine Protected Areas' (2003).

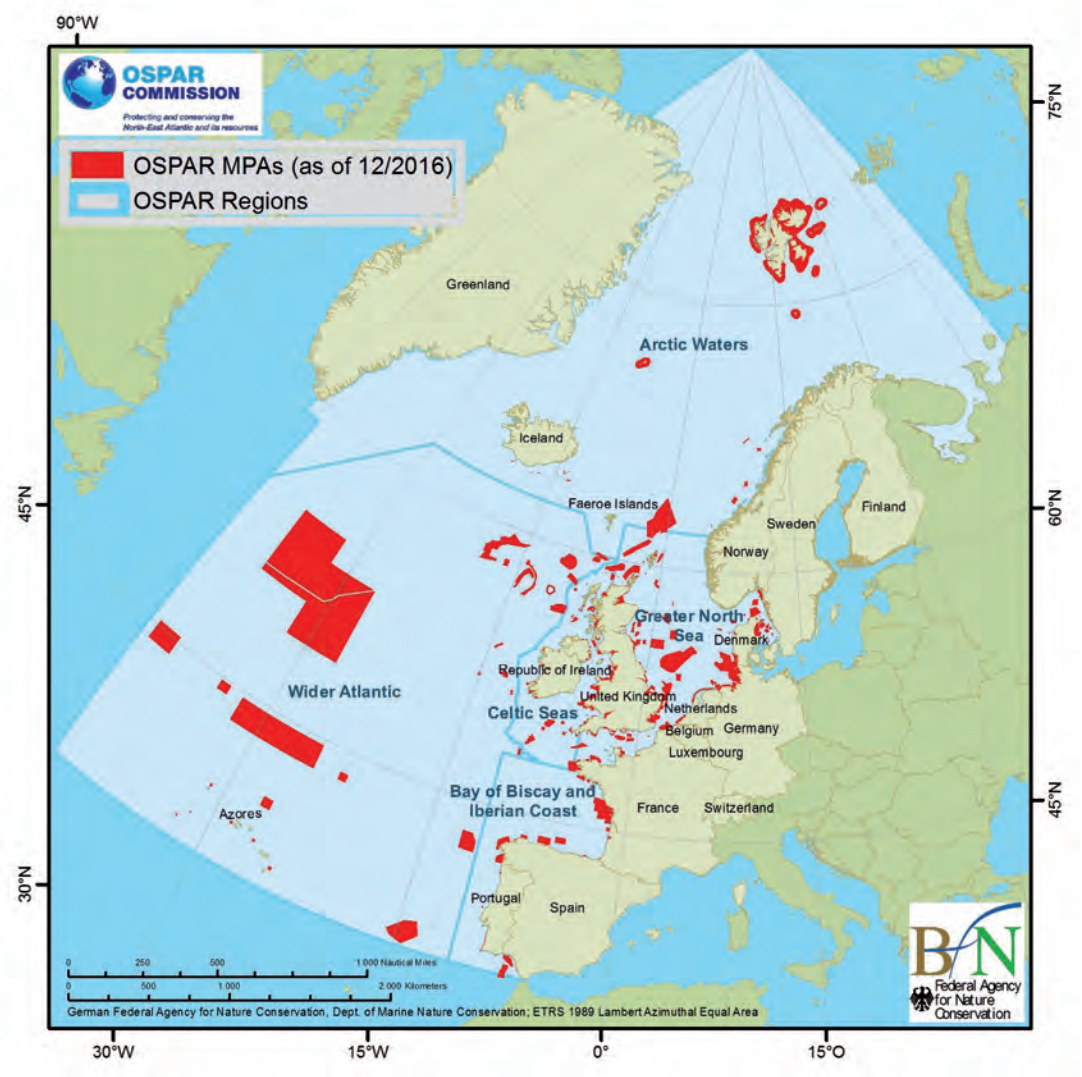



**Figure 9: The OSPAR MPA network**

**Source:** OSPAR Secretariat

### Challenges

- OSPAR does not have the mandate to manage all activities that may have an impact on the marine environment.
- Lack of data has been identified as a barrier to better understanding both ecological coherence and management status of MPAs in the OSPAR Convention area.

### Enabling conditions

- OSPAR's Contracting Parties are all developed countries within which there is substantial political will and commitment to tackling environmental issues.
- OSPAR has four decades of experience and has been effective in ensuring cooperation between its Contracting Parties to monitor and reduce discharge of hazardous substances, regulate offshore oil and gas activity and establish ecological quality objectives.
- Complementary EU regulations requiring conservation action.

### Outcomes

- OSPAR Contracting Parties have nominated 423 MPAS, both within and beyond their national waters.[151]
- Collectively, Contracting Parties have established the world's first network of MPAs in ABNJ.

[151] OSPAR Fact Sheet, Status of the OSPAR Network of Marine Protected Areas <https://www.ospar.org/site/assets/files/1173/assessment_sheet_mpa_status_2015.pdf>.

- In total, the OSPAR Network of MPAs covers a total surface area of 789,125 square kilometres, 5.8% of the OSPAR area.
- Regular assessments of the status of the MPA network.
- Development of a range of guidance documents, including on identifying and selecting sites to be included in the OSPAR network, on managing MPAs, and on developing an ecologically coherent MPA network.

**Outlook and next steps**

Overall, it is clear that OSPAR provides a solid and stable framework for further development and management of the MPA network. Nonetheless, the network is not yet considered ecologically coherent (though it does provide good representation of the different biogeographic regions) and conservation measures are not yet in place for all sites. Future areas of work could therefore include:

- With improved understanding of ecological coherence and management effectiveness, OSPAR Contracting Parties can consider where MPAs should be nominated in order to fill geographical gaps in the network.
- Adjustment of management measures to ensure adequate and appropriate protection of sites.
- Improved reporting of relevant data on species and habitats as well as on management plans and measures is required to understand what resources are being protected and if they are being protected effectively.
- Further development of cooperation with relevant international organisations to coordinate adoption and implementation of complementary conservation measures.

**Lessons learned**

- Targets and deadlines are essential to motivate action, but are not sufficient on their own.
- A "champion" Contracting Party/Parties or observer organisation can help advance efforts by raising awareness, identifying gaps in current initiatives, and proposing options to move forward.
- OSPAR demonstrates that well-funded and functioning Regional Seas Conventions can provide a valuable mechanism for cooperation and communication between States and can facilitate and stimulate greater protection of the marine environment.
- Considerable effort and resources are required to achieve regional cooperation across a variety of sectoral organisations.

### 3.6. Target 14.6. Fisheries subsidies

*"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."*

#### Issues at stake

A fisheries subsidy is any government action that seeks to supplement the income or lower the costs of fishing operations and may include:[152] direct monetary support; income or price support measures; tax credits; exemptions and rebates; low-interest loans and guarantees; preferential treatment; and direct provision of goods and services. Globally, these subsidies total USD $15–35 billion annually.[153] Subsidies

[152] The FAO has defined it as "government actions or inactions that are specific to the fisheries industry and that modifies – by increasing or decreasing – the potential profits by the industry in the short-, medium- or long-term". In contrast, the WTO uses a more specific and technical definition. See Westlund, 'Guide for Identifying, Assessing and Reporting on Subsidies in the Fisheries Sector' (FAO 2004).

[153] UNEP, Fisheries Subsidies: A Critical Issue for Trade and Sustainable Development at the WTO: An Introductory Guide (2008)

have a significant influence on the sustainability of fisheries and poorly designed subsidies can drive overcapacity and overfishing as well as increasing environmental impacts. In short, if the true costs of a fishery are masked by subsidies that impair normal market signals (e.g. fuel and ship building), then that fishery can be pushed beyond its true economic and environmental sustainability while still being profitable to its recipients.

States committed at the 2002 World Summit on Sustainable Development (WSSD) to eliminate subsidies that contribute to IUU fishing and overcapacity.[154] The 2010 CBD Aichi Target 3 also aims to eliminate, phase out, or reform harmful incentives, including subsidies, by 2020. In the framework of the World Trade Organization (WTO), Parties have agreed to strengthen disciplines on fisheries subsidies, including through a prohibition of certain forms of fisheries subsidies that contribute to overcapacity and overfishing.[155] However, this has been a contentious topic, including divisions between least developed countries and distant water fishing nations. Although discussions began in 2005, there is still no agreed text.

### Mandates of regional organisations

FAO Committee on Fisheries (COFI) members have adopted international plans of action (IPOAs), i.e. voluntary instruments elaborated within the framework of the Code of Conduct for Responsible Fisheries. Two such voluntary instruments address fisheries subsidies-related issues. Adopted in 1997, the International Plan of Action for the Management of Fishing Capacity (IPOA-Capacity) encourages States to "reduce and progressively eliminate all factors, including subsidies (...) which contribute, directly or indirectly, to the build-up of excessive fishing capacity".[156]

Adopted in 2001, the International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) provides for a similar incentive, encouraging States to "avoid conferring economic support, including subsidies, to companies, vessels or persons that are involved in IUU fishing".[157]

While fisheries subsidies negotiations are conducted under the auspices of the WTO, RFMOs are uniquely positioned to promote and coordinate efforts to implement the IPOAs. In this regard, they can be a useful forum to stimulate discussions, develop knowledge, and promote subsidies-related measures. For instance, based on the IPOA-IUU and the IPOA for the Management of Fishing Capacity, the IATTC developed the Eastern Pacific Ocean plan, a "policy document that established the general framework for managing the capacity of the tuna fleets in the eastern Pacific, including provisions on subsidies".[158]

Regional economic organisations can also provide an appropriate framework to discuss and advance fisheries subsidies related issues. In 2014 for instance, the Asia-Pacific Economic Cooperation (APEC) released a political declaration calling for an abstention from introducing new subsidy programs for fisheries.[159] In the EU, subsidies are subject to shared competence between Member States and the Commission in line with the provisions established under the European Fund for Maritime Affairs and Fisheries (EMFF).[160] Under the EMFF, the EU has eliminated harmful subsidies, such as support for vessel new builds or modernisation that contribute directly to overcapacity. Support is possible for example to incentivise more sustainable and environmentally friendly fisheries, however in principle a "regionalized approach regarding the provision of support to the fisheries sector seems possible, as long as it remains within the EU legislative framework and the MS concerned achieve the required consensus".[161]

[154] World Summit on Sustainable Development, 'Plan of Implementation of the World Summit on Sustainable Development' (Johannesburg Plan of Implementation) (2002), §31(f).

[155] See WTO, 'Negotiations on fisheries subsidies' <https://www.wto.org/english/tratop_e/rulesneg_e/fish_e/fish_e.htm>.

[156] FAO Committee on Fisheries, 'International Plan of Action for the Management of Fishing Capacity' (1999), §26. However, the IPOAs are generally not well implemented.

[157] Ibid. §88.

[158] Oceana, 'Paths to Fisheries Subsidies Reform : Creating Sustainable Fisheries through Trade and Economics' (2015).

[159] Ibid.

[160] Regulation (EU) No 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund (EMFF).

[161] Salz, 'Towards Elimination of Subsidies in Fisheries' (Baltic Sea 2020 Foundation, 2009).

### 3.7. Target 14.7. Small Island Developing States & Least Developed Countries

*"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."*

#### Issues at stake

SIDS are low-lying island States with small landmasses and populations, spread across the globe.[162] The SIDS are "a distinct group of developing countries facing specific social, economic and environmental vulnerabilities",[163] including limited natural resources and fragile environments, dependence on marine resources, susceptibility to natural disasters, and dependence on international trade. Development in SIDS is hampered by a range of factors including high costs (e.g. energy and transportation costs), disproportionately costly public administration and infrastructure, and few opportunities to benefit from economies of scale.[164] Many SIDS "have large maritime areas and have shown notable leadership in the conservation and sustainable use of those areas and their resources".[165]

The SIDS were first recognised as a distinct group of developing countries at the UN Conference on Environment and Development in June 1992, and the Barbados Programme of Action was produced in 1994 to assist SIDS in their sustainable development efforts. While the UN has never established criteria to determine an official list of SIDS, an unofficial list kept by the UN Conference on Trade and Development (UNCTAD) for analytical purposes includes 31 States.[166]

LDCs are "low-income countries confronting severe structural impediments to sustainable development".[167] This category was created in 1971[168] and currently includes 48 countries.[169] LDCs are given exclusive access to specific international support in trade and development assistance, as well as other general support mechanisms.

Ten States are both a SIDS and a LDC, while three SIDS have graduated from the list of LDCs since its inception.[170] The UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS) represents both groups, and most SIDS are members of the Alliance of Small Island States (AOSIS), which carries out lobbying and negotiating functions within the UN system.

#### Mandates of regional organisations

The SIDS Accelerated Modalities of Action (SAMOA) Pathway, adopted by the UNGA in 2014, recognises that SIDS have "made significant efforts at the national and regional levels (...). They have mainstreamed sustainable development principles into national and in some cases regional development (...) and have also mobilized resources at the national and regional levels".[171]

[162] The Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States categorises the SIDS into three regions, namely: the Caribbean; the Pacific; and the Atlantic, Indian Ocean, Mediterranean and South China Sea (AIMS). United Nations, 'Small Island Developing States – Small Islands Big(ger) Stakes' (Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS), 2013) <http://www.unohrlls.org/custom-content/uploads/2013/08/SIDS-Small-Islands-Bigger-Stakes.pdf>.

[163] UN (1992) n 26, Chapter 17 G.

[164] Ibid.

[165] UNGA Resolution A/RES/69/15, 'Resolution Adopted by the General Assembly on 14 November 2014: SIDS Accelerated Modalities of Action (SAMOA) Pathway' (15 December 2014).

[166] UN Conference on Trade and Development, 'UNCTAD's unofficial list of SIDS' <http://www.unctad.org/en/pages/aldc/Small%20Island%20Developing%20States/UNCTAD%C2%B4s-unofficial-list-of-SIDS.aspx>.

