



# Conventions and Coral Reefs

Fourteen Multilateral Environmental Agreements, Programmes, Partnerships and Networks Relevant to the Protection and Conservation of Coral Reefs, and the World Summit on Sustainable Development Plan of Implementation

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### Foreword

Coral reefs are one of the most biologically diverse ecosystems in the world – they occupy less than 1% of the ocean floor, but are inhabited by at least 25% of all marine species. Thirty-two of the 33 animal phyla are found on coral reefs, compared with nine in tropical rain forests. Due to their unique complexity and diversity, coral reefs can provide food and livelihood opportunities to millions of people. They are vital for small–scale and artisanal fisheries, producing 10 percent of the world's fishing harvest. Further, they are hosts to a wide range of organisms that may hold the key to future medical advances. They also provide services such as shoreline



protection and recreational opportunities, making their importance for the economies of coastal communities and entire nations immeasurable.

However, coral reefs have come under increasing threat around the world, particularly during the last decades, and mostly due to anthropogenic impacts. Roughly one third of the world's coral reefs have been destroyed or highly degraded. The present rate of extinction on coral reefs is estimated to be 1,000 to 10,000 times the background rate without human interference. Coral reefs are threatened by increased sedimentation, euthrophication, over harvesting of fish and other reef based resources, and pollution. In addition, bleaching and mass mortality events caused by climate change appear to have become more frequent as well as more severe, posing a major threat to coral reefs world wide.

Action is being taken to halt and turn back this negative trend. A framework is provided in the World Summit on Sustainable Development (WSSD) Plan of Implementation, which sets out targets for the sustainable management of our natural resources, as agreed by the Governments in Johannesburg in September 2002 (see summary on page 1). A global WSSD partnership - ICRAN (the International Coral Reef Action Network) - has already delivered tangible improvements at reef level, which benefited from generous funding by the UN Foundation. However, we need to create a strong resource base, backed by governmental, non-governmental and private funds, to build further on this foundation. Achieving the aims of WSSD also requires support from the other Multilateral Environmental Agreements, programmes, partnerships and networks included in this brochure, which summarizes their area of work, how they relate to coral reefs, as well as current and future activities.

This brochure is intended to serve both as a source of information and as a tool for identifying synergies and needs. Efficient and coordinated work between the organizations included here, as well as Governments and other bodies, is essential for sustainable development, to secure a future for coral reefs and the people that depend on them. This brochure can contribute to the process.

Klaus Töpfer Executive Director UNEP

#### Coral reefs in the World Summit on Sustainable Development Plan of Implementation (23 September 2002)

29. Strengthen coordination, cooperation and action at all levels: f) the UNEP Regional Seas programmes 30. Achieve sustainable fisheries: g) Strengthen donor coordination and partnerships to enable developing countries and SIDS to develop national, regional and subregional capacities; h) Support the sustainable development of aquaculture

31. Promote conservation and management: a) Maintain the productivity and biodiversity of important and vulnerable marine and coastal areas; b) implement the Jakarta Mandate of the CBD; c) facilitate the elimination of destructive fishing practices and the establishment of MPAs and the integration of marine and coastal areas management into key sectors; d) develop programmes for halting the loss of marine biodiversity; e) implement the Ramsar Convention, CBD, and ICRI

34. Improve scientific understanding and assessment of marine and coastal ecosystems. a) Increase scientific collaboration; c) Build capacity in marine science, information and management

38. Enhancing food security and food safety in an environmentally sustainable way: c) Increase understanding of the sustainable use, protection and management of water resources; d) promote sustainable effective use of water resources in artisanal fisheries and aquaculture, especially through indigenous and local community-based approaches

41. Promote sustainable tourism: a) Enhance international cooperation, foreign direct investment and partnerships with both private and public sectors, at all levels; b) Develop programmes that encourage participation in eco-tourism, enable indigenous and local communities to develop and benefit from it, and enhance stakeholder cooperation

42. Biodiversity and CBD: () Promote and support partnerships for the sustainable use of biodiversity, in particular in developing countries; g) promote and support initiatives for hot spot areas; h) support indigenous and community-based biodiversity conservation efforts in developing countries; j) develop and implement benefit-sharing mechanisms for the use of indigenous knowledge, innovations and practice; l) Promote the participation of indigenous and local communities in decision and policy-making

45.ter Promote corporate responsibility and accountability, including development and effective implementation of international and public-private partnerships

