Chapter 7

The global legal dimension: Navigating the legal currents of rights and responsibilities

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Abstract: This chapter describes the global legal framework for the management and conservation of living marine resources, addressing legally binding as well as non-binding instruments. The 1982 United Nations (UN) Law of the Sea Convention and its main provisions in relation to living marine resources are first described, followed by an overview of further global fisheries agreements such as the 1995 UN Fish Stocks Agreement. FAO documents, particularly the FAO Code of Conduct for Responsible Fisheries, are discussed further. The importance of multilateral environmental agreements, such as the 1992 Biodiversity Convention, is then highlighted. Before a concluding discussion of possible future developments, the contributions of global environment and development conferences/ summits and the UN General Assembly resolutions and processes are reviewed.

Keywords: framework; binding/non-binding instrument; convention; agreement; UNCLOS; IUU; responsibilities

Introduction

The law of the sea has evolved over centuries. Until the end of the Second World War, the generally accepted view was that the oceans were subject to the freedom of the seas for navigation and other uses. Coastal State jurisdiction prevailed only in a narrow belt of sea along the coasts (Churchill and Lowe, 1999). In 1958, the First United Nations Conference on the Law of the Sea (UNCLOS I) was convened, resulting in four conventions: the Convention on the Territorial Sea and the Contiguous Zone; the Convention on the High Seas; the Convention on Fishing and Conservation of the Living Resources of the High Seas; and the Convention on the Continental Shelf. The conventions formalized the core of the law of the sea¹ but did not solve many issues including the breadth of the territorial sea (Rothwell and Stevens, 2010).

The global framework for the conservation and management of living marine resources has evolved substantially over the past decades (Birnie et al., 2009). The adoption of the 1982 United Nations (UN) Law of the Sea Convention (LOSC) as well as the emergence of a number of other instruments has forged a legal framework addressing the sustainable use and conservation of living marine resources (Edeson, 2005; Orrego Vicuna, 2001). These instruments establish global rules for ownership of resources, for their management, for how international cooperation is to take place and for how rules are to be enforced and disputes resolved (Ebbin et al., 2005). They constitute a dynamic framework evolving over time in response to new challenges, the latest addition to which is the 2009 Port State Measures Agreement in response to an international growth in landings from illegal, unreported and unregulated (IUU) fisheries.

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The evolution in the global legal framework for the management of living marine resources coincides in time with in the use of natural resources (Hoel, 1998). This is reflected in the living marine resources related instruments in a number of ways, for example by the introduction of the precautionary approach in fisheries management (Garcia, 1994; VanderZwaag, 2002) and an increasing emphasis on the impacts of fishing activities on marine ecosystems (Pikitch et al., 2004). A growing number of environmental agreements relevant to management of living marine resources, such as the 1992 Convention on Biological Diversity (CBD), have also emerged.

Two overall currents, sometimes raising major tensions, run through the global governance regime for living marine resources. One current is the bestowal and claiming of rights by States to exploit marine living resources and to exert enforcement measures and compel conservation practices on third parties for the protection of those rights. The other current is the setting out of numerous responsibilities on States, and in some cases on their resource users, to effectively conserve and manage the taking of living marine resources and broader marine biodiversity (Hutchings et al., 2012; Rayfuse, 2007).

This chapter provides a six-part navigational tour of the array of international instruments and institutional mechanisms established by the global community to govern fisheries and marine biodiversity conservation (see also Annexes 1 and 2 in this volume). The following section reviews the role of the 1982 Law of the Sea Convention in establishing rights and responsibilities. We then highlight further legally binding global fisheries agreements, including the 1995 UN Fish Stocks Agreement, in the third section. The contributions of the FAO Code of Conduct for Responsible Fisheries and its subsidiary documents (four international plans of action and various guidelines) towards sustainable fisheries are then examined in the fourth section. Other key multilateral environmental agreements of relevance, such as the Convention on Biological Diversity, are summarized in the fifth section. The sixth section briefly describes the importance of global environment and development conferences/summits. The penultimate section emphasizes the contributions of UN resolutions and processes to the global quest for healthy marine ecosystems and sustainable coastal communities. The paper concludes with some observations on possible future developments.

It is important to note that the global framework discussed here is only a part of the governance framework for living marine resources. In addition to the global rules, regional bodies have become increasingly important (Lodge et al., 2007) and a large number of bilateral agreements between neighbouring States exists to manage transboundary resources (FAO, 2002; Munro et al., 2004).