[167] See UN DESA, 'Least Developed Countries (LDCs)' <http://www.un.org/en/development/desa/policy/cdp/ldc_info.shtml>.

[168] See UNGA 2768, 'Identification of the least developed among developing countries' 1988th Plenary Meeting (18 November 1971) <http://www.un.org/en/development/desa/policy/cdp/ldc2/gares2768xxvi.pdf>.

[169] See UN DESA n 167.

[170] Namely Cape Verde (2007), Maldives (2011) and Samoa (2014).

[171] UNGA Resolution A/RES/69/15 n 165.

SIDS are a priority for UNEP's RSP. All SIDS participate in Regional Seas programmes,[172] which have taken a wide range of actions benefitting SIDS, including: supporting the establishment of protocols to regional conventions on marine protection, assisting with sustainable tourism initiatives, and promoting ecosystem-based management of the marine and coastal environment. Each of the three SIDS regions is also served by a regional cooperation organisation that could assist in supporting the implementation of Target 7 (the Caribbean Community, the Pacific Islands Forum and the IOC).

SIDS and LDCs are also members of a number of RFMOs, many of which have specific provisions or mandates to consider developing countries and SIDS. For example, a provision in the Convention establishing the Western and Central Pacific Fisheries Commission (WCPFC) states that it must, in developing criteria to set fishing quotas, take into account the "needs of SIDS in the Convention Area whose economies, food supplies and livelihoods are overwhelmingly dependent on the exploitation of marine living resources".

Under the auspices of the SAMOA Pathway, a range of projects and partnerships has been launched in SIDS.[173] These include: (1) a partnership aimed at promoting the adoption of appropriate technology, techniques and good practices in pacific tuna fisheries;[174] (2) a project to provide fishery management advice and recommendations to the Western Central Atlantic Fisheries Commission (WECAFC);[175] and (3) the Big Ocean initiative to improve management of large-scale MPAs.[176]

### 3.8. Target 14.a. Knowledge, capacity building & technology transfer

*"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."*

#### Issues at stake

Two key issues are at stake for this Target: firstly, the development of scientific and research capacity; and, secondly, capacity development (CD)[177] to achieve the level of integration required to deliver the 2030 Agenda for the ocean and coasts. The development of scientific knowledge and research capacity as well as the transfer of marine technology are crucial challenges in many developing States and regions.

UNCLOS contains a technical assistance clause and promotes the establishment of Criteria and Guidelines for the Transfer of Marine Technology, particularly taking into account the interests and needs of developing countries. The Intergovernmental Oceanographic Commission of UNESCO (UNESCO-IOC) adopted their Criteria and Guidelines on Transfer of Marine Technology in 2003, with the guiding principle that the transfer of marine technology must always be conducted on fair and reasonable terms and conditions and should enable all parties concerned to benefit on an equitable basis from developments in marine science related activities, particularly those aiming at stimulating the social and economic contexts in developing countries.[178]

[172] See UNEP, 'Small Island Developing States (SIDS) Booklet' (2002) <https://wedocs.unep.org/bitstream/handle/20.500.11822/13593/SIDS_booklet.pdf>.

[173] See SIDS Action Platform, 'SIDS Partnerships' <http://www.sids2014.org/partnerships/>.

[174] Ibid. 'ACP – Pacific Sustainable Fisheries Value Chains' <http://www.sids2014.org/partnerships/?p=7528>.

[175] Ibid. 'Fisheries Conservation in the Wider Caribbean Region through FAO's Western Central Atlantic Fisheries Commission (WECAFC)' <http://www.sids2014.org/partnerships/?p=7825>. 6 Caribbean members of WECAFC are SIDS.

[176] Ibid. 'Big Ocean' <http://www.sids2014.org/partnerships/?p=7834>.

[177] Herein, drawing from Shackeroff et al., (2016): "we use the term "capacity development" rather than "capacity building", even though the latter term is used in the 2030 Agenda and is common in ocean and coastal management practice. Developing, rather than building capacities, speaks to an approach that takes existing strengths and capacities as its foundation while also seeking to address deficits within a particular place and context." Shackeroff et al., 'Capacity Development for Oceans, Coasts, and the 2030 Agenda (IASS, 2016) <http://www.iass- potsdam.de/sites/default/files/files/policy_brief_3_2016_en_capacity_development-oceans_coasts.pdf>

[178] UNESCO-IOC, 'IOC Criteria and Guidelines on Transfer of Marine Technology' <http://www.ioc-unesco.org/index.php?option=com_content&view=article&id=316&Itemid=100028>.

Implementation of the 2030 Agenda will require capacity development measures focused on strengthening local and regional capacities and supporting key institutions as they transition to more integrated, ecosystem-based approaches. Transformative agendas, such as the 2030 Agenda and the transition towards EBM, require transformed institutions. Indeed, global consultations on the implementation of the 2030 Agenda found that capacity development and strengthened institutions will be crucial.

A range of governance organisations are now calling for and engaging in CD to support the transition towards EBM for the ocean and coasts. This trend is reflected by the sizeable increases in the funding of and commitment to initiatives for CD in ocean and coastal management in recent years. However, little guidance exists on how to approach, design, implement and measure the impact of CD on efforts to improve ocean conservation and sustainable use, which can pose challenges and potentially bring harm to those it is intended to benefit. Many are working to advance discourse and practice in CD to enable the transformations in marine management required to achieve the 2030 Agenda,[179] particularly building lessons learned from ROG initiatives and CD efforts supporting them.

### Mandates of regional organisations

UNESCO-IOC is recognised by UNCLOS as the competent international organisation with regards to marine scientific research and transfer of marine technology. UNESCO-IOC has established regional subsidiary bodies to promote, develop and coordinate marine scientific research (MSR) programmes. Cooperation between different regions is taking place to facilitate knowledge exchange and capacity development for ecosystem-based management. The Abidjan Convention and OSPAR, whose combined maritime area covers the Eastern Atlantic from the North Pole down to South Africa (excepting a small gap between the two), adopted a MoU under which they cooperate, share information and data, and build capacities in areas of mutual interest.

Those funding, designing, and delivering CD support include regional organisations, governments' scientific and technical agencies, NGOs, academia, and other stakeholders. More recently, leader-driven ROG initiatives have emerged in Asia, the Pacific Islands, the Mediterranean, the Caribbean and elsewhere. In each of these regions, there are examples of strong CD partnerships, many with deep roots in local institutions, support from decision-makers, and evolving sustainable financing mechanisms to support them. Most partnerships and projects have some CD elements, but these are highly variable – defining, assessing, and analysing them is difficult. New types of innovative CD partnerships are evolving quickly, and much could be gained through exchange and sharing of lessons learned. Recent partnerships are aiming to fill this gap by catalysing region-to-region dialogue.[180]

### Example: the Pacific Islands Managed and Protected Area Community (PIMPAC)

PIMPAC was founded in 2005 following a regional needs assessment and a workshop convening over 45 regional MPA leaders. PIMPAC conducts on the ground capacity development targeting managers or individuals in local conservation NGOs and government agencies that work with communities to foster effective management. At the site level, PIMPAC also supports EBM approaches, which integrate land and sea connections as well as human dimensions into management planning and activities. PIMPAC's approach is to be a catalyst, leveraging successful experiences to inspire and support further action.

#### Type/mandate

Long-term capacity sharing program and social network.

#### Scope and objectives

PIMPAC brings together site managers, NGOs, local communities, federal, state, and territorial agencies, and other stakeholders to collectively enhance the effective use and management of marine areas in the Pacific Islands.

PIMPAC has three goals, which it aims to achieve by 2019:

- A minimum of one site in each of the members' jurisdiction operating as a model for effective site-based management using ecosystem-based management principles.

[179] Shackeroff et al. (2016) n 177.

[180] Ibid.

- Local teams in each island jurisdiction independently supporting effective site-based management.
- Institutionalising training (through coursework in schools, colleges and universities, and internships) and ensuring that it is offered on an ongoing basis throughout the region.

**Structure and governance**

PIMPAC has an informal structure, guided by key principles to ensure inclusiveness and transparency among partners and in decision-making. Implementation and management of MPAs is conducted at the national/local level, with PIMPAC providing support through four main approaches: (1) provision of training and technical support; (2) learning exchanges; (3) partnership building; and (4) communications and information sharing.

**Timeline**

2005–present

**Challenges**

- Limited human and financial resources.
- Isolation of site managers from one another restricts their ability to learn from and apply approaches that have been successful elsewhere.
- The need to build on traditional management approaches while adopting and adapting to modern technology and practices.
- Difficulty in finding sufficient long-term funding.
- Internal politics among members can present challenges for communication.
- The approach of donor agencies: many constraints and reporting requirements, coupled with little flexibility regarding use of funds.

**Enabling conditions**

- Leaders shared a common vision of a network that would strengthen their MPA efforts and overcome common and shared challenges in MPA management.
- Involvement by all major conservation organisations/agencies.
- Existing tools readily available for adaptation.
- Existing regional expertise available on priority areas.
- Initial financial support from key donors complemented by development of sustainable financing locally.

**Outcomes**

PIMPAC has evolved to be a key support to develop capacity surrounding the Micronesia Challenge (MC), a ROG initiative among eight jurisdictions[181] dedicated to effectively conserving 20% of land and 30% of nearshore marine ecosystems by the year 2020. Over the course of 10–15 years, PIMPAC strategies supporting the MC have evolved to include:

- Conservation action planning.
- Establishment of approximately 150 MPAs and the development and implementation of management plans for them.
- Local development, design and launching of monitoring schemes for biophysical (marine and terrestrial), socioeconomic, and governance indicators.
- Development of a variety of fisheries policies.
- Skills-building and coordination for local marine enforcement officers and task forces, such as the Alliance of Palau Conservation Officers.
- Co-creation of local climate change adaptation toolkits, which are now being replicated across Micronesia, the Coral Triangle, and the Caribbean.

Overall, sustained capacity development – primarily through PIMPAC – and investment in the Micronesia Challenge has enabled remarkable transformations in marine and coastal management across the eight Micronesia Challenge jurisdictions.

[181] Micronesia Challenge jurisdictions include the Federated States of Micronesia, the Republic of Palau, the Republic of the Marshall Islands, and the US Flag Islands of Guam and the Commonwealth of the Northern Mariana Islands.

### Outlook and next steps

PIMPAC has achieved impressive advances in MPA management and has demonstrated the value in developing networks of managers. PIMPAC plans to continue to support capacity development on core competencies for effective site-based management and is focused on expanding partnerships to support development and institutionalisation of training and technical assistance. However, there remain considerable challenges, especially relating to funding, capacity, and coordination across jurisdictions.

### Lessons learned

- Micronesia sets an outstanding example of successful, regional governance and solid capacity development partnership to support it – made possible, in part, through consistent leadership support, donor and development investment and coordination, and capacity development over some 10–15 years.
- Importance of local development, ownership, and expertise.
- Long-term, stable, and flexible donor support is essential for the success of such initiatives.

## 3.9. Target 14.b. Artisanal fisheries

*"Provide access for small-scale artisanal fishers to marine resources and markets."*

### Issues at stake

Half the world's fish harvest is captured by the small-scale fishing sector,[182] which provides around 12 million jobs worldwide.[183] Target b echoes the provisions of the UNFSA,[184] which addresses the special needs of developing States, and draws attention to the importance of access to fisheries by "subsistence, small-scale and artisanal fishers and women fish-workers, as well as indigenous people in developing States". The target is intended to ensure that people who need to fish on a small, local scale have the opportunity to do so, while also ensuring that this fishing does not compromise the sustainability of fisheries resources.

### Mandates of regional organisations

The mandates of many RFMOs reflect the wording of the UNFSA and contain specific references to and provisions for artisanal fisheries. For example, the mandates of more recently formed RFMOs, e.g. the conventions establishing the South East Atlantic Fisheries Organisation (SEAFO) and the WCPFC echo the provisions of the UNFSA in requiring parties to give full recognition to the special requirements of developing States in the region, the need to avoid adverse impacts on artisanal fishers, and the need to ensure that conservation measures do not result in transferring a disproportionate burden of conservation action onto developing States.[185]

Regional economic organisations can also play a role in ensuring access to markets and harmonising rules

[182] The terms "small-scale" and "artisanal" evade simple definition because they have historically been used by different actors to "represent different points of view and socio-economic dimensions in different national contexts" (UN Atlas of the Oceans, 'Small-Scale and Artisanal Fisheries' <http://www.oceansatlas.org/subtopic/en/c/1421/>). "Small-scale fishery" tends to "imply the use of a relatively small size gear and vessel. The term has sometimes the added connotation of low levels of technology and capital investment per fisher although that may not always be the case" (FAO, 'FAO Fishery Glossary – small-scale fishery' (2009) <http://www.fao.org/faoterm/viewentry/en/?entryId=98107>). "Artisanal fisheries" may refer to "traditional fisheries involving fishing households (as opposed to commercial companies), using relatively small amount of capital and energy, relatively small fishing vessels (if any), making short fishing trips, close to shore, mainly for local consumption", and tends to imply a "simple, individual (self-employed) or family type of enterprise (...), most often operated by the owner (even though the vessels may sometimes belong to the fishmonger or some external investor), with the support of the household. The term has no obvious reference to size but tends to have the same connotation of relatively low levels of technology and this may not always be the case." (Ibid. 'FAO Fisheries Glossary – artisanal fisheries' <http://www.fao.org/faoterm/viewentry/en/?entryId=85654>). The FAO Fisheries Glossary nonetheless notes that definition and practice varies between countries: e.g. gleaning or a one-man canoe to trawlers, seiners, or long-liners of greater than 20 m.; subsistence or commercial fisheries; local consumption or export.

[183] FAO, *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication* (2015) <http://www.fao.org/docrep/field/003/ab825f/AB825F00.htm#TOC>; Jacquet & Pauly, 'Funding Priorities: Big Barriers to Small-Scale Fisheries' (2008) 22 Conservation and Policy 832.