52. Small Island Developing States (SIDS): c) Assist in managing coastal areas and EEZ; d) support the development and implementation of SIDS-specific components of programmes of work on marine and coastal biodiversity; g) Develop community-based initiatives on sustainable tourism, while protecting culture and traditions and conserving and managing natural resources

56. Sustainable development in Africa: h) strengthen the capacity to undertake environmental legislative policy and institutional reform; i) Develop projects, programmes and partnerships and mobilize resources for the implementation of the African Process for the Protection and Development of the Marine and Coastal Environment

61. Improved sustainable agricultural productivity in Africa: a) Support development and implementation of policies and programmes, including research for sustainable fisheries

64. Support Africa's efforts to attain sustainable tourism: a) Implementing projects at the local, national and subregional level; b) Establishing and supporting national and cross-border conservation areas

### Stockholm Convention on Persistent Organic Pollutants



#### Area of work

The Stockholm Convention is a global treaty to protect human health and the environment from persistent organic pollutants (POPs). POPs are chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of living organisms and are toxic to humans and wildlife. In implementing the Convention, Governments will take measures to eliminate or reduce the release of POPs into the environment.

#### Issues relevant to coral reefs

POPs are released into the environment through many activities, including agriculture, forestry and urbanization. POPs may accumulate in reef ecosystems through local releases or long-range transport. Many POPs have insecticidal properties and are relatively more toxic to invertebrates than vertebrates, and may be endocrine disruptors in fish and mammals. Dioxins, furans and PCBs have been detected in sea grasses, and organochlorine pesticides have also been detected in fish and dugong tissue samples.

#### Activities on coral reefs

A global assessment programme focusing on POPs and other Persistent Toxic Substances (PTS) as well as country-support programmes on POPs are run by UNEP.

#### Need for future work

Pollutant concentrations on coral reefs have only been studied in a limited number of species. There is a need to study the short- and long-term effects of POPs on coral reef biota and the consequent health effects on surrounding communities.

## Marine Protected Areas

No

# www.pops.int

### Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA)



#### Area of work

More than half of the world's population lives within 200 km from the sea. Land-based activities affect the quality of water flowing into rivers, streams and eventually to the coastal and marine environment. Healthy coastal environments are essential to human health and to support human activities and resource utilisation. The GPA addresses threats to the coastal and marine environment, and GPA principles can be incorporated into national legislation and management schemes.

#### Issues relevant to coral reefs

Among the largest threats to corals are siltation and eutrophication, caused by deforestation and sewage and fertilizer runoff. Eutrophication leads to increased growth of turf- and macroalgae, which compete with corals for space, shade smaller colonies and bind sediment, which can lead to suffocation of corals. Increased reef erosion through proliferation of bio-eroding organisms makes the reefs more fragile. Litter originating from storm water discharges from urban areas may cause entanglement and ingestion problems in marine animals.

#### Activities on coral reefs

The GPA is implementing Sewage Action Plans (SAP) in many tropical countries with coral reefs, as well as a project on the Physical Alteration and Destruction of Habitats (PADH).

#### Need for future work

More information is required on e.g. the factors contributing to macroalgae proliferation, as well as the relation between land-based activities and coral diseases, crown-of-thorns starfish outbreaks Phase shifts in reef biota etc.

#### Marine Protected Areas No

## www.gpa.unep.org

## Convention on Biological Diversity (CBD)



#### Area of work

The CBD sets commitments for maintaining the world's biological diversity. The Convention establishes three main goals: conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits from the use of genetic resources. The CBD identifies common problems, sets goals and general obligations, and organizes technical and financial cooperation.

#### Issues relevant to coral reefs

Impacts on marine and coastal ecosystems can be grouped in five main categories: chemical pollution and eutrophication; fisheries operations; global climate change; alterations of physical habitat and invasions of exotic species. All of these can contribute to loss of biodiversity on coral reefs and subsequent loss of ecosystem functionality and productivity.

#### Activities on coral reefs

The Jakarta Mandate on Marine and Coastal Biological Diversity of the CBD was adopted in 1995. Through its programme of work, adopted in 1998, the Convention focuses on integrated marine and coastal area management, the sustainable use of living resources, protected areas, mariculture and alien species. Coral bleaching is an element of the programme, and a work plan on the physical degradation and destruction of coral reefs is in progress.