The Law of the Sea Convention

UNCLOS III and the status of the Law of the Sea Convention

The Third United Nations Conference on the Law of the Sea (UNCLOS III) took place between 1973 and 1982 and resulted in the 1982 United Nations Convention on the Law of the Sea (LOSC) (1833 UNTS 397). The Convention represents a comprehensive, legally binding instrument that defines a global order of the oceans, including the formal recognition of the 200 nautical mile (NM) exclusive economic zone (EEZ) and a more precise definition of the seaward extent of coastal state rights and jurisdiction over the continental shelf (Hannesson, 2004; Miles, 1998).

As of 21 January 2013, 164 countries had ratified the Convention, which entered into force in November 1994. The Convention has an important position in international law. It is widely considered to be the fundamental instrument on the law of the sea, and therefore other agreements must be compatible with it (LOSC Article 311). It establishes general principles and mandates, directly and through international organizations and diplomatic conferences, to develop further rules, measures and regulations. Many of its provisions are also widely considered to reflect customary international law (Churchill and Lowe, 1999).

Fisheries rights under LOSC

The Law of the Sea Convention recognizes extensive rights by coastal States in their various offshore zones to marine fisheries. Coastal States enjoy full sovereignty over internal waters, such as harbours and some bays,² and over an adjacent territorial sea out to 12 NM from the baselines, subject to the right of innocent passage of foreign vessels. Coastal States have the total right of access to fisheries and broad discretion in how to regulate fisheries, subject to various conservation responsibilities under the Convention and possible other rules of international law (Article 2).

The Law of the Sea Convention also defined the new category of an exclusive economic zone, the seaward

limit of which may extend to 200 NM from the baselines. In the EEZ the coastal State has sovereign rights:

'...for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the sea-bed and sub-soil and the superjacent waters, and with regard to other activities for the economic exploitation of the zone such as the production of energy from the water, currents and winds' (Article 56(1)(a)).

The coastal State also has jurisdiction over matters such as marine scientific research and environmental protection (Article 56(1)(b)).

The Convention also contains provisions regarding enforcement of laws and regulations of the coastal State relating to management of living resources in the EEZ. Subject to certain limitations, the coastal State may take the measures it deems necessary to ensure compliance with its laws and regulations (Article 73).³

Other States have to comply with the coastal State's regulations regarding exploring and exploiting the resources in the EEZ, but they also continue to enjoy specified customary rights. The Convention reaffirms the right of all States to exercise various freedoms of the high seas under conditions laid down in the Convention. These include scientific research, navigation and overflight, and the freedom to lay submarine cables and pipelines (Article 58).

The coastal State also exercises sovereign rights to explore and exploit the natural resources of the continental shelf. The continental shelf extends either to 200 NM or further out, depending on legal and geological criteria described in the Convention, 4 While granting coastal States all rights to mineral and other non-living resources of the seabed and subsoil of the continental shelf, Article 77(3) restricts coastal State rights over living marine resources on an extended continental shelf beyond 200 NM to sedentary species. This provision raises uncertainties as to precisely what species are covered beyond sessile species such as mussels and corals, but crabs and lobsters are also considered sedentary (Rothwell and Stevens, 2010). The exercise of coastal State rights over the continental shelf must not infringe or result in an unjustifiable interference with navigation and other rights and freedoms of other States (Article 78(2)).

Furthermore, the Convention provides that the seabed and subsoil thereof beyond the limits of national jurisdiction (the Area) and its mineral resources is the common heritage of mankind. The International Sea-Bed Authority (ISA) is the body through which State Parties to the Convention organize and control activities in the Area (Warner, 2009). The 1994 Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, an integral part of the Convention, addresses difficulties with the seabed mining regime (Part XI) of the Convention that prevented many industrialized countries from becoming a party to it.⁵ A major field of controversy has been the alleged *lacunae* in LOSC regarding the management of seabed living resources (Freestone, 2012) and the regime applicable to the exploration/exploitation of marine genetic resources in areas beyond national jurisdiction (Leary, 2007, 2012).

Pursuant to Article 87 of LOSC, all States enjoy the freedom of fisheries on the high seas beyond 200 NM EEZs. However, that freedom must be exercised with due regard for the interest of other States in their exercise of high seas freedoms and also with due regard for the rights under the Convention with respect to activities in the Area.