[184] UNFSA, Article VII.

[185] Lodge et al., *Recommended Best Practices Fo Regional Fisheries Management Organizations* (Chatham House, 2007).

and regulations across jurisdictions, as illustrated by the existing regulations and most recent discussions within the EU[186] or the initiatives conducted within the framework of the CRFM.[187] In the EU, the CFP also establishes special access rules for the 12 nautical mile zone that benefit small-scale and artisanal fisheries by "authorising Member States to restrict fishing to fishing vessels that traditionally fish in those waters from ports on the adjacent coast".[188]

### Example: Regional Fisheries Livelihoods Programme (RFLP) for South and Southeast Asia

Across South and Southeast Asia, the livelihoods of coastal small-scale fishers are among the most insecure and vulnerable. They are dependent on an increasingly depleted and degraded resource, due to overcapacity, resource access conflicts, severe habitat degradation and fragmentation, and inadequate resource management. These communities make important but often poorly recognised contributions to the food security and development of many millions of people, as well as to national and regional economies.

The Regional Fisheries Livelihood Programme (RFLP) aimed to improve the livelihoods of fishers and their families and foster more sustainable practices by strengthening the capacity of small-scale fishing communities in Cambodia, Indonesia, the Philippines, Sri Lanka, Timor-Leste, and Viet Nam.

#### Type/mandate

International project implemented by the FAO.

#### Scope and objectives

The RFLP supported small-scale fishers through six main activities:

- Putting in place joint fisheries management between fishers and government authorities.
- Implement measures to improve safety at sea.
- Improving handling, preservation, processing and marketing.
- Strengthening existing income generating activities, introducing new income streams, and supporting their implementation.
- Facilitate access to micro-finance and improving understanding of savings and credit mechanisms.
- Collating, analysing and disseminating lessons learned in the different countries.

#### Structure and governance

The RFLP was funded by the Kingdom of Spain and implemented by the FAO, working in collaboration with relevant national authorities. A National Coordinating Committee and Project Coordination Office were established in each country to coordinate and implement field activities respectively. A Regional Programme Management Office was located at the FAO Regional Office for Asia and the Pacific in Bangkok, comprising a regional programme manager, chief technical advisor, information officer and administration/secretarial staff. Oversight of RFLP was provided by a Programme Steering Committee composed of the six participating countries, the donor and FAO.

#### Timeline

2009–2013

#### Challenges

- Unexpected cuts to the project budget as a result of the global financial crisis caused many planned activities to be cancelled.
- While the total operational life of RFLP was 48 months, in reality project implementation time was limited to around 32 months, and in certain countries less, due to the time taken for staff recruitment, reporting, handover, closure of offices, etc. The active implementation was too short for some of the activities to be properly implemented.
- FAO procedures can be complex, presenting a "steep learning curve for regional and national staff".[189] The "work load generated by regulations at

[186] European Parliament – Committee on Fisheries, 'Report on Innovation and Diversification of Small-Scale Coastal Fishing in Fisheries-Dependent Regions (2015/2090(INI)' (26 February 2016) <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A8-2016-0044+0+DOC+WORD+V0//EN>.

[187] See Caribbean Regional Fisheries Mechanism <http://www.crfm.net/>.

[188] Regulation (EU) No 1380/2013 n 44, Article 5.

times became demotivating for national teams and totally out of proportion to the activity itself".[190]

- For many officers of fisheries agencies, the project represented an additional burden to their already full workloads.

**Enabling conditions**

- The FAO regional office was able to provide significant added value to national activities, in particular by: ensuring a uniform and consistent approach; providing technical guidance; sharing knowledge results and lessons learned; collaborating with the Asia Pacific Fisheries Commission; and supporting effective monitoring and implementation.

- The RFLP regional management was extremely flexible in its approach when agreeing the allowable content of the activity work plans and budgets. This was important given the variation in country contexts of the six participating countries.

**Outcomes**

Key successes included:

- Involving around 35,500 members of fisher communities and government staff (38% women) in a wide range of over 1,150 capacity development activities at the national and regional levels.

- Creation, development or strengthening a total of 65 co-management mechanisms or bodies throughout the six participating RFLP countries. Innovative resource management plans were also developed, such as village regulations in Indonesia and the documentation and institutionalisation of traditional management measures in Timor-Leste.

- Generating and gathering significant data and information on fisheries and communities that informed for the development of fisheries management plans.

- A range of successful activities on safety at sea, development of alternative livelihoods, and gender mainstreaming.

**Outlook and next steps**

The RFLP was an ambitious programme, and as such it is difficult to draw generalised conclusions regarding the long-term prospects of all the activities undertaken. In general, it proved extremely challenging to deliver the level of support needed to achieve long-lasting impact across all areas and countries, and activities were spread relatively thinly. The project also showed that many actions, especially development of co-management mechanisms, require lengthy gestation periods not generally allowed for in donor-funded projects. Nonetheless, considerable advances were made in all areas, many of which have continued to be developed, both by domestic actors and by subsequent donors and projects.

**Lessons learned**

- Coordination and support at the regional level can be a helpful enabler of concrete national actions.

- Efforts to support artisanal fishers need a supportive enabling environment, including high-level support from central government, commitment involving artisanal fishers in resource management, and allocation of resources (human and financial).

- Capacity development works best when it is long-term, hands-on and of a "mentoring" nature.

- Project planning must take into account the length of time to recruit suitable staff and early turnover.

- There was a strong demand for the development of non-fisheries related livelihoods in fishing communities, suggesting the need for the injection of new skill sets and assistance into fisher communities, and, more broadly, the need for projects to be open to the possibility that recipients may have different needs than initially envisaged.

- Bottom up processes offer better community buy-in and acceptance. This can be further strengthened if traditional management systems are incorporated and given recognition within the legal framework.

[189] Regional Fisheries Livelihood Programme for South and Southeast Asia, 'Programme Terminal Report for the Regional Fisheries Livelihoods Programme for South and Southeast Asia' (2013).

[190] Ibid.

### 3.10. Target 14.c. Implementation of the international law as reflected in UNCLOS

*"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."*

#### Issues at stake

UNCLOS sets out the legal framework under which all activities in the ocean must be carried out, and as such it is frequently referred to as the 'Constitution for the Ocean'. At present, 168 States have ratified the Convention,[191] and many of its provisions are considered part of customary international law. Despite its overarching nature and wide adoption, there are some provisions that have not been fully implemented or operationalised, e.g. Article 192, which requires States to protect and preserve the marine environment, and Articles 204–206, which require States to monitor and assess environmental impacts and provide reports. In addition, the regulatory framework is, in practice, highly fragmented (see section 5.1).

#### Mandates of regional organisations

Regional organisations can be a key lever for the implementation of UNCLOS. Broadly speaking, they can encourage their Member States that are not parties to UNCLOS to ratify the text and provide assistance with implementation, while the many regional efforts focused on conservation and sustainable use contribute to States' implementation of their obligation to protect and preserve the marine environment (UNCLOS, Article 192). Regional organisations can also bring States together to form coherent positions on ongoing international negotiations and processes relevant to the implementation of UNCLOS.[192]

There are also opportunities for States and other actors to work together at the regional level to take innovative action for the implementation of UNCLOS. For example, Mauritius and the Seychelles, supported by the Commonwealth Secretariat, prepared a joint continental shelf submission to the Commission on the Limits of the Continental Shelf. This led to the establishment of the world's first Joint Management Zone and a Joint Commission to coordinate and manage the exploration, conservation and development of the living and non-living resources of the seabed.[193]

#### Example: Sargasso Sea

The diverse and productive Sargasso Sea covers approximately 2 million square nautical miles within the North Atlantic Subtropical Gyre around the islands of Bermuda, most of which is in ABNJ. The Sargasso Sea is on the migration route of many species, including sharks and cetaceans, and it is the only place in the world where the endangered American eel and critically endangered European eel spawn. The area contains a 4,000 metres deep abyssal plain with three groups of ancient seamounts. Current and potential threats include: adverse impacts from ships and shipping including underwater noise; damage to Sargassum seaweed mats; operational vessel discharges and ballast water exchange; pollution from floating debris including plastics; the negative impacts of fishing, including bycatch and habitat damage; and climate change.[194]

**Type/mandate**

The Sargasso Sea Initiative was an informal partnership between the Government of Bermuda, NGOs, scientists and private donors. The Sargasso Sea Commission (SSC) was established pursuant to the Hamilton Declaration (2014), a non-binding political declaration adopted and signed by Bermuda, Azores, Bahamas, British Virgin Islands, Canada, Cayman

[191] See UN Division for Ocean Affairs and the Law of the Sea, 'Chronological lists of ratifications of, accessions and successions to the Convention and the related Agreements' <http://www.un.org/depts/los/reference_files/chronological_lists_of_ratifications.htm>.

[192] E.g. Discussions regarding the Area conducted by the International Seabed Authority and the ongoing international process regarding the development of an implementing agreement for the conservation and sustainable use of marine biodiversity in ABNJ

[193] See The Commonwealth, 'Mauritius and Seychelles secure and manage joint seabed rights through continental shelf submission' <http://www.thecommonwealth.org/project/mauritius-and-seychelles-secure-and-manage-joint-seabed-rights-through-continental-shelf#sthash.rML1Yk07.dpuf>.

[194] Laffoley et al., 'The Protection and Management of the Sargasso Sea: The Golden Floating Rainforest of the Atlantic Ocean' (2011) <http://www.sargassoseacommission.org/storage/documents/Sargasso.Report.9.12.pdf>.

Islands, Monaco, the UK and the US.[195] The SCC is mandated to exercise a stewardship role for the ABNJ surrounding the island of Bermuda working through existing legal agreements and competent management bodies established according to UNCLOS.[196]

### Scope and objectives

The SSC aims to exercise its stewardship role by:[197]

- Promoting international recognition of the unique ecological and biological nature and global significance of the Sargasso Sea.
- Encouraging scientific research.
- Developing conservation proposals for submission to existing regional, sectoral and international organisations.

### Structure and governance

The SSC is a standalone legal entity established by Bermudian law.[198] A small Secretariat is based at the International Union for the Conservation of Nature (IUCN) office in Washington, D.C., though the Commission operates in a largely virtual setting. Commissioners are appointed by the Government of Bermuda through a consultation process with the Signatories to the Hamilton Declaration.

### Challenges

- The legal and institutional framework for ABNJ is highly fragmented and ill-equipped to address conservation concerns.[199]
- Only a handful of existing organisations have a management mandate for the ABNJ in the Sargasso Sea area, and none have a core focus on conservation of marine biodiversity or marine ecosystems.[200]
- Each existing sectoral organisation has its own distinctive protection mechanisms and processes, and each assesses differently the factors that need to be taken into account.

### Enabling conditions

- The Government of Bermuda acting as a vocal and supportive champion for the initiative.
- Concerted effort on behalf of civil society and the scientific community.

### Outcomes

- Signature of the Hamilton Declaration by nine governments and establishment of the Sargasso Sea Commission.
- The Parties to the CBD have recognised the Sargasso Sea as an Ecologically or Biologically Significant Marine Area (EBSA).[201] The northern seamounts of the Sargasso Sea form part of another EBSA.[202]
- The Ecosystem Subcommittee of the Standing Committee on Research and Statistics of the International Commission for the Conservation of Atlantic Tunas (ICCAT) recommended the Sargasso Sea be used as a case study for an ecosystem-based approach to fisheries management.[203]

[195] See Morrison & Freestone, 'The Signing of the Hamilton Declaration on Collaboration for the Conservation of the Sargasso Sea: A New Paradigm for High Seas Conservation?' (2014) 29 International Journal of Marine and Coastal Law 345.

[196] Ibid.

[197] See Sargasso Sea Commission, 'About our Work' <http://www.sargassoseacommission.org/about-our-work>.

[198] See Sargasso Sea Commission, 'About the Commission' <http://www.sargassoseacommission.org/about-the-commission>.

[199] See Wright et al. (2016) n 5.

[200] Freestone & Gjerde, 'Lessons from the Sargasso Sea: Challenges to the Conservation and Sustainable Use of Marine Biodiversity beyond National Jurisdiction' (2016) <https://www.un.org/depts/los/biodiversity/prepcom_files/Sargasso_Sea_Commission_Lessons_Learned.pdf>.

[201] Decision XI/17 on Marine and Coastal Biodiversity: Ecologically or Biologically Significant Marine Areas (2012) UNEP/CBD/COP/DEC/XI/17.

[202] Ibid.

[203] See Resolution by ICCAT on Ecosystems that are Important and Unique for ICCAT Species (2016).

- Listing of European Eel under Appendix II of the Conservation of Migratory Species of Wild Animals.[204]

- Recognition of the Corner Rise and New England seamounts as VMEs; closure of some seamounts to bottom fishing, and prohibition of certain mid-water trawling gear.[205]

- The only named ecosystem reported in the First UN World Ocean Assessment.[206]

**Outlook and next steps**

A range of sectoral conservation and management actions are currently being considered[207] and the SSC is finalising a Sargasso Sea Stewardship Plan – the first of its kind for ABNJ. While favourable conditions have enabled the establishment of the SSC and the development of a clear and ambitious work programme,[208] the considerable challenges of working with existing organisations with a mandate in ABNJ has meant that the SSC achievements have been modest in terms of concrete conservation and management measures.[209]

Progress is likely to continue to be slow, unless there is a significant shift in the approaches of sectoral organisations to conservation issues. Depending on what is agreed, a possible future international legally binding instrument that covers the conservation and sustainable use of marine biodiversity in ABNJ may contribute to this change. At the same time, the experience of the Sargasso Sea highlights deficiencies in the existing regime for ABNJ and therefore provides evidence of the need for a strong new international instrument.