#### Need for future work

 Information: tolerance and adaptation of coral reef biota to acute and chronic increases in SST, the connection between coral bleaching, global warming and local threats;
Capacity building: training and stakeholder partnerships;
Policy: develop and support conservation frameworks and integrated marine and coastal management plans;
Financing: mobilize public and private international and national programmes for financial and technical development assistance.

#### Marine Protected Areas

At the 7<sup>th</sup> CBD Conference of Parties in 2004, Parties will be asked to reconfirm their WSSD commitment to the global network of MPAs by 2012.

# www.biodiv.org

## Ramsar Convention on Wetlands

#### Area of work

The Ramsar Convention deals with international cooperation for the conservation and wise use of wetlands. Wetlands have fundamental ecological functions, as regulators of water regimes and as habitats supporting a rich biodiversity, and they constitute a resource of great economic, cultural, scientific and recreational value that must be maintained. Under the convention there is a general obligation for Contracting Parties to include wetlands conservation in their national land-use planning.

### Issues relevant to coral reefs

Wetlands are defined as areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres. Thus many coral reefs fall within the definition of wetland.

Coral reefs are degraded and lost due to human activities, e.g. coastal development, siltation, nutrient enrichment and pollution from agricultural, domestic and industrial effluents, impact of tourism and over exploitation of reef resources, climate change and associated bleaching and mortality.

### Activities on coral reefs

Contracting Parties are expected to implement management planning processes to secure sustainable use, and in the context of CBD's ecosystem approach.

The Convention has produced a 'Toolkit' for wise use of wetlands, management, policy, law, community participation, education and public awareness etc., and operates the Ramsar Small Grants fund for wetlands conservation and wise use projects.

Country level activities include the characterization of coral reefs in the Marine State Park of Parcel de Manuel Luis in Brazil, and a reef biodiversity assessment of the Vermetid Reef in Israel.

### Need for future work

Establishment of further National Wetland Committees and increased participation of civil society organizations in activities under the Convention. Increased networking between Ramsar sites and increased awareness of existing activities including information on available funding sources to avoid duplication of efforts. Increased representation of coral reefs in Ramsar sites.

### Marine Protected Areas

35 Ramsar sites in the world have significant coral reefs

## www.ramsar.org

### Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

#### Area of work



CITES works to ensure that international trade in wild animals and plants does not threaten their survival. Because the trade crosses international borders, efforts to regulate it require international cooperation. The species covered by CITES are listed in three appendices, according to the degree of protection they need. Appendix I includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances. Appendix II includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival. Appendix III contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade. The convention also provides a framework for the implementation of national legislation.

#### Issues relevant to coral reefs

All species of stony corals, black corals, blue corals, organ pipe corals, fire corals, lace corals, giant clams, sea horses as well as the queen conch are listed in Appendix II of CITES as species not necessarily threatened with extinction, but for which trade must be controlled in order to avoid utilization incompatible with their survival. International trade in these organisms requires an export permit issued by the country of export, proving the specimen has been legally obtained and that the export is not detrimental to the survival of the species.

#### Activities on coral reefs

The Animals Committee has initiated a review of the artificial propagation and rearing of corals for international trade. There is also a species programme on the Hawksbill turtle.

#### Need for future work

Assess the need for additional listings of coral reef biota in the CITES Annexes, e.g. ornamental fish, sponges, polychaetes, echinoderms, and additional soft corals and molluscs.

#### Marine Protected Areas No

# www.cites.org

### World Heritage Convention

#### Area of work



### Issues relevant to coral reefs

Of the 730 World Heritage sites, 563 are cultural, 144 natural and 23 mixed. At the moment about twenty of these contain coral reefs, but not all of those have been inscribed on the List for their coral reefs values.

Coral reefs are impacted by climate change, sedimentation, nutrient enrichment and other land-based pollution as well as unsustainable use of reef resources. In many developing countries these threats are poorly managed because of lack of resources.

### Activities on coral reefs

The project "Filling critical gaps and promoting multi-sites approach to new nominations of tropical coastal, marine and small island ecosystems" is underway, aiming to increase the representation of those ecosystems on the World Heritage List. An expert workshop has identified some of the most biologically diverse sites, which are recommended to State Parties for nomination. 2-3 pilot projects have been identified to prepare marine World Heritage nominations, and the identified regions also include coral reef ecosystems.