Responsibilities under LOSC

Responsibilities under LOSC may be summarized under two categories: responsibilities relating specifically to living marine resource management and those relating to broader marine environmental protection.

Living marine resources

The rights of coastal States to exploit and manage fisheries in the EEZ are subject to numerous conservation responsibilities. Coastal States are required to determine the allowable catch of living resources within their EEZs (Article 61(1)). They are to take into account the best scientific evidence available to ensure the living resources are not endangered by over-exploitation. The coastal State and competent international organizations, whether subregional, regional or global, shall co-operate to this end (Article 61(2)). Measures must be designed to maintain or restore populations of harvested species at levels which can produce maximum sustainable yield as qualified by relevant environmental and economic factors (Article 61(3)). In establishing conservation measures, the coastal State shall take into consideration the interdependence of stocks and the effects on species associated with or dependent upon harvested species, with a view to maintaining or restoring populations of such associated or dependent species above levels at which their reproduction may become seriously threatened (Article 61(4)).

A wide range of international cooperation responsibilities in marine living resource conservation is imposed by regional or subregional organizations, to manage shared fish stocks in EEZs (Article 63(1)) and fish stocks straddling EEZs and high seas (Article 63(2)). Cooperation duties are also spelled out in general terms for conserving highly migratory species (Article 64), marine mammals (Article 65), anadromous stocks (Article 66) and catadromous species (Article 67).

On the high seas, the flag States of the fishing vessels are to respect certain conditions, such as the duty to take such measures for their respective nationals as may be necessary for the conservation of the living resources and the duty to cooperate with other States in the conservation and management of such resources (Articles 117 and 118). In determining such conservation measures, States are to take into account the same criteria noted above for coastal State fisheries (interdependence of stocks, associated or dependent species, generally recommended international minimum standards; Article 119). These provisions establish a foundation for the 1995 UN Fish Stocks Agreement (UNFSA).

Responsibilities for the utilization of living resources in the EEZ are also spelled out under LOSC. Coastal States are to promote the objective of optimum utilization (Article 62(1)). Coastal States must determine their capacity to harvest EEZ living resources and, where they do not have the capacity to harvest the entire allowable catch, they are required to give other States, particularly developing States, the surplus allowable catch (Article 62(2)). In practice this provision does not mean much, as it is up to the coastal State to decide both its own harvesting capacity and the total allowable catch (Burke, 1994).

The LOSC and marine environmental responsibilities

Part XII of LOSC sets out numerous responsibilities for States to protect and preserve the marine environment (Birnie et al., 2009). A coastal State's sovereign right to exploit its natural resources is to be done in accordance with the duty to protect and preserve the marine environment (Article 193). Steps taken by coastal States must ment (Article 193). Steps taken by coastal States must include measures necessary to protect and preserve rare or include measures and habitats of depleted, threatened or fragile ecosystems and habitats of depleted.

endangered species (Article 194).

States are generally urged to cooperate on a global states are generally urged to cooperate on a global and regional basis to further elaborate international rules,

standards and best practices for the protection of the marine environment (Article 197). They are encouraged to specifically develop global and regional rules and standards for land-based marine pollution (Article 207), seabed activities (Article 208), ocean dumping (Article 210) and pollution through the atmosphere (Article 212). States are also required to further establish international rules and standards to control vessel-source pollution (Article 211).

LOSC also provides a fundamental environmental assessment obligation. Where States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial marine pollution or significant and harmful changes to the marine environment, they must assess the potential effects of such activities and must publish the results and notify competent international organizations (Article 206).

Dispute resolution

The Law of the Sea Convention requires its Parties to settle disputes concerning its interpretation and application by peaceful means (Part XV). Where no settlement can be reached, a Party may refer the dispute to a court or tribunal having jurisdiction in regard to the matter at hand. The Convention points to four such courts or tribunals: the International Tribunal for the Law of the Sea (ITLOS), the International Court of Justice, an arbitral tribunal established pursuant to Annex VII of the Convention or a special arbitral tribunal (Article 287).

The dispute resolution system in the Law of the Sea Convention is mandatory for its Parties, which is unusual in international law (Klein, 2005), and therefore an important development for international law in general. Limitations and exceptions are provided however, for example a coastal State is not subject to binding resolution regarding its discretionary powers over fisheries management in the EEZ, such as determining the allowable catch and allocating surplus to other States (Article 297(3)).⁶

Legally binding global fisheries agreements

The 1982 Convention needed to be strengthened in several respects in relation to living marine resources (Burke, 1994). Over time, a system of additional instruments has evolved addressing compliance, high seas fisheries and the role of port States in combating IUU fisheries.