**Lessons learned**

The unique experience in the Sargasso Sea to date provides some interesting lessons learned, particularly regarding efforts to conserve and sustainable use marine biodiversity of ABNJ, including:[210]

- The "lack of common principles, common criteria and common evidentiary standards for conservation measures" between different sectoral organisations and processes hinders broader efforts for comprehensive management and sustainable use of the marine environment as required by UNCLOS.

- International sectoral bodies are often failing to follow some basic precepts of key international environmental treaties and policy instruments, e.g. the ecosystem and precautionary approaches.

- Regional frameworks can facilitate measures to enhance conservation and sustainable use through existing instruments.

- EBSAs have the potential to act as a unifying concept for the advancement of conservation and sustainable use, but the early experience they have not yet generated much action within the various sectoral organisations.

- A new international legally binding instrument on the conservation and sustainable use of marine biodiversity in ABNJ provides a critical opportunity to build on the provisions in UNCLOS and could allow for a more holistic approach to ocean governance for the Sargasso Sea and other regions in ABNJ.

[204] Appendix II covers migratory species that have an unfavourable conservation status and that require international agreements for their conservation and management, as well as those that have a conservation status, which would significantly benefit from international cooperation that could be achieved by an international agreement. The Convention encourages the Range States to species listed on Appendix II to conclude global or regional Agreements for the conservation and management of individual species or groups of related species. See CMS, 'Appendix I & II of CMS' <http://www.cms.int/en/page/appendix-i-ii-cms>.

[205] See FAO, 'Vulnerable Marine Ecosystems Database – New England Seamounts' <http://www.fao.org/figis/pdf/fishery/vme/23646/167810/en?title=VME-DB>.

[206] Inniss et al. (2015) n 3.

[207] These include: recognition of the Sargasso Sea as a UNESCO World Heritage Site; regulation of tuna fishing activities through ICCAT; regulation of navigation through IMO, possibly through the designation of a Particularly Significant Sea Area (PSSA) with associated protective measures; coordination and cooperation with ISA with respect to mining activities; and initiation of coordination and cooperation with relevant actors.

[208] See Sargasso Sea Commission, 'Work Programme Priorities (2016 – 2018)' <http://www.sargassoseacommission.org/storage/documents/MOS_SSC_2016_2_Doc.1_Work_Programme_2016-2018_revised_1.pdf>.

[209] Freestone and Gjerde (2016) n 200.

[210] Ibid.

### 3.11. Summary: SDG14 targets and regional organisations' mandates and activities

| SDG14 targets | Mandate of ROG organisations | Level of ROG activity | Main challenges |
|---|---|---|---|
| **Target 14.1:** Marine Pollution | Yes, but prevention of shipborne pollution mainly falls under the International Maritime Organization (IMO) and the agreements it administers. | High | Effective implementation of the legal i nstruments adopted.<br><br>Scaling-up of successful projects.<br><br>Integrating cumulative impacts into decision-making processes. |
| **Target 14.2:** Sustainable management and protection | Yes. | High | Effective implementation of the legal instruments adopted.<br><br>Scaling-up of successful projects. |
| **Target 14.3:** Ocean acidification | Yes, mainly through scientific cooperation and elaboration of adaptation measure. | Medium | Level of knowledge still low/inadequate for effective management/governance.<br><br>Mainstreaming ocean acidification in the agendas of regional organisations.<br><br>Encourage RFMOs to include ocean acidification and impacts of climate change in management measures. |
| **Target 14.4:** Sustainable Fisheries | Yes, some, but not in Regional Seas programmes. | High | Effective implementation and enforcement of the legal instruments adopted.<br><br>Strengthening regional and national capacities for monitoring, control and surveillance. |
| **Target 14.5:** Conservation | Yes, mainly through area-based management tools. | High | Effective implementation of conservation measures in protected areas.<br><br>Ensuring the coherence, connectivity, and representativeness of MPA networks.<br><br>Cooperation and coordination between national, regional, and global organisations for the effective conservation of marine ecosystems.<br><br>Effective protection by sectoral bodies and cooperation between them. |
| **Target 14.6:** Fisheries subsidies | Partially, as inter-governmental fisheries subsidies negotiations are the exclusive province of WTO. | Low | In the absence of a global agreement at WTO, encouraging regional economic organisations to adopt specific measures.<br><br>Developing studies on the impacts of subsidies by RFMOs. |
| **Target 14.7:** SIDS and LDCs | Yes. | High | Governance, capacity and finance challenges of SIDS and developing countries. |
| **Target 14.a:** Knowledge, capacity building & technology transfer | Yes. | Medium | Funding and support to sustain CD efforts.<br><br>Revitalising MoUs concluded between North and South Regional Seas programmes.<br><br>Catalysing region-to-region dialogue, exchanging lessons learned and providing good practice recommendations. |
| **Target 14.b:** Artisanal fisheries | Yes, mainly through regional economic organisations and RFMOs. | High | Collection of data and understanding dynamics of artisanal fishers.<br><br>Engaging disparate and varied fisher communities.<br><br>Difficulty of regulating and managing small scale of artisanal activities at national/ regional levels. |
| **Target 14.c:** Implementation of international law | Yes. | Medium | Continuing to encourage States to ratify and implement international law, as reflected in UNCLOS. |

# 4. Beyond the SDG14 targets: fostering regional cooperation and integration

While sector- and target-specific measures will undoubtedly play an important role in meeting SDG14, these must be embedded in broader ocean governance efforts that account for the interdependencies among SDG14 targets and with other SDGs. As the SDGs are "integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental",[211] implementing the 2030 Agenda will require governance approaches that work across sectors and take into account interactions between goals and targets.[212]

This section provides good practice examples of how ROG efforts can complement national and global action and promote integration across sectors and scales. The examples have been chosen from different marine regions in the world, representing a variety of geographic, cultural, social, economic, and political contexts.

### 4.1. European Union Strategy for the Baltic Sea Region (EUSBSR)

The Baltic Sea is a semi-enclosed sea and one of the largest brackish-water areas in the world. It is nearly isolated, being linked to the oceanic system by a narrow connection with the North Sea. Its ecosystems are severely impacted by eutrophication, pollution, and unsustainable fishing. The ecosystems of the Baltic Sea and many of its ecosystem services and associated economic activities, including fisheries and tourism, are threatened by these impacts.[213] Some 93% of the Baltic catchment area belongs to the nine riparian countries, with the five upstream States[214] accounting for the remaining 7% of the catchment area.[215] The governance approach to the Baltic Sea had historically been fragmented and sector-based, with significant mismatches between political visions, actual political actions, and management.[216] Against this background, the need for an EU Baltic Sea strategy to improve regional coordination was raised, first by the EU Parliament in 2006[217] and subsequently by the EU Council in 2007.[218]

[211] UNGA (2015) n 12.

[212] Schmidt et al. in Griggs et al. (eds) A guide to SDG interactions: the science perspective (International Council for Science, 2017).

[213] HELCOM, Ecosystem Health of the Baltic Sea 2003–2007: HELCOM Initial Holistic Assessment (2010) Baltic Sea Environmental Proceedings.

[214] Belarus, Ukraine, Czech Republic, Slovakia, and Norway

[215] Lääne et al., 'Baltic Sea, GIWA Regional assessment 17' (UNEP, 2005) <http://www.staging.unep.org/dewa/giwa/areas/reports/r17/contents_giwa_r17.pdf>.

[216] Schymik & Krumrey, 'EU Strategy for the Baltic Sea Region. Core Europe in the Northern Periphery?' (SWP Berlin, April 2009).

[217] European Parliament resolution on a Baltic Sea Region Strategy for the Northern Dimension (2006/2171(INI) (16 November 2016).

[218] Council of the European Union 15265/1/09 REV 1, 'Presidency Conclusions of the Brussels European Council (29/30 October 2009)' (1 December 2009).


**Figure 10: Baltic Sea region**

### Type/mandate

European Union macro-regional strategy.

### Scope and objectives

The EUSBSR constitutes an integrated framework to improve strategic alignment, coordination, and cooperation among actors and stakeholders and to promote integrated and harmonised implementation of sectoral policies – all with a view to addressing common environmental, economic, and social challenges in the Baltic Sea region. However, the EUSBR is not intended to lead to any new legislation, governance structures, or funding mechanisms.

### Structure and governance

Governance of the Strategy is multi-layered, with active participation by actors and stakeholders across all levels. Roles and responsibilities of key actors like the European Commission, Member States or National Focal Points are set out as part of the Strategy. These terms leave room for, and encourage, additional engagement.[219]

### Timeline

Launched in 2009, the strategy was amended in 2010. An evaluation in 2011 resulted in a two-step review and adaptation process between 2012 and

[219] INTERACT Point Turku, 'Roles and responsibilities of the implementing stakeholders of the EUSBSR and a flagship project concept' (2013) <https://www.balticsea-region-strategy.eu/attachments/article/590645/EUSBSR%20roles%20and%20responsibilities.pdf>.

2015. The Strategy does not have a deadline. Since it is fully aligned with the EU 2020 strategy on smart, sustainable, and inclusive growth,[220] its purpose and role after 2020 will have to be assessed.

**Challenges**

- Involvement of both EU and non-EU countries.
- Varied political leadership and engagement in different Member States.
- Difficulty of verifying the Strategy's added value beyond the existing governance structure.
- Complexity of the multi-level governance scheme and its communication to actors and stakeholders.

**Enabling conditions**

- Long-standing history of cross-border cooperation and transnational networking.
- Strong support by key actors like the European Parliament and the EU Member States through the EU Council.
- Comprehensive architecture of regional organisations, agreements, and processes in various fields and on different levels are already in place.
- Strong ownership by some Baltic States able and ready to champion EUSBSR implementation and further development.

**Outcomes**

The EUSBSR was successful in:

- Strengthening cooperation to implement and complement common legal obligations and promoting coordination and alignment of different regional bodies.[221]
- Streamlining funding streams and resources to provide targeted and tailor-made support to the EUSBSR objectives and targets and their implementation.[222]
- Inclusive and transparent decision-making by engaging stakeholders in the development of the strategy and integrating stakeholder views and wishes to a large extent.[223]
- Initiating targeted and tailor-made projects and actions to tackle sustainability challenges in the Baltic like eutrophication (Baltic Deal), pollution from vessels (CleanShip) and climate change (BaltAdapt).
- Initiating capacity development and motivating active engagement to improve knowledge, competencies, and leadership skills for implementation of the Strategy in a complex multilevel governance system. This is also to ensure that all stakeholders have opportunities and incentives to participate in the implementation of the EUSBSR.

**Outlook and next steps**

The Strategy articulates a dynamic process with a rolling action plan that is updated regularly, pending agreement by the key actors. Concrete next steps include the preparation of the next progress report by the European Commission and the development of a vision how the EUSBSR can or should contribute to the implementation of the 2030 Agenda.

**Lessons learned**

- As a voluntary arrangement driven by the engagement of actors and stakeholders, a clear strategy can be a powerful tool to complement and support implementation of legal obligations and policies.
- The original structure of the strategy was too complex and had to be simplified based on practical experiences with the strategy and its first review.

[220] European Commission COM(2010), '2020 Communication on Europe 2020: A strategy for smart, sustainable and inclusive growth' (3 March 2010).

[221] European Commission COM(2011) 381 final, Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Implementation of the EU Strategy for the Baltic Sea Region (EUSBSR)' (22 June 2011).

[222] Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006.

[223] Schymik and Krumrey (2009) n 216.

- Strong leadership across all Member States is needed.

- Streamlining existing funding mechanisms towards targeted and coordinated support paired with providing guidelines and information on additional funding sources facilitates the establishment of a sustainable funding basis for implementation.

### 4.2. Caribbean Regional Fund for Wastewater Management (CReW)

The Wider Caribbean Region (WCR)[224] is a complex mosaic of marine and coastal habitats and ecosystems comprising of coral reefs, sea grass beds, and mangrove forests.[225] The region is highly dependent on the tourism and fishing sectors increasing being threatened by environmental degradation. Pollution from land-based sources due to inadequate wastewater infrastructure is the most pervasive problem, contributing up to 70% of all pollution.[226] In recognition of this problem several WCR countries have signed the Protocol on the Control of Land Based Sources of Marine Pollution (LBS Protocol) to the Cartagena Protocol,[227] which sets out measures to prevent, reduce, and control pollution and address priority pollutants.[228] In many WCR countries, increasing investment in wastewater treatment is needed, but significant financial constraints exist. Additionally, inadequate national policies, laws and regulations, and limited enforcement and collaboration between sectors contribute to a fragmented approach to wastewater management.

To address this gap, the Inter-American Development Bank (IDB), and UNEP Caribbean Environment Programme-Regional Coordination Unit (UNEP CAR-CRU) jointly applied for financing from the GEF to co-implement the CReW pilot project.

#### Type/mandate

IDB provides development financing and technical support to Latin American and Caribbean countries, while UNEP CAR-CRU hosts the secretariat for the Convention for the Protection and Development of the Marine Environment in the WCR (Cartagena Convention). The two agencies collaborated as the GEF executing entities for co-implementation of the CReW project.

**St. John's Harbour in Antigua polluted due to lack of sewage treatment**

© GEF CreW 2014

[224] The marine environment of the Gulf of Mexico, the Caribbean Sea and the areas of the Atlantic Ocean adjacent thereto, south of 30o north latitude within 200 nautical miles of the Atlantic coasts (Article 2(1) of Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention)).

[225] Knowles et al., 'Establishing a Marine Conservation Baseline in the Insular Caribbean' (2015) 60 Marine Policy 84.

[226] UNEP, 'Regional Overview of Land-Based Sources of Pollution in the Wider Caribbean Region' (UNEP Caribbean Environment Programme, 1994) 33 CEP Technical Report <http://www.cep.unep.org/publications-and-resources/technical-reports/tr33en.pdf/download>, p.5; UNEP, 'Caribbean Ecosystem Assessment 2005' (UNEP, 1998), p.5.