### Need for future work

The representation of coral reefs, and marine ecosystems in general, on the World Heritage List should be increased. Exchange of management experiences between World Heritage sites should be promoted, possibly through establishment of a marine World Heritage site managers' network. Partnerships should be forged with other institutions and organisations to support management of existing and nomination of new sites, and to build management capacity. Awareness about the possibility to nominate marine and coral reef World Heritage sites needs to be increased among Governments.

### Marine Protected Areas

About 20 of the World Heritage sites contain coral reefs (at the time of printing)

## whc.unesco.org



## The Man and the Biosphere Programme (MAB)



#### Area of work

The Man and the Biosphere (MAB) Programme was launched by UNESCO in 1971 to promote sustainable use and conservation of biodiversity by improving the relationship between people and their environment. MAB encourages interdisciplinary research, demonstration and training for a better understanding of the environment, as well as a greater involvement of science and scientists in policy development. A central feature of the MAB programme is a world network of biosphere reserves. These "special places for people and nature" represent the main ecosystems of the planet, and serve to promote integrated solutions for reconciling biodiversity conservation with its sustainable use.

#### Issues relevant to coral reefs

Following an International Conference reviewing Biosphere Reserves in 1995, UNESCO adopted a Statutory Framework for the World Network of Biosphere Reserves and the 'Seville Strategy', a new action plan for biosphere reserves. It suggests, *inter alia*, that they should be used as priority long-term monitoring sites for programmes focused on e.g. observation systems and global change. These topics include coral reefs, while serving the aims of other scientific programmes and supporting the objectives of the CBD.

By June 2003, 95 countries had designated 425 MAB reserves, 22 of which include coral reefs.

#### Activities on coral reefs

Coral reefs are considered an element in a number of projects and project areas such as 'Ecology and Rational Use of Island Ecosystems' and 'Integrated Biodiversity Strategies for Islands and Coastal Areas'. Based on the experience in 14 project areas, MAB is now entering a phase focusing on the development and full use of the existing site network, continuing efforts to reconcile conservation and sustainable use with socio-economic development and maintenance of cultural values; building capacity and helping countries address complex, cross-sectoral issues of environment and development.

#### Need for future work

The representation of coral reefs, and marine and coastal ecosystems in general, on the list of MAB reserves should be increased and Governments are being encouraged to nominate such areas. Experiences gained under MAB and plans for future work should be exchanged with other relevant organizations. The joint work programme between MAB and the Ramsar Convention should help in this effort.

#### Marine Protected Areas

Twenty-two MAB reserves include coral reefs, two of which are also World Heritage Sites

## www.unesco.org/mab

# United Nations Framework Convention on Climate Change (UNFCCC)

#### Area of work

The UNFCCC has the ultimate objective of stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level is to be achieved in a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

#### Issues relevant to coral reefs

UNFCCC receives scientific information on climate change from the Intergovernmental Panel on Climate Change (IPCC), an independent body of the World Meteorological Organization and UNEP, conducting periodic scientific assessments. IPCC research includes assessing the impacts of climate change on coral reefs. Results show that the expected increase in seawater temperature, sea level rise, changes in storm patterns and water currents, as well as changes in rainfall patterns and increased sedimentation will all affect coral reef ecosystems.

#### Activities on coral reefs

Based on guidelines, parties to the UNFCCC prepare National Communications and gather greenhouse gas inventory data that provide an overview of national circumstances related to climate change.

National communications include information on all affected ecosystems; actions underway to mitigate impacts and to assess vulnerability and adaptation; activities related to research and systematic observation; and education, training and public awareness.

#### Need for future work

Parties may, as appropriate, use National Communications as a means to provide information on coral reefs. In addition, results of assessments of research by the IPCC and other relevant institutions on the impacts of climate change on coral reefs may be used by Parties to the Convention to develop policies, projects, and activities to sustainably manage coral reefs as part of National Adaptation Programmes of Action and other strategies.

## Marine Protected Areas

No

## unfccc.int - www.ipcc.ch

UNFOOD

### International Coral Reef Initiative (ICRI)



#### Area of work

The International Coral Reef Initiative (ICRI), a partnership among nations and organizations, was established in order to stop and reverse the global degradation of coral reefs and related ecosystems by seeking to implement Chapter 17 of Agenda 21 and other international conventions and agreements. The ICRI partnership and approach thus far has been to involve governments and a wide range of other stakeholders in an effort to improve management practices, increase capacity and political support, and share information on the health of these ecosystems.