The 1946 International Convention for the Regulation of Whaling

The International Convention for the Regulation of Whaling⁷ entered into force in 1948. It establishes an International Whaling Commission (IWC), which currently has 89 member governments. Against the background of the overfishing of a number of stocks of large whales before the Second World War, the Convention was concluded to provide for the proper conservation and management of whale stocks, enabling the orderly development of the whaling industry.

The International Whaling Commission must adopt regulations with respect to the conservation and utilization of whale resources. The Commission's scientific committee provides scientific advice and recommendations to the Commission. The IWC established a commercial moratorium on whaling for the 1986–1990 period, to which several countries filed an objection and are thereby not bound by it. The moratorium has not been lifted, as the status of whales as natural resources remains controversial. The IWC therefore remains a divided body (Iliff, 2008).

The 1993 Compliance Agreement

The Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas⁸ was adopted in 1993 and entered into force in 2003. There are 39 parties to the Agreement.⁹ The scope of the agreement is global, as it applies to all fishing vessels that fish on the high seas.

The objective of the agreement is to promote compliance with international conservation measures on the high seas, and it applies to fisheries of all fish stocks located there. The agreement requires flag States to take necessary measures to ensure that fishing vessels flying their flag do not engage in activities that undermine the effectiveness of international conservation and management measures. A key requirement is that no Party allow fishing vessels entitled to fly its flag to be used for fishing on the high seas unless they have been authorized to do so by the Party. Also, States are not to authorize vessels entitled to fly their flag to fish on the high seas unless they can exercise effective control over these vessels.

The flag State must take measures against fishing vessels that act in contravention of the provisions of the agreement. Sanctions shall be of sufficient gravity as to be effective in securing compliance.

The Agreement also requires the State Parties to cooperate on enforcement, by exchanging information on activities of

fishing vessels in order to assist the flag State in identifying fishing vessels flying its flag reported to have engaged in activities undermining international conservation and management measures.

The 1995 UN Fish Stocks Agreement

The 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 (UNFSA)¹⁰ was adopted in 1995 and entered into force in 2001.¹¹

The UNFSA is an implementing agreement of the Law of the Sea Convention regarding the conservation and management of straddling and highly migratory fish stocks (Balton, 1996). The objective of the Agreement is '...to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks through effective implementation of the relevant provisions of the Convention' (UNFSA, Article 2). The Agreement applies to the conservation and management of straddling fish stocks and highly migratory fish species beyond areas under national jurisdiction and, to some extent, to the conservation and management of such stocks within areas under national jurisdiction.

The Agreement sets out provisions for the conservation and management of such fish stocks as well as principles for management, notably the precautionary approach and an ecosystem approach. Since straddling fish stocks and highly migratory fish stocks migrate across maritime zones, the Agreement requires that their management in the coastal States' zones and in the adjacent high seas are compatible and do not undermine the conservation efforts of coastal States. The Agreement also establishes a framework and benchmarks for the development of regional and subregional fisheries agreements (Stokke, 2001) as well enforcement arrangements. It also contains provisions on dispute resolution

The conservation and management principles in the agreement include the precautionary approach (Articles 6 and 7) as well as an ecosystem approach (Article 5(e)). The Agreement also affirms the duty set out in the Law of the Sea Convention to cooperate concerning straddling and highly migratory fish stocks. Where regional fisheries management organizations or arrangements (RFMO/As) already exist, these are to be used. In areas where a fishery occurs and no organization or arrangement exists, States fishing on the high seas shall establish one.

Building on the Compliance Agreement, the UN Fish Stocks Agreement requires the flag State to ensure compliance by its vessels with subregional and regional conservation and management measures for straddling and highly migratory fish stocks. States cooperating through RFMO/As are to establish cooperative mechanisms for effective monitoring, control, surveillance and enforcement (Hayashi, 1996).

An annual State Party meeting and an ongoing review conference are mandated by the agreement. The review conference has met twice and considered issues relating to the implementation of the Agreement. Informal Consultations and the Review Conference are called for on an ad hoc basis by the UNGA Resolution on Sustainable Fisheries.