[227] Adopted in 1999 and entered into force in 2010. UN, 'Protocol Concerning Pollution from Land-Based Sources and Activities to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region' <http://www.cep.unep.org/cartagena-convention/lbs-protocol/lbs-protocol-english/view>.

[228] Land-based sources (Annex I–II), domestic wastewater (Annex III), and agricultural non-point sources of pollution (Annex IV).

### Scope and objectives

The project was developed to mobilise financial resources at the regional level and allocate them to countries to establish and test innovative financing mechanisms, and improve the policy, regulatory, and legal frameworks for the wastewater sector. IDB was responsible for the sustainable financing component and UNEP CAR-RCU for building capacity for policy, legal and institutional reforms, and creating awareness.

### Structure and governance

The project enabled cooperation between the two regional bodies that each have the responsibility for implementing and monitoring their respective project components and for financing their own costs. IDB designated National Executing Agencies in the four pilot countries,[229] entered into loan agreements to capitalise national wastewater revolving funds,[230] and provided an Operations Manual for each country. UNEP CAR-CRU provided funds for capacity development for institutional and policy reforms in 13 participating countries, and for regional activities (such as regional dialogues) with a direct focus on meeting the requirements of the LBS Protocol.

To ensure synergy between the two components, IDB and UNEP CAR-RCU created an Inter-Agency Co-ordination Group (IACG) to provide technical and administrative oversight to the project. Additionally, an annual Project Steering Committee (PSC) meeting composed of CReW National Focal Points, representatives of the Pilot Financing Mechanisms, GEF Agencies and other stakeholders (e.g. Caribbean Development Bank) was held to supervise the project.

### Timeline

2011–Ongoing

### Challenges

- Setting up the administrative structure, financial management, and operational procedures for the National Revolving Funds took a long time to put in place.
- The fulfilment of the conditions developed by IDB as pre-qualification criteria for disbursement of funds occasioned delays in implementing national projects in Belize and Trinidad and Tobago.[231]

### Enabling conditions

- The regional funds provided by IDB and UNEP as the GEF Executing Agencies were supplemented by cash and in-kind contributions by the participating countries.
- Although IDB and UNEP implemented different components of the project, they had frequent engagements through the IACG and PSC. This enabled the project to be implemented in an integrated manner.
- IDB's focus on infrastructure combined with UNEP's environment focus enabled cross-sectoral engagements between Ministries of Environment, Finance, Health, Education, wastewater utilities, and involvement of private sector and local communities.
- Implementation of UNEP CAR-RCU's component of the project helped to build capacity for policy, legal, and institutional reform, and create stakeholder awareness that was mutually supportive to developing projects on the ground from the National Revolving Funds.

[229] Belize (Ministry of Finance), Guyana (Ministry of Housing and Water), Jamaica (National Water Commission), and Trinidad & Tobago (Ministry of Finance and Economy).

[230] In the case of Jamaica, the Jamaica Credit Enhancement Facility (JCEF) was created as a reserve account used as collateral to acquire financing from local commercial banks. CReW funds were used to supplement the K-factor, a pre-existing surcharge levied on consumers' bills to provide secondary assurance to commercial lenders in the event K-factor revenue would be unavailable.

[231] (1) Evidence of establishment of the national revolving fund; (2) Establishment of a Board to oversee the activities of the fund; (3) Appointment of a fund manager; (4) Approval by the Board of the operations manual; (5) A legal opinion from the government; (6) Identification of the agreement's signatories; (7) An project inception report; (8) Demonstrated sufficient resources for at least one year of operation; (9) An adequate financial system; and (9) An internal control structure.

**Outcomes**

The project was successful in:

- Improving access to financing to develop projects for wastewater management in the four pilot countries and reduce pollution to coastal waters from untreated wastewater.
- Replenishing the seed funds provided by the GEF through the revolving fund financing mechanism. For example, Jamaica's model of a guarantee account with a revolving fund mechanism has enabled the public utility to secure a commercial loan without a sovereign guarantee.
- Building capacity in national administrations to develop, harmonise, implement, and enforce national wastewater policies, legislation, and regulations in line with the LBS Protocol to the Cartagena Convention.

**Outlook and next steps**

As a pilot GEF project, the CReW has tested financing approaches for cost-effective solutions for wastewater management at the national level and helped to build capacity for improved policy, regulatory, and legal frameworks at the national and regional levels. Drawing on lessons learned, the project can be scaled with wider participation of other WCR countries and donors.

**Lessons learned**

- Regional Banks and other bodies, such as Regional Seas programmes, can play an important role in directing finances to the national level for the implementation of SDG14.
- Developing appropriate national legislation, policies, regulations, and enforcement linked to a wider regional policy objective (e.g. compliance with the LBS Protocol) plays a crucial enabling role to support and leverage investments.

## 4.3. OSPAR and NEAFC: the Collective Arrangement

In September 2010, the Ministerial Meeting of the OSPAR Commission established the world's first network of marine protected areas in ABNJ. OSPAR ministers declared six protected areas that, together, cover 286,200 square kilometres of the Northeast Atlantic.[232] A seventh MPA was declared in 2012. NEAFC had also designated areas closed for bottom trawling, responding to UNGA Resolutions calling for the protection of VMEs from destructive bottom fishing in ABNJ.[233]

A complementary network of sites has been established by both organisations. To some extent, the two organisations worked separately and in parallel on their own designation processes, although there is regular exchange between them and both receive scientific advice from the International Council for the Exploration of the Seas (ICES).

An MoU between both organisations provided the basis for mutual cooperation towards the conservation and sustainable use of marine biodiversity, including through exchange of data and information, research collaboration, and reciprocal observership.[234] In order to coordinate any activities relating to the management of the selected areas in ABNJ, both organisations have also agreed on a specific cooperative mechanism,[235] the "Collective arrangement between competent international organisations on cooperation and coordination regarding selected areas in areas beyond national jurisdiction in the North- East Atlantic".[236] OSPAR and NEAFC are the first participants that have endorsed this arrangement and other authorities with management competencies in the region, such as the IMO and the ISA, have also been invited to participate.

**Type/mandate**

The geographic mandates of OSPAR and NEAFC cover a similar area. The core focus of their activities differs, though both have a mandate for the protec-

[232] O'Leary et al., 'The first network of marine protected areas (MPAs) in the high seas: The process, the challenges and where next' (2012) 36 Marine Policy 598.

[233] Kvalvik, 'Managing institutional overlap in the protection of marine ecosystems on the high seas. The case of the North East Atlantic' (2011) 56 Ocean and Coastal Management 35.

[234] NEAFC and OSPAR Commission, 'Memorandum of Understanding between the North East Atlantic Fisheries Commission (NEAFC) and the OSPAR Commission' (2008) <http://www.ospar.org/site/assets/files/1357/mou_neafc_ospar.pdf>.

[235] NEAFC and OSPAR Commission, 'The process of forming a cooperative mechanism between NEAFC and OSPAR' (2015) 196 UNEP Regional Seas Reports and Studies.

[236] OSPAR Agreement 2014-09.

tion of biodiversity. The two organisations do not have overlapping legal mandates regarding the management measures they are able to take. OSPAR has no competence to regulate fisheries, while NEAFC has no responsibility for biodiversity conservation separate from its fisheries management role. Any attempt to come to more integrated management approaches therefore requires cooperation and coordination between both organisations.[237] In short:

- OSPAR: MPAs established by legally binding OSPAR Decisions and complementary OSPAR Recommendations on the initial management.
- NEAFC: Bottom fisheries closures through NEAFC Recommendations, legally binding on all NEAFC Contracting Parties.
- Coordination between OSPAR and NEAFC (and potentially other competent international organisations) through a collective arrangement.

**Scope and objectives**

The collective arrangement is currently a bilateral arrangement to facilitate cooperation and coordination between the competent authorities that will ensure that they share information and avoid undermining each other's conservation and management measures.

**Structure and governance**

The Collective Arrangement sets out a general cooperative mechanism regarding selected areas in ABNJ listed in an Annex to the arrangement. Areas of cooperation include the exchange of information, notification of any proposed activities, cooperation with regard to Environmental Impact Assessments and Strategic Environmental Assessments, and data exchange. Following formal adoption of the collective arrangement in 2014, both organisations finalised the submission of areas to be included in the Annex to the Arrangement. Formal annual meetings were held in 2015 and 2016, bringing together the secretariats of both organisations, representatives of Contracting Parties, observers from other competent international organisations, and NGOs.

**Challenges**

- The Collective Arrangement remains incomplete without the other key competent international organisations, in particular the ISA for the management of deep sea bed mining and the IMO for the management of shipping.
- Whilst countries within the region have achieved the creation of a common approach through the cooperation of competent regional organisations, reaching out to global level organisations remains a challenge. Third-party countries do not share the same interests and knowledge as countries within the region and may prevent progress within the remit of competent global organisations.

**Enabling conditions**

- Through well-established and functional institutions, the regional conventions provided the basis for efficient cooperation and coordination among Contracting Parties as well as with other competent authorities.
- Commitment by Contracting Parties to meet global targets, including the Plan of Implementation of the WSSD and relevant UNGA resolutions on deep-sea fisheries.
- Parallel processes in both organisations consider the protection and sustainable use of marine biodiversity in ABNJ.
- Regional interest in the conservation and sustainable use of marine biodiversity in ABNJ supported by complementary discussions on the need for a new global instrument regarding ABNJ under UNCLOS.
- High degree of cooperation and trust between the Secretariats of both organisations already prior to starting work on ABNJ. Furthermore, a high degree of commitment of Contracting Parties to work within their regional organisations and sufficient coordination within national administrations between those persons representing their countries within these organisations.

[237] Johnson, 'Can Competent Authorities Cooperate for the Common Good: Towards a Collective Arrangement in the North-East Atlantic' in Berkman & Vylegzhanin (eds) *Environmental Security in the Arctic Ocean* (Springer Netherlands, 2013).

- Science-based and staged approaches in both organisations helped build solid scientific cases for each area based on their conservation values, and later for consideration of possible measures and management.

**Outcomes**

- OSPAR and NEAFC have created an institutional mechanism for cooperation and coordination on a regional scale across sectoral boundaries.

- Both organisations exchange information routinely and without needing the initiative of an interested party.[238]

- The joint meetings under the collective arrangement created a process through which the Secretariats, Chairs of relevant committees or working groups established under both Conventions, Contracting Party representatives, and other observers meet to discuss and consider relevant issues with regard to the management of these areas.

**Outlook and next steps**

OSPAR and NEAFC agreed at their last meeting: (1) to pass any updated information (such as on the selected areas) via existing MoUs between organisations on behalf of OSPAR/NEAFC; (2) that their respective secretariats will continue to liaise with and update the IMO and ISA; and (3) that their Contracting Parties will promote new participation in the Collective Arrangement and provide updates during formal sessions, as appropriate.[239] Consideration of the effects of climate change could be a subject for further discussion, given the future implications for fisheries and environmental protection.

**Lessons learned**

- OSPAR and NEAFC demonstrated that, despite a lack of an overarching legal framework for the conservation and sustainable use of marine biodiversity in ABNJ of the Northeast Atlantic, coordination and cooperation between competent international organisations in ABNJ can be achieved.

- Cooperation across sectors is easiest at the regional level where there is: a high degree of interest and commitment of Contracting Parties to cooperate; trust between competent international organisations; and domestic coordination within countries.

- Cooperation between the regional and global level, where interest and knowledge regarding those areas are limited, remains a challenge. A new legally binding implementing agreement for conservation and sustainable use of marine biodiversity in ABNJ could facilitate cooperative mechanisms between regional and global organisations.

[238] NEAFC and OSPAR Commission, 'The process of forming a cooperative mechanism between NEAFC and OSPAR' (2015) 196 UNEP Regional Seas Reports and Studies <http://www.ospar.org/documents?v=35111>.

[239] OSPAR Commission, 'Aide memoire and key actions resulting from the second meeting under the collective arrangement' (2016) <http://www.ospar.org/meetings/archive/second-meeting-under-the-collective-arrangement>.

### 4.4. The Micronesia Challenge

The Micronesia Challenge brings together more than 2,000 isolated islands spanning 6.7 million square kilometres. The area represents more than 5% of the Pacific Ocean and is extremely biodiverse, hosting 61% of the world's coral species, 66 threatened species and more than 1,300 species of reef fish. The Challenge is considered to be one the first leader-driven ROG initiatives and is dedicated to achieving (and exceeding) the CBD Aichi targets. This initiative evolved from local, on-the-ground conservation projects across Micronesia and is today a large-scale partnership between governments, non-profit and community leaders, and multinational agencies and donors.

#### Scope and objectives

The overall goal of the Challenge is to effectively conserve at least 30% of the near-shore marine resources and 20% of the terrestrial resources across Micronesia by 2020.[241]

#### Structure and governance

The MC is a multi-jurisdiction commitment between The Federated States of Micronesia, the Republic of the Marshall Islands, the Republic of Palau, Guam, and the Commonwealth of the Northern Marianas Island. The effort is supported by the United States Department of Interior, NOAA, and The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety of Germany. The MC is implemented at the local, jurisdictional, and regional levels across the region.