#### Issues relevant to coral reefs

The primary concern of ICRI is the health of coral reefs and associated ecosystems, which is threatened by e.g. climate change, unsustainable or destructive utilization of reef based resources, pollution, several land-based activities, etc. The ICRI Call to Action mobilises governments and a wide range of other stakeholders to coordinated and effective actions to address the threats to reefs. The Framework for Action identifies four major areas of work: integrated management; capacity building; research and monitoring; and review.

#### Activities on coral reefs

The ICRI Coordination and Planning Committee (CPC) provides coral reef policy guidance and advice to governments and conventions. Scientific workshops are held regularly as a forum for scientists in different parts of the world to present and discuss status, trends and recent research on coral reefs. Operational networks have been established for monitoring (GCRMN, Reefcheck), information dissemination and awareness (ICRIN), and management action (ICRAN). Currently there is one regional network for research and monitoring (CORDIO).

#### Need for future work

ICRI will continue to focus the world's attention on the need for protecting and managing coral reefs at local, national and international levels, promoting concrete action. The operational networks will be strengthened, and additional ones formed on international and regional scales as needed, to coordinate implementation of projects. ICRI will catalyse the development and funding of regional programmes and projects through these networks.

Marine Protected Areas No

### International Coral Reef Action Network (ICRAN)

#### Area of work

ICRAN, one of the operational networks of ICRI, is a global partnership between IGO's, NGO's, research and conservation organizations, working for the sustainable development of coral reef areas through management action and information sharing. ICRAN is at site level implemented by UNEP Regional Seas Programmes, while activities by the Global Partners focus on information and assessment.

#### Issues relevant to coral reefs

The threats to coral reefs range from local to global, and must thus be addressed at all levels, in a coordinated way and involving all stakeholders.

In addition to the four original Regional Seas, the Caribbean, Eastern Africa, East Asia and the South Pacific, the network has been extended to include South Asia and the Arabian Seas through SACEP, PERSGA and ROPME, thus covering all major coral reef areas in the world and many hotspots of biodiversity and/or endemism.

#### Activities on coral reefs

ICRAN management action involves all stakeholders and addresses both bio-physical and social and economic issues, recognizing the link between the health of the coral reef ecosystems and their users. ICRAN also works to increase community involvement in management through empowerment, awareness and outreach activities, and through assistance at public policy level. Networking and information exchange makes possible a globaly coordinated but locally relevant approach to management.

#### Need for future work

Continued implementation in the four original regions and development of activities at demonstration and target sites in the Arabian Seas and South Asian Regions. Additional partners and closer ties with key private sector reef users such as the tourism, fishing and ornamental fish industries. Securing sustainable financing for ICRAN and other coral reef activities in a Coral Reef Fund to be established 2003.

#### Marine Protected Areas

17 Demonstration and 15 Target Sites in four Regional Seas (at the time of printing)



## www.icran.org

# The United Nations Convention on the Law of the Sea (UNCLOS)



#### Area of work

UNCLOS lays down a comprehensive regime of law and order for oceans and seas based on the principle that all problems of ocean space are closely interrelated and need to be addressed as a whole. The Convention comprises 320 articles and nine annexes, governing all aspects of ocean space, such as jurisdiction of States over maritime areas, economic activities, protection and preservation of the marine environment, marine science and technology and the settlement of disputes relating to ocean matters.

#### Issues relevant to coral reefs

Under Part XII on the Protection and Preservation of the Marine Environment (articles 192-237) States have an obligation to protect and preserve the marine environment and are required to take all measures necessary to prevent, reduce and control pollution of the marine environment from any source (e.g. pollution from land-based sources, sea-bed activities or activities in the area, by dumping, from vessels, and from or through the atmosphere). This should include necessary actions for the protection and preservation of rare and fragile ecosystems, as well as the habitat of depleted, threatened or endangered species and other forms of marine life – such as coral reefs.

### Activities on coral reefs

Under UNCLOS, States are under a duty to adopt and enforce laws and regulations to prevent, reduce and control marine pollution. States are required to conserve and manage the living resources under their jurisdiction and on the high seas, and to endeavor to cooperate with other States in the conservation and management of living resources in enclosed or semi-enclosed seas. In establishing conservation measures for marine living resources, States are required to take into consideration the need to protect associated or dependent species, such as coral reef biodiversity. UNCLOS also provides a legal framework for marine scientific research.