The 2009 FAO Port State Agreement

The Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (FAO Port State Agreement) was adopted in 2009 and is not yet in force (25 ratifications required).12 The objective of the Agreement is to prevent, deter and eliminate illegal, unreported and unregulated fishing (IUU fishing) through the implementation of effective port State measures, and thereby to ensure the long-term conservation and sustainable use of living marine resources and marine ecosystems.

The Agreement recognizes that port State measures are considered a cost-effective means to fight IUU fishing. It includes measures such as requesting permission for entry into designated ports by foreign fishing vessels ahead of arrival and transmission of information on their activities and catch to the port State. Port States must conduct inspections of ships according to standards set out in the Agreement. The flag State is responsible for follow-up action.

The 1995 FAO Code of Conduct for Responsible Fisheries and its subsidiary documents

In parallel with the development of the legally binding UN Fish Stocks Agreement, a broader framework addressing all aspects of fisheries and aquaculture was negotiated under the auspices of the FAO. The Code of Conduct is a nonbinding voluntary instrument which aims to provide principles for responsible fisheries activities, guidance for the implementation of international agreements and sets the standard for good conduct in all matters relating to

fisheries (FAO, 1995, Article 2). The Code is based on relevant rules of international law, including those reflected in the Law of the Sea Convention. It contains provisions that may be or have already been given binding effect by other legally binding instruments such as the UNFSA, agreements creating RFMOs and the FAO Compliance Agreement, which forms an integral part of the Code. The Code also reflects important UNCED provisions such as the precautionary approach of the Rio Declaration. 13 The FAO secretariat intended the Code to express the position of the FAO regarding ongoing environmental conflicts without engaging directly in them.

The Code contains a number of concepts and principles States should make use of, starting with General Principles, and lists principles for fisheries management (including the precautionary approach), fishing operations, aquaculture development, integration of fisheries into coastal area management, post-harvest practices and trade and fisheries research.

The Code has given rise to and is implemented through a number of international plans of action:

- International Plan of Action for reducing incidental catch of seabirds in longline fisheries (IPOA-SEABIRDS) in 1999 (http://www.fao.org/fishery/ipoa-seabirds/);
- International Plan of Action for the conservation and management of sharks (IPOA-SHARKS) in 1999 (http:// www.fao.org/fishery/ipoa-sharks/en);
- International Plan of Action for the management of fishing capacity (IPOA-CAPACITY) in 1999 (http://www. fao.org/fishery/ipoa-sharks/en); and
- International Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing (IPOA-IUU) in 2001 (http://www.fao.org/DOCREP/003/ y1224e/y1224e00.htm).

The FAO has also developed and adopted a series of technical and international guidelines in support of the implementation of the Code of Conduct for Responsible Fisheries.¹⁴ These include guidelines on fishing operations, the implementation of the precautionary approach and fisheries management. Recent examples are the International FAO Guidelines for the Management of Deepsea Fisheries in the High Seas in 2008 and the International Guidelines on Bycatch Management and Reduction of Discards, adopted in 2011 (http://www.fao.org/docrep/ 011/i0816t/i0816t00.htm). Following discussions in the FAO Committee on Fisheries (COFI), a document aiming at establishing guidelines for flag State performance is under discussion in an ongoing technical consultation.15

There is an ongoing debate concerning the effectiveness of the Code, and the global reviews of the state of the world's fisheries resources provided biannually by the FAO indicate room for improvement (Agnew et al., 2009; Pitcher et al., 2009). Progress reports on Code implementation are provided every two years by COFI and the 2011 report showed 'mixed' results. 16 This may explain the discrepancy between a high proportion of countries (90%) claiming to have management plans and the high proportion of stocks which are still exploited at the limit of natural productivity and beyond (FAO, 2012, p. 56-57).

Multilateral environmental agreements relevant to the conservation of living marine resources

Introduction

In parallel with the development of the global instruments pertaining to the conservation and management of living marine resources previously discussed, there has been a substantial growth in the number of multilateral environmental agreements.¹⁷ Some of these establish standards and mechanisms which also apply to living marine resources. Further, fisheries agreements have been inspired by elements found in environmental instruments, for example in the case of the precautionary principle adopted at UNCED (Principle 15) which found its way into the 1995 UN Fish Stocks Agreement and in the 1995 Code of Conduct for Responsible Fisheries (CCRF) (General Principle 6.5) in the form of a 'precautionary approach' (VanderZwaag, 2002) and ecosystem-based management (Garcia et al., 2003).