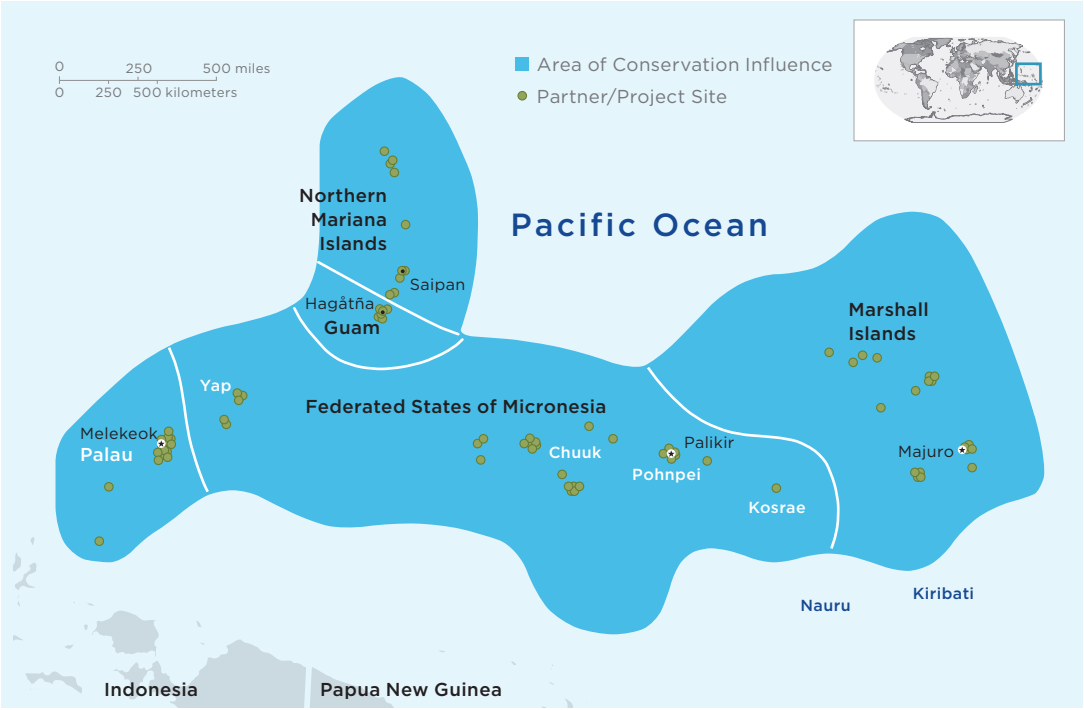



**Figure 11: The Micronesia challenge**

#### Type/mandate

The Micronesia Challenge (MC) is a shared commitment among eight Micronesian jurisdictions[240] to preserve the natural resources that are crucial to the survival of Pacific traditions, cultures, and livelihoods.

#### Timeline

2006–present

[240] The Federated States of Micronesia, the Republic of the Marshall Islands, the Republic of Palau, Guam, and the Commonwealth of the Northern Marianas Islands.

[241] Micronesia Challenge, 'About the Challenge' <http://www.themicronesiachallenge.blogspot.com/p/about.html>.

### Challenges

- A vast region, with 500,000 people speaking 12 different languages, makes coordination a challenge.
- The MC is a highly ambitious political declaration, with a concomitant need for financing and action at the regional to local levels.
- These jurisdictions are SIDS with extensive marine zones, the management of which necessitates considerable capacity development and financing.

### Outcomes

Over the course of 10–15 years, strategies to meet the MC have led to:

- Consistent leadership support among chief executives, as well as local and traditional leaders.
- Establishment of a sustainable financing mechanism (Micronesia Conservation Trust), development of sustainable financing plans for each jurisdiction, and raising of sustainable funds.

### Enabling conditions

**Coral Reef in Palau**

© iStock/Global_Pics

- Strong, capable leadership support at the chief executive level.
- Vibrant local leaders engaged in implementing the MC.
- Some shared sense of identity (history, culture) across the participating jurisdictions.
- Strong and consistent international partner support.
- Sound sustainable financing.
- Adaptive and innovative capacity development to support the MC goals.
- Establishment and evolution of multi-tiered capacity development initiative to support the evolving needs and priorities of ROG.
- Conservation action planning across the region.
- Establishment of approximately 150 marine managed areas and the development and implementation of management plans for them.
- Establishment of a variety of fisheries policies and management actions based upon monitoring to date.
- Co-creation of local climate change adaptation toolkits, which are now being replicated across Micronesia, the Coral Triangle, and the Caribbean.[242]

[242] U.S. Coral Triangle Initiative Support Program, 'Climate Change Adaptation for Coral Triangle Communities: Guide for Vulnerability Assessment and Local Early Action Planning (LEAP Guide)' (2013) <http://www.coraltriangleinitiative.org/sites/default/files/resources/LEAP_Final_complete.pdf>.

**Outlook and next steps**

The MC's overall approach, its sustainable financing mechanism, the international partnership therein, and capacity development approaches have inspired the subsequent leader driven initiatives, such as the CTI-CFF and the Caribbean Challenge, among others. Micronesia sets an outstanding example of successful, regional governance, and solid capacity development partnership to support it.

**Lessons learned**

- Consistent, sustained, and culturally relevant leadership, financing, capacity development, local and international partnership, and culturally sensitive mechanisms underlie the success of the MC.
- Development of governance capacity should be a continuous and adaptive process conducted at all levels and based upon local needs and priorities.
- Biophysical, socioeconomic and governance indicators should be developed in culturally appropriate manner, taking into account the capabilities and data available in each jurisdiction.
- Sustainable financing is crucial to support capacity development for natural resource agencies and NGOs that support the goals of the MC.
- The importance of co-creation, i.e., engaging people from multiple knowledge systems (including local, indigenous, scientific, policy, and others across cultural boundaries, e.g. language) to co-develop ocean management tools.[243]

### 4.5. Consortium for the Conservation of Coastal and Marine Ecosystems in the Western Indian Ocean (WIO-C)

The Western Indian Ocean (WIO) Region comprises tropical and subtropical regions characterised by multiple and interlinked resource systems ranging from coral reefs, mangroves, sea grass beds, and salt marshes.[244] Although one of the least ecologically disturbed regions of the world, it is increasingly facing pressures from resource exploitation and habitat degradation.[245]


**Figure 12: Contracting Parties of the Nairobi Convention, Western Indian Ocean**

[243] E.g. in Pohnpei in 2010, Micronesian leaders, traditional practitioners, marine management practitioners, international climate scientists, and others gathered to develop a community-based toolkit for local early adaptation to climate change. See Gombos et al., 'Adapting to a Changing Climate (Booklet)' (2010) <cakex.org/virtual-library/adapting-changing-climate-booklet>.

[244] WIOMSA UNEP-Nairobi Convention, 'Regional State of the Coast Report: Western Indian Ocean' (2015).

[245] Ibid.

WIO governments,[246] through the Nairobi Convention,[247] have developed collaborative partnerships with a variety of NGOs over the last two decades to implement a range of programmes, projects, and initiatives. Drawing on this experience and the availability of a broad range of civil society actors in the region, the Consortium for the Conservation of the Marine and Coastal Ecosystems of the WIO region (WIO-C) was created to enhance civil society participation in project/programme implementation and advocacy within the framework of the Nairobi Convention.

**Type/mandate**

The WIO-C is a membership partnership of international and regional NGOs and intergovernmental organisations to support marine research, conservation, and management in the region. The Consortium was launched at the Fifth Meeting of the Contracting Parties to the Nairobi Convention in 2007.[248]

**Scope and objectives**

The WIO-C provides a mechanism for NGOs to anchor their activities in the Nairobi Convention's programme of work, while promoting synergies between of projects and knowledge and information sharing amongst its members.

**Structure and governance**

The Consortium draws its membership from Intergovernmental Organisations (IGO), regional NGOs, and national and local NGOs that are active in marine and coastal management in the WIO.[249] The general membership acts as the steering committee and consortium members host the secretariat on a rotational basis.

**Timeline**

2007–present

**Challenges**

It took time for the Consortium to fully develop following its launch due to challenges in clarifying membership, structure and governance, and in defining the expected level of collaboration by members.[250]

**Enabling conditions**

- Support and endorsement of the Consortium by Nairobi Convention Contracting Parties.[251]
- Well-coordinated resource mobilisation for programme development and implementation to minimise duplication and overlap of member activities and competition for resources.

**Outcomes**

- The Consortium has enabled members to develop common policy positions on threats to the coastal and marine environment in the region and lobby for decision support with Nairobi Convention Contracting Parties.
- Development in 2012 of a Joint Regional Programme on enhancing the resilience of coastal socio-ecological systems in the WIO.
- Implementation of regional commitments at national and local levels through environmental education and community natural resource co-management programs.

**Outlook and next steps**

The Consortium, as a common voice of the WIO civil society, will continue to play an important role in advocacy and implementation of programmes and projects in collaboration with the Nairobi Convention Contracting Parties. There is the opportunity for extended collaboration with other ROG mechanisms. Since 2013, the WIO-C and the Western

[246] Continental States: Somalia, Kenya, United Republic of Tanzania, Mozambique, South Africa; and the island states of Mauritius, Comoros, Seychelles, Madagascar, and Réunion (France).

[247] Nairobi Convention (1996) n 51.

[248] Fifth Meeting of the Contracting Parties to the Nairobi Convention Decision CP5/5 (2007).

[249] The nine founding members are: IUCN, the World Wide Fund for Nature (WWF), the Western Indian Ocean Marine Science Association (WIOMSA), Coastal Oceans Research and Development in the Indian Ocean (CORDIO), Wildlife Conservation Society (WCS), United Nations Environment Programme (UNEP)-Nairobi Convention, Indian Ocean Commission (IOC), New Partnership for Africa's Development (NEPAD), and the Inter-Governmental Oceanographic Commission (UNESCO-IOC).

[250] Humphrey, 'Development of Recommendations for Consolidation of the Consortium for the Conservation of Coastal and Marine Ecosystems in the Western Indian Ocean' (August 2009) <http://www.wio-c.org/wp-content/uploads/2015/12/a_discussion_document_on_wio-c.pdf>.

[251] Decision CP5/5 n 248.

Indian Ocean Coastal Challenge (WIO-CC) a leader-driven initiative, signed a MoU to collaborate on climate change adaptation, promoting resilient ecosystems, sustainable livelihoods, and human security. Partnership with NGOs will also be crucial for WIO governments to successfully implement new LME projects (WIOSAP[252] and SAPPHIRE ).[253]

**Lessons learned**

- Civil society participation can be enhanced within existing ROG frameworks through partnership and collaboration, especially where civil society plays a key role in implementing projects and programmes.
- Civil society can play an important advocacy role regarding threats to the coastal and marine environment and cross-cutting issues at regional intergovernmental processes.
- A formal regional mechanism/infrastructure such as a consortium of civil society organisations with clear governance structures can help to achieve synergy and complementarities for implementation of the 2030 Agenda and resource mobilisation.

**The ocean blue, Kitutia Reef, Mafia Island Marine Park**



[252] UNEP/Nairobi Convention Secretariat, 'Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities' (2009) <http://www.web.unep.org/nairobiconvention/strategic-action-programme-sap-protection-western-indian-ocean-land-based-sources-and-activities>.

[253] Western Indian Ocean Large Marine Ecosystems Strategic Action Program Policy Harmonization and Institutional Reforms.

# 5. Laying a foundation for ocean sustainability

### 5.1. Transition towards marine ecosystem-based management (EBM)

**Marine EBM approaches** are dynamic, adaptive, and iterative practices seeking to balance human wellbeing and ecosystem health in order to ensure the long-term sustainability of the ocean's ecosystem services. Definitions vary (Long et al. 2015), though most apply at least five essential elements:

1. Approaching the ocean as holistic, interconnected ecosystems.
2. Incorporating a place-based context (environmental, governance, social, cultural, and historical) into management decision-making.
3. Managing for the cross-scale dynamics of ocean ecosystems (local to global geographies, short to long timeframes) with the need to effectively address transboundary governance within and across local, subnational, national, regional, and global systems.
4. Accounting for the interconnections of ecological, social, economic, and governance aspects of ocean systems and the need to govern across sectors.
5. Incorporating diverse stakeholder perspectives and balancing conflicting objectives to develop an integrated approach to management.[254]

Ocean governance has historically been developed around political, sectoral, and administrative boundaries. Consequently, the management of the marine environment is often criticised as being fragmented (i.e. among different sectors, jurisdictions, and scales), lacking in meaningful integration and coordination, and ill-equipped to ensure the sustainability of marine resources.[255] In spite of a proliferation of new efforts and initiatives, the overall framework for ocean governance often amounts to less than the sum of its parts.

It is now widely acknowledged that our approach to management and protection of the marine environment needs to be aligned with the nature of these ecosystems.[256] The successful delivery of SDG14 will therefore require a transition from single-sector management integrated and coordinated decision-making processes that better account for ecosystem dynamics and ecological boundaries. Such processes should aim to holistically manage sectoral activities by taking into consideration marine and coastal systems, including habitats, species, and their interactions, so as to maintain ecosystem productivity and resilience; and ensure the long-term provision of services that the ocean provides to society.[257]

As the case studies in this report show, regional approaches play a key role in the transition towards EBM as:

[254] See McLeod and Leslie, *Ecosystem-Based Management for the Oceans* (Island Press 2009); Alexander, 'Regional Governance and Ecosystem-Based Management of Ocean and Coastal Resources.

[255] See, e.g. Tladi, 'Ocean Governance: A Fragmented Regulatory Framework' in Jacquetet al. (eds) *Oceans: the new frontier – A Planet for Life 2011* (TERI Press, 2011); Mahon et al., 'Assessment of Governance Arrangements for the Ocean. Volume 2 – Areas Beyond National Jurisdiction' (2015); Billé et al. (2016) n 11.

[256] Agardy et al., ´Taking Steps toward Marine and Coastal Management´(UNEP, 2011) 189 UNEP Regional Seas Reports and Studies <http://www.unep.org/pdf/EBM_Manual_r15_Final.pdf>.

[257] Ruckelshaus et al., 'Marine Ecosystem-Based Management in Practice: Scientific and Governance Challenges' (2008) 58 BioScience 53.

1. They allow for the specific ecological, economic, and social transboundary characteristics and challenges of a marine region to be taken into consideration and addressed through the development of fit-for-purpose legal regimes and management systems.

2. Differentiation makes it possible to increase the level of ambition as well as the diversity of solutions, so regional efforts have the potential to go further than global efforts and support ambitious national efforts.

3. The flexibility of regional mechanisms, compared to global mechanisms (limited number of States and stakeholders, inclusive procedures, etc.), can facilitate the participation of stakeholders in adaptive decision-making and contribute to consensus building.