### Need for future work

Further ratifications of UNCLOS and its related agreements (some countries with coral communities are not yet parties, e.g. Ecuador, Israel, Thailand, and the United Arab Emirates) and effective implementation of their provisions would enhance protection and preservation of marine ecosystems, including coral reefs.

Marine Protected Areas No

www.un.org/depts/los

# The International Convention for the Prevention of Marine Pollution from Ships (MARPOL)

### Area of work

MARPOL is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. It is a combination of two treaties adopted in 1973 and 1978 respectively and updated by amendments through the years.

### Issues relevant to coral reefs

MARPOL covers all the technical aspects of pollution from ships, except dumping and pollution arising out of the exploration and exploitation of seabed mineral resources. MARPOL regulates pollution by oil spills, ballast water, sewage, garbage and air pollution, all of which are severe threats to coral reefs, particularly in heavily trafficked and/or vulnerable areas. It sets criteria e.g. for discharges, noxious substances, packaging, marking and labelling, and dumping of garbage, and requires states to provide reception facilities for the disposal of oily waste and chemicals.

### Activities on coral reefs

MARPOL governs the design and equipment of ships and establishes systems of certificates and inspections. The convention is applied by parties in making and enforcing regulations to protect marine and coastal resources. In November 2002, the IMO designated a 3,000-square-nautical-mile zone around the Florida Keys an internationally protected nautical zone, to protect the fragile coral reefs in the area from anchors, groundings and collisions from large international ships.

#### Need for future work

Further ratification and entry into force of Annex IV: Prevention of pollution by sewage from ships. Pollution from ships is a threat to the health of Coral Reefs in areas adjacent to major shipping routes.

Marine Protected Areas No

## www.imo.org



#### The Convention on the Conservation of Migratory Species of Wild Animals (CMS or the Bonn Convention)

### Area of work



CMS aims to conserve terrestrial, marine and avian migratory species throughout their range, as well as their habitats on a global scale. CMS provides strict protection for endangered migratory species listed in Appendix I, and concludes multilateral agreements on species requiring or benefiting from co-operative agreements listed in Appendix II.

#### Issues relevant to coral reefs

Loss of habitat and over-exploitation is affecting several migratory animals in coral reef areas. For example, coastal development in coral reef areas is denying sea turtles adequate nesting beaches. Artisanal fishing of sea turtles for food and oil is a severe threat in some areas, and sea turtle eggs are frequently collected for food. Further, sea turtles are easily caught as by-catch in trawls. The Great White Shark, which frequents coral reef areas, was listed in Appendix I in 2002.

### Activities on coral reefs

Memoranda of Understanding on conservation of sea turtles have been signed in the Indian Ocean – South East Asia, as well as on the Atlantic Coast of Africa. Other sea turtle related activities include by-catch assessments, a turtle nesting beach GIS database and co-operative research activities.

#### Need for future work

Increased protection of Sea Turtles e.g. in the use of turtle excluding devices on trawlers, development of measures reducing by-catch on long lines, and enforcement of harvesting regulations. Listing of other migratory species that occur in coral reef areas such as fish, additional species of sharks etc.

#### Marine Protected Areas No

www.wcmc.org.uk/cms

## UNEP Regional Seas Conventions and Action Plans

#### Area of work



Regional Seas is a global programme implemented through a collection of decentralized, independent regional Conventions and Action Plans, focusing on environmental assessment, management and legislation and institutional and financial arrangements for management of the marine and coastal environment.

#### Issues relevant to coral reefs

Regional Seas addresses issues related to biodiversity, exploitation of living resources, land and sea based sources of pollution, shipping, invasive species, global change, coastal development and physical alteration of the coastal environment, all of which have a potential impact on coral reefs.

#### Activities on coral reefs

Action Plans are implemented regionally, by legally binding Conventions where such exist, carrying out baseline studies, monitoring and research, as well as training and capacity building activities e.g. on environmental impact assessments. The Regional Seas Agreements are the primary implementers of the International Coral Reef Initiative (ICRI), as well as responsible for site based management activities through the International Coral Reef Action Network (ICRAN).

#### Need for future work

The main focus of the Regional Seas Programmes will turn towards biodiversity conservation, land-based activities and integrated coastal management, promoting horizontal ties, carrying out the Global International Waters Assessment, collaborating with the GPA and exploiting synergies with other MEAs.

#### Marine Protected Areas

Yes (varies between the Regional Seas agreements).

## www.unep.ch/seas

### **Contact Information**

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#### The United Nations Convention

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