The 1992 Convention on Biological **Diversity (CBD)**

The Convention on Biological Diversity (CBD)18 was adopted in 1992, and entered into force in 1993. As of 28 January 2013 the Convention has 193 Parties (http://www.cbd.int). The objectives of the CBD are (1) the conservation of biological diversity; (2) the sustainable use of its components; and (3) the fair and equitable sharing of the benefits arising from the utilization of genetic resources (Article 1). Biological diversity is the diversity within species, between species and of habitats and ecosystems (Article 2). The concept of biological diversity covers the entire variability of life. The provisions of CBD apply to areas under the Parties' national jurisdiction and to 'processes and activities' regardless of where their effects occur, carried out under a party's national jurisdiction or control.

The Convention includes a number of obligations to achieve its three objectives. It calls for general measures for conservation and sustainable use, and requires its Parties to identify and monitor components of biological diversity and the effects of activities that are likely to have significant adverse impacts on biodiversity (Articles 6, 7 and 10). Parties are also to take steps to assess environmental impacts of proposed projects that are likely to have significant adverse effects on biodiversity, and to cooperate with other States to notify and address such effects (Article 14).

The COP has adopted two legally binding Protocols on Biosafety (http://bch.cbd.int/protocol/) and on Access and Benefit-sharing (http://www.cbd.int/abs/). Of importance in relation to the marine realm is the Programme of Work on Marine and Coastal Biodiversity (http://www.cbd.int/ marine/), which includes the development of criteria for identifying ecologically and biologically significant areas and for the selection, establishment and management of Marine Protected Areas. 19 This work also includes cooperation in providing information relevant to the establishment of marine protected areas beyond the limits of the national jurisdiction.20

The Strategic Plan for Biodiversity 2011–2020,21 adopted by the Conference of the Parties in October 2010, contains 20 key targets (the Aichi Biodiversity Targets) for 2015 or 2020 with three particularly important targets in the marine context. Target 6 urges:

'By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

Target 10 calls for the minimization of anthropogenic pressures on coral reefs and other vulnerable ecosystems impacted by climate change or ocean acidification by 2015. Target 11 recommends the establishment of representative and well-connected systems of protected areas covering at least 10% of coastal and marine areas by 2020.

With regard to the actual management of living marine resources, it can be argued that the Law of the Sea

Other global environmental agreements relevant to the management and conservation of living marine resources

The 1971 Convention on Wetlands of International Importance (the Ramsar Convention)

The Ramsar Convention (2 February 1971, 996 UNTS 245) has 163 Contracting Parties²² and is generally applicable to wet lands. The Convention's definition of 'wetlands' includes brackish or salt water and areas of marine water the depth of which at low tide does not exceed 6 m (Article 1). The objective of the Ramsar Convention is to protect and conserve wetlands of international significance. The Convention requires the Parties to designate suitable wetlands within their territory for inclusion in a List of Wetlands of International Importance, and promote their conservation (Articles 2 and 3). Each Party is to further promote the conservation of wetlands by establishing nature reserves on wetlands, whether included on the List or not, and to provide adequately for their wardening (Article 4).

The 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

CITES (3 March 1973, 993 UNTS 243) has 177 Parties²³ and regulates international trade in plant and animal species that are or may become threatened with extinction due to trade. The Convention has three appendices with species listed according to the degree of protection they are perceived to require (cf. Chapter 13 for more details). Trade in species that are threatened with extinction (appendix I) is banned, except for non-commercial purposes (Article III). Appendix II pertains to trade in species that may be threatened with extinction unless trade is subject to strict regulation (Article IV). Appendix III includes species which are subject to regulation in some States, needing international cooperation to control trade. States can list species here unilaterally (Article XVI). States are required to report on all trade in species of flora and fauna that are listed in the appendices (Article VIII).

To assist CITES in considering proposals for the listing of commercial fish species, a cooperation arrangement has been established between CITES and the FAO. Such proposals are assessed by experts appointed by the FAO.

Listing of marine species having commercial interest has become politicized and difficult. Some countries believe such species are more appropriately managed through existing regional fisheries management organizations or arrangements (Hutchings et al., 2012). At the Fifteenth Conference of the Parties to CITES in 2010. various marine listing proposals for marine species were rejected.

The 1979 Convention on the **Conservation of Migratory Species** of Wild Animals (CMS