4. They act as an entry point for national and local stakeholders to become involved in their respective management schemes.

### 5.2. Strengthened institutions and capacities

**Capacity development** refers to efforts to strengthen the knowledge, skills, systems, structures, processes, values, resources, and powers that empower individuals, organisations, and society to reach their goals for sustainable ocean and coastal resources.[258]

Effective EBM and implementation of the 2030 Agenda require institutional transformation.[259] Most countries and governance organisations have worked on the transition to EBM approaches in recent decades, but numerous obstacles hinder progress. Preparing and equipping individuals, organisations, and societal structures to implement the transformation to EBM will likely be required to achieve the Agenda. Capacity building (or perhaps better, capacity development)[260] can help facilitate the transition. Indeed, global consultations on the implementation of the Agenda found that local and national stakeholder engagement, capacities, and strengthened institutions would be among the foremost factors to the 2030 Agenda's success.

UN processes since the 1992 Rio Conference have focused on the importance of capacity development, and the recently published First Global Integrated Marine Assessment identified monitoring and assessment capacity needs across different regions in relation to human activities affecting the marine environment[261] and the status of species and habitats.[262] Furthermore, the need for improved capacity development for the implementation of UNCLOS has been recognised by the UNGA, especially for SIDS, LDCs, and coastal African states.[263] In practice, capacity building and development are on the upswing, with many countries and governance organisations calling for and engaging in developing EBM skills and structures.[264]

[258] See UNDP, 'Capacity Development: a UNDP Primer' (UNDP 2009) <http://www.undp.org/content/dam/aplaws/publication/en/publications/capacity-development/capacity-development-a-undp-primer/CDG_PrimerReport_final_web.pdf>; Shackeroff et al. (2016) n 179. <http://www.iass-potsdam.de/sites/default/files/files/policy_brief_3_2016_en_capacity_development-oceans_coasts.pdf>.

[259] UNDP, 'Delivering on the Post-2015 Development Agenda: Opportunities at the national and local levels' (UNDP, 2014) <https://sustainabledevelopment.un.org/content/documents/1909UNDP-MDG-Delivering-Post-2015-Report-2014.pdf>.

[260] Elsewhere, we use the term "capacity development" rather than "capacity building, though the latter is that which is used in the 2030 Agenda (e.g. "technology bank and science, technology and innovation capacity building mechanism [SDG17.8]). Developing rather than building speaks to an approach that takes existing strengths and capacities as its foundation and works to strengthen, advance and fill gaps within a particular place and context. It also rests on the conception of capacity as a holistic system, where individuals, organisations, and society are nested and interacting, and through these levels are various aspects critical to each.

[261] See World Ocean Assessment I, n 3, Chapter 32: (1) data accessibility and data sharing; (2) mentoring and training for less experienced scientists and practitioners; (3) data collection and marine habitat mapping to inform management of ecosystems, biodiversity, and fisheries; (4) improving professional capacities to assess socioeconomic issues; and (5) capacity to conduct integrated and ecosystem-services assessments.

[262] See Ibid. Chapter 53: (1) taxonomy and genetics; (2) bio-physical/chemical research on the ocean environment; (3) Socio-economics of oceanic natural resources focusing on biodiversity and habitats; (4) skills in integrated assessments, including modelling; (5) supportive technology, especially in research vessels and laboratories to support multidisciplinary research; and (6) Geographical Information System mapping skills.

[263] UNGA Resolution A/RES/70/235, 'Oceans and the Law of the Sea´ (23 December 2015). E.g. Paragraph 10 emphasises that "capacity-building is essential to ensure that [such] States (…) are able to fully implement the Convention, benefit from the sustainable development of the oceans and seas and participate fully in global and regional forums on ocean affairs and the law of the sea."

[264] Shackeroff et al. (2016) n 177.

Building capacity at the regional level is crucial as support for ROG efforts can help develop capacity across multiple jurisdictions and instil regional thinking, while ensuring that initiatives are attuned to place-based contexts. ROG can provide an efficient, strategic, and holistic means for UN Member States to deliver on the ocean-related goals and targets of the 2030 Agenda.[265]

In turn, ROG organisations and mechanisms can provide important forums for capacity development as they:

- Support science-policy dialogue.
- Support the development of integrated ocean policy.
- Enhance the exchange of data, information, and good practices.
- Encourage cross-sectoral and multi-stakeholder participation in reviewing progress and designing integrated policies across all the SDGs.

Support for regional approaches could include, for example:

- Strengthening capacities for regionally coordinated monitoring and assessment programmes (including data collection, monitoring, control, and enforcement).
- Effective marine environment reporting (in line with regionally-based global assessments).[266]
- Development of regionally harmonised indicators and targets.
- Implementation and enforcement of joint management measures to achieve common objectives.

Given the foregoing, regionally coordinated capacity development mechanisms will be key for facilitating synergies, addressing common challenges within a regional context, and improving efficient use of limited resources for the effective implementation of the 2030 Agenda.

### 5.3. Financing

**Sustainable financing** means the ability to secure stable and sufficient long-term financial resources, their targeted and timely allocation and effective management.[267]

Delivery and implementation of SDG14 and other ocean-related aspects of SDGs will require significant public and private resources. High-income countries will need to redirect public-private funding and increase investment in key areas. For low-income countries, international public finance, including official development assistance (ODA) and concessional financing, will be vital. Such sources of finance can complement domestic public resources and catalyse additional funds from diverse private sources ranging from micro-enterprises and cooperatives to multinationals, civil society, and philanthropic organisations.[268]

While these resources are primarily allocated at the national level, the regional level will play an important role in directing public and private investments. Coordination through regional processes could facilitate targeted funding, ensuring a coordinated approach according to regional priorities. This can draw on existing mechanisms, such as Regional Trust Funds for Regional Seas programmes and RFB, and short- to medium-term LME projects funded by the GEF, supplemented by cash and in-kind contributions by the participating countries. In addition, Regional Endowment Funds,[269] Sinking Funds,[270] and

[265] Ibid.

[266] E.g. The World Ocean Assessment and IPBES.

[267] Adapted from Dudley et al., ´Towards Effective Protected Area Systems. An Action Guide to Implement the Convention on Biological Diversity Programme of Work on Protected Areas´ (Secretariat of the Convention on Biological Diversity Montreal 2005) 18 Technical Series.

[268] UNGA (2015) n 12, §41.

[269] Capital is invested over the long-term and only interest is spent.

[270] Funds are invested with a stipulation that the funds must be spent over a specified time frame.

Revolving Funds[271] that draw their capital mix from public financing, grants, and private sources, can be used to deliver sustainable financial resources over the long-term, for specified objectives, and in certain cases within specified time frames.

In October 2016 the UN Secretary General announced the creation of a new platform for innovative finance for the delivery of the SDGs. The proposed Financial Innovation Platform will provide a new multi-stakeholder forum to help finance progress toward the Goals.[272] This platform could help to raise awareness and engagement at the global level for ocean finance solutions, including those at the regional level. A number of international institutions such as the World Bank, the GEF, and the United Nations Environment Programme are aligning their financing priorities to the 2030 Agenda and are keen to help support solutions at every appropriate scale, including by supporting regional efforts. By accessing additional support, such as from the Green Climate Fund, additional long-term debt may also be available on favourable terms.

Innovative financing mechanisms that draw on private sector sources (and in particular those that aim to access capital markets) can also be considered as a means to deliver finance at a regional level. Regional development banks such as the Asian Development Bank, the African Development Bank, the Andean Development Corporation (Development Bank for Latin America), and the Caribbean Development Bank can play an important role in catalysing finance for their respective regions and structure appropriate financing that includes public and private sector partners. Likewise, new public-private partnerships, e.g. an Ocean Sustainability Bank[273] or Regional Ocean Fund, could provide an innovative way forward.

Regional development banks are at the forefront of delivering "blended finance". For example, the European Investment Bank has identified a wide range of formats for integrating a variety of additional investment sources into their funding approaches.[274] According to the World Economic Forum's ReDesigning Development Finance Initiative, blended finance refers to the use of public funds to attract private capital towards investments delivering development impact in emerging and frontier markets. Specifically, public investors strategically use their funds to mitigate investment risk and/or enhance returns for private investors. By supporting blended finance transactions, public investors can magnify the impact of their own resources; estimates suggest that public capital deployed through blended finance transactions can attract one to ten times the initial amount in private investment.

Processes that help to standardise, verify and deliver specific SDG-compatible funding products, such as the Climate Bonds Initiative (CBI),[275] may offer a further opportunity for improving funding flows, including from the private sector. Bonds certified under this process provide private investors with predictable cash flows whilst delivering finance for climate projects. These bonds are increasingly raised by a diversity of issuers and could be structured to cover a range of projects in a particular region, provided that they fit the relevant verification criteria. The CBI established a Marine Technical Working Group in April 2016 that aims to catalyse increased investment in marine-based climate mitigation, adaptation by developing eligibility criteria for marine-related investments under the Climate Bonds Standard.[276] Blue Bond standards would allow a broader uptake by traditional institutional investors of ocean capital market instruments and could provide borrowers with additional funding to transform their ocean economies to sustainability.

[271] Annual payments are received into the fund from a variety of sources (such as taxes, fees, fines, and compensation payments).

[272] UN, 'UN, private sector to create platform for financing SDGs' (UN, 10 October 2016) <http://www.un.org/sustainabledevelopment/blog/2016/10/un-private-sector-to-create-platform-for-financing-sdgs/>.

[273] Thiele, 'Accelerating Impact, The Promise of Blue Finance' (2015) 2 Cornerstone Journal of Sustainable Finance & Banking 21.

[274] European Investment Bank, 'Blending' <http://www.eib.europa.eu/products/blending/index.htm>.

[275] Climate Bonds Initiative is aiming to mobilise the $100 trillion bond market for climate change solutions by: developing a large and liquid Green and Climate Bonds Market that will help drive down the cost of capital for climate projects; growing aggregation mechanisms for fragmented sectors; and supporting governments seeking to tap debt capital markets. See Climate Bonds Initiative, ´About us´ <https://www.climatebonds.net/about>.

[276] Climate Bonds Initiative, ´Climate Bonds Convenes Marine Technical Working Group-April 2016´ (Climate Bonds Initiative 13 April 2016) <https://www.climatebonds.net/resources/press-release/Marine-TWG-Launch/13April-2016>.

# 6. Conclusions

Over the last four decades, regional partnerships have proved to be effective in fostering marine conservation and sustainable ocean management. They are a cornerstone of marine ecosystem-based management and have frequently succeeded in securing greater commitments by States and stakeholders than global instruments. This report demonstrates that regional ocean governance can be a key lever for successful implementation of SDG14 and the broader 2030 Agenda.

The implementation of the Agenda 2030 is first and foremost the responsibility of States. National authorities must transpose these commitments into standards and policies, establish monitoring mechanisms, and provide regular reporting on actions undertaken. However, in light of the transboundary nature of the marine environment, achieving SDG14 is likely to be difficult, if not impossible, without robust initiatives conducted at the regional level.

As many of the SDG14 targets are a restatement and consolidation of targets and commitments already made under the auspices of existing instruments, regional ocean governance organisations and mechanisms already make important efforts that contribute to the implementation of SDG14. Moreover, regional organisations and mechanisms provide a platform for coordination, cooperation, and exchange across territorial and sectoral boundaries, fostering shared understanding of common and interdependent challenges to ocean sustainability and enabling the alignment of policies. They often also trigger new initiatives to strengthen or complement existing policies and measures. Where cooperation leads to the pooling of human or technical resources, management costs (e.g. for control, monitoring, surveillance, and enforcement) are likely to be reduced and their effectiveness increased. In other cases, regional initiatives facilitate fund raising and streamlining of available financial resources to provide targeted and tailor-made support for policy implementation and monitoring.

In many cases, regional processes also allow for transparent and inclusive decision-making, involving relevant stakeholders and providing avenues for their active engagement. Furthermore, building capacity and the strengthening of institutions through regional mechanisms can spur stakeholder engagement, facilitate common and comprehensive capacity development, and support coordinated action that links capacity needs with ecosystem realities.

Regional cooperation and exchange on science and research has also proven to be valuable, in particular by promoting the development of shared knowledge bases on ecosystem and resource dynamics and their responses to human impacts. Joint monitoring and data collection programmes have also been established that support the formulation and follow-up and review of tailor-made management measures. In some cases, improvement of the knowledge base and scientific capacity has driven the development of innovative management tools and approaches.

However, this report also shows that regional ocean governance is continuously evolving and that competent organisations and mechanisms face many challenges. Regional ocean governance requires coordination and cooperation across a diverse range of national contexts, interests, and capacities. Even successful efforts can be disrupted by political changes, unrest, or institutional restructuring. Generating tangible benefits for ocean sustainability in such contexts can be more labour-intensive and time-consuming, resulting in less coordination at the regional level and potentially less concrete action at the national level. These challenges can also be discouraging, impeding leadership and active engagement by Member States, especially where resources are limited.

Indeed, limited human and financial resources are a common problem for many regional organisations and securing adequate capacities and strategic and long-term funding for the 2030 Agenda is a challenge of its own. In some cases, unclear or weak legal

frameworks or the lack of a comprehensive knowledge base is another challenge for common positioning or decision-making.

The 2030 Agenda calls upon Member States to build on existing processes and mechanisms for implementation, follow-up, and review, and recognises the potential of the regional level to support national implementation and to provide a link to the global aspects of the 2030 Agenda. Regional initiatives and approaches to ocean governance must therefore be considered a key part of the framework for the implementation of SDG14. Regional ocean governance efforts should be further supported and strengthened so they can reach their full potential to support delivery of the 2030 Agenda and provide a useful mediator between global and national processes.

Some States have recognised regional forums and mechanisms in their national implementation strategies, while several regional ocean governance organisations have started to actively engage or define their potential role in the implementation of the 2030 Agenda. These first steps should be supported and, as appropriate, further expanded. However, as no regional organisation has a mandate covering the entire set of ocean-related SDG targets, improving cooperation and coordination across sectors is crucial.

Tailor-made and context-specific regional partnerships for sustainable management of the ocean could be developed to allow for such coordination and cooperation. Partnerships could bring together the various sectors and actors in ocean management to develop coordinated approaches and roadmaps for integrated SDG implementation. Civil society and donors could also be associated with these regional partnerships, providing support and sustainable financing.

The partnerships could provide a platform for dialogue and exchange on implementation challenges within a region. Moreover, they could create a mechanism through which countries and competent management organisations could cooperate towards a harmonised implementation across SDG14 targets and other ocean-related SDGs. This is particularly important for issues that are subject to different legal regimes and that cannot be managed effectively by one sector alone, e.g. the impact of fisheries on marine species and habitats or marine pollution from land-based sources.

While regional partnerships would facilitate exchange, coordination, and cooperation within a given region, opportunities for region-to-region dialogue are still largely absent from global governance processes. Establishing a mechanism for "inter-regional" and "region-to-global" cooperation and dialogue could help to broaden the scope of existing approaches and gather regional organisations and mechanisms from different regions, as well as further involve stakeholders, NGOs, and scientists in the regional discussions. Such a mechanism could provide the opportunity to meet informally to share experiences and good practices, discuss common initiatives, highlight options to tackle key challenges, and identify pathways toward improved cooperation for ocean sustainability.

The 2030 Agenda calls the international community to address sustainability issues as a whole. For SDG14, this requires a fundamental transformation of governance structures away from state-centric single-sector management and towards better integration. Regional ocean governance can play a crucial role in this transition, supporting the implementation of SDG14 and ultimately ensuring a sustainable future for our ocean.

# Annex I: Overview of regional ocean goverance mechanisms and their relevance for SDG14 implementation

| Type of ROG Mechanism | Description and potential contribution |
|---|---|
| Regional Seas Conventions and Action Plans | ■ RSCAPs work through Secretariats or Regional Coordinating Units (RCUs) that follow-up on the implementation of legal documents, programmes of work and policies adopted by the Contracting Parties. In some regions, Regional Activity Centers (RACs) are established with formal mandates and delegated authority from States to support the implementation of protocols or other thematic priorities.<br>■ RSCAPs will play a key role in coordinating actions related to SDG14 targets on pollution, conservation of marine living resources, and restoration of critical coastal and marine ecosystems and habitats. |
| Regional Fisheries Bodies | ■ The functions of RFBs can include the collection, analysis, and dissemination of information and data, coordinating fisheries management through joint schemes and mechanisms, serving as a technical and policy forum, and taking decisions relating to the conservation, management, development, and responsible use of the resources.<br>■ Many RFBs promote the ecosystem approach to fisheries and have huge potential to promote sustainable fisheries and aquaculture. |
| **Regional Political and Economic Organisations** | |
| The European Union | ■ "International ocean governance: an agenda for the future of our oceans"[277] is a central element of the EU's response to the 2030 Agenda in particular Sustainable Development Goal 14 "to conserve and sustainably use the oceans, seas and marine resources". Its objectives include improving the international ocean governance framework at global and regional level.<br>■ The Integrated Maritime Policy (IMP)[278] provides the overarching framework for the EU's ocean policy coordinating different sectors and actors through 'horizontal and cross-cutting' policy tools and initiatives to support transnational cooperation on commonly agreed maritime objectives. Under its auspices, regional sea strategies have been established to address common challenges and opportunities vis-à-vis sustainable growth.<br>■ The Marine Strategy Framework Directive (MSFD)[279] articulates the regional approach as one of its underlying principles requiring the EU Members States to cooperate with other EU Members States and non-EU countries where appropriate on sea basin-level to coordinate the development of national marine strategies for implementation of the MSFD. Member States shall use existing regional institutional cooperation structures, including those under Regional Sea Conventions, respectively.<br>■ Under its Common Fisheries Policy (CFP)[280] regional cooperation on conservation measures is encouraged. In addition, advisory councils have been established to strengthen and coordinate stakeholder involvement for each sea basin/-region.<br>■ Marine Knowledge 2020[281] pools marine data from different sources on oceanography and human activities, both on the European as well as the sea basin level, to improve the knowledge base on oceans and seas, and help actors and stakeholders to make evidence-based and informed choices as well as decision-making. |

[277] European Commission JOIN(2016) 49 final, 'Joint Communication on International ocean governance: an agenda for the future of our oceans' (10 November 2016).

[278] See n 42.

[279] See n 82.

[280] See n 44.

[281] European Commission COM(2014) 254 final/2, 'Communication on Innovation in the Blue Economy: realising the potential of our seas and oceans for jobs and growth' (13 May 2014).

| Type of ROG Mechanism | Description and potential contribution |
|---|---|
| African Union | ■ AIMS 2050 Strategy[282] proposes the development of a Common Fisheries Policy for the conservation, management, and exploitation of fish stocks for the Combined Exclusive Maritime Zone for Africa (CEMZA)(AIMS 2050 p.18) in line with the ecosystem-based management and precautionary approach.<br>■ NEPAD's Policy Framework and Reform Strategy for Fisheries and Aquaculture[283] promotes fisheries governance reforms to improve the productivity, profitability, and sustainability of fisheries and address IUU fishing. The Policy recommends cooperation and coordinated mechanisms among RECs, RFBs, and LME-based commissions to ensure coherence of fisheries policies and aquaculture at the regional level. |
| **Leader-Driven Initiatives** | |
| The Micronesia Challenge | ■ The Micronesia Challenge (MC) is a commitment by the Federated States of Micronesia, the Republic of the Marshall Islands, the Republic of Palau, Guam, and the Commonwealth of the Northern Marianas Islands to preserve the natural resources that are crucial to the survival of Pacific traditions, cultures, and livelihoods. The overall goal of the Challenge is to effectively conserve at least 30% of the near-shore marine resources and 20% of the terrestrial resources across Micronesia by 2020.[284]<br>■ Micronesia Challenge (MC) has enabled remarkable transformations in marine and coastal management across the eight Micronesia Challenge jurisdictions. Over the course of 10–15 years, strategies to meet the MC have evolved to include: conservation action planning; the establishment of approximately 150 marine managed areas (MPAs); and the development and implementation of management plans for them; the local development, design, and launching of monitoring schemes for biophysical (marine and terrestrial), socioeconomic, and governance indicators; the development of a variety of fisheries policies; skills-building and coordination for local marine enforcement officers and task forces, such as the Alliance of Palau Conservation Officers; and the co-creation of local climate change adaptation toolkits, which are now being replicated across Micronesia, the Coral Triangle, and the Caribbean.<br>■ Micronesia sets an outstanding example of successful regional governance and solid capacity development partnership to support it – made possible, in part, through consistent leadership support, donor, and development investment and coordination, and capacity development over some 10–15 years. |
| The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) | ■ The Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF) established in 2009 is a multilateral partnership of 6 countries[285] to address the urgent threats facing the coastal and marine resources of the Coral Triangle. Through the 10-year CTI-CFF Regional Plan of Action (CTI RPOA), the governments collaborate to strengthen the management of seascapes, promote an ecosystem approach to fisheries management (EAFM), improve management of marine protected areas (MPAs) and coastal community resilience and adaptation to climate change, and protect threatened species.<br>■ Among a host of achievements, the CTI-CFF has achieved, in policy and practice, from local to national to regional scales:<br>▪ Region-wide Early Action Plan for Climate Change Adaptation (REAP)[286] as well a Local Early Adaptation Plan toolkit implemented in each of the six countries.<br>▪ Regional EAFM Framework and national EAFM policies implemented.<br>▪ Coral Triangle System of MPAs and a common management effectiveness framework.<br>▪ Transboundary IUU exercises to help successfully combat illegal, unreported, and unregulated fishing. |

[282] African Union (2012) n 47.

[283] African Union, 'Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa' (10 September 2014) <https://au.int/web/sites/default/files/documents/30266-doc-au-ibar_-_fisheries_policy_framework_and_reform_strategy.pdf>.

[284] Micronesia Challenge, 'About the Challenge' <http://www.themicronesiachallenge.blogspot.de/p/about.html>.

[285] Malaysia, Indonesia, Philippines, Papua New Guinea, Solomon Islands, Timor-Leste (the CT-6).

[286] See Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security, 'Region-wide Early Action Plan for Climate Change Adaptation for the Nearshore Marine and Coastal Environment (REAP-CCA)' (October 2011) <http://www.coraltriangleinitiative.org/sites/default/files/resources/FINAL_CCA%20REAP_17Oct2011_lg_V6.pdf>.

| | |
|---|---|
| | ■ Ocean acidification monitoring framework and training among MPA and fisheries managers about the potential OA impacts to their coastal communities.<br>■ Permanent regional CTI-CFF Secretariat. |
| Caribbean Challenge Initiative | ■ The Caribbean Challenge Initiative (CCI) is a joint effort by governments, donors, businesses, and conservation organisations to build political support and generate long-term funding to protect the region's marine and coastal areas. Under the Initiative, the governments have committed to protect at least 20% of their near-shore marine/coastal environment by 2020, through comprehensive national systems of marine and coastal protected areas.<br>■ To enable participating countries to meet the Initiative's objectives, a Regional Biodiversity Fund has been established to provide a sustainable flow of funds for enforcement, infrastructure, and monitoring needs for the conservation and maintenance of biodiversity. |
| Pacific Oceanscape | ■ The Pacific Oceanscape Framework adopted at the 40th Pacific Islands Leaders Forum in 2009 is the region's implementation tool for the Pacific Islands Regional Ocean Policy and the Framework for Integrated Strategic Action (PIROF-ISA),[287] the overarching framework for regional coordination, integration, and collaboration on ocean issues and coasts in the Pacific Island countries.<br>■ The Pacific Oceanscape emphasises integrated ocean management at all scales and has catalysed a number of developments to promote sustainable development, biodiversity conservation, establishment of marine protected areas, integrating traditional resource coastal management, and collaborative partnerships to manage resources in the high seas such as Pacific-ACP Regional Legislative and Regulatory Framework for Deep Sea Minerals Exploration and Exploitation. |
| Western Indian Ocean Coastal Challenge | ■ The Western Indian Ocean Challenge (WIO-CC) is a partnership of WIO island and coastal countries and stakeholders, working together to achieve a range of commitments in international and regional agreements, projects and activities that address climate change, biodiversity conservation, desertification, and sustainable development over a 25 year period. The WIO-CC has great potential to leverage on the WIO countries to implement their Oceans 2030 Agenda commitments. |

[287] The Pacific Islands Regional Ocean Policy and Framework for Integrated Strategic Action <http://www.forumsec.org/resources/uploads/attachments/documents/pirop.pdf>.

## The Partnership for Regional Ocean Governance (PROG)

The PROG was created in 2015 with the aim of advancing regional cooperation for the conservation and sustainable use of marine ecosystems and resources. Established as a platform at the interface of science, policy, and society, the PROG focuses on facilitating dialogue, fostering regional cooperation, and encouraging the development of integrated and coherent governance frameworks at regional and national levels. Main areas of work include the implementation of the 2030 Agenda and the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction. The work of the PROG is supported by different international organisations and agencies, including the Federal Ministry for Economic Cooperation and Development (BMZ) through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

More information at: http://www.prog-ocean.org/

### Contributing organisations

The PROG is hosted by the Institute of Advanced Sustainability Studies (IASS), the Institute for Sustainable Development and International Relations (IDDRI), TMG-Think Tank for Sustainability, and the United Nations Environment Programme (UN Environment).

**Institute for Advanced Sustainability Studies (IASS)**
Funded by the ministries of research of the Federal Republic of Germany and the State of Brandenburg, the IASS aims to identify and promote development pathways for a global transformation towards a sustainable society.

More information at: www.iass-potsdam.de

**Institute for Sustainable Development and International Relations (IDDRI)**
IDDRI is an independent research institute dedicated to fostering the transition to sustainable development and prosperity for all. IDDRI identifies the necessary conditions for the integration of sustainable development into public policies and proposes tools for their implementation.

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**TMG – Think Tank for Sustainability (Töpfer Müller Gaßner GmbH)**
TMG initiates and supports transitions towards a sustainable society and cooperates with groups from across society to overcome existing barriers in the fields of renewable energy, sustainable development goals, development policy, and the management of natural resources.

More information at: www.tmg-thinktank.com

**The United Nations Environment Programme (UN Environment)**
UN Environment is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment.

More information at: www.unep.org

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***Partnering for a Sustainable Ocean: The Role of Regional Ocean Governance in Implementing SDG14*** **highlights the major role that regional ocean governance can play in the implementation of SDG14. It assesses the mandates of different regional frameworks, showcases existing regional efforts contributing to the specific targets underpinning SDG14, and identifies key contributions that regional initiatives can make to the overarching challenges of the 2030 Agenda. Acknowledgements**

## Key messages

**1. Regional cooperations are is essential for ocean sustainability**
Regional approaches to ocean governance make it possible for States and stakeholders to cooperate at an ecosystem scale and work together across sectors and national boundaries.

**2. Most of the SDG14 targets can be addressed through regional initiatives**
Regional approaches and instruments can play a key role in meeting most of the SDG14 targets, with particular relevance in the areas of marine pollution, sustainable ocean management, fisheries, conservation, and economic benefits for Small Island Developing States and Least Developed Countries.

**3. Regional ocean governance is a driver for the development of integrated approaches**
Regional approaches can help advance ocean governance by bringing all relevant actors together, taking the interdependencies among SDG14 targets into account, and providing co-benefits for the other SDGs.

**4. Regional ocean governance efforts require greater support to overcome gaps and institutional weaknesses.**
Regional cooperation is key to the success of SDG14 and the 2030 Agenda, and should be further strengthened, including through capacity building and the development of regional partnerships.

**www.prog-ocean.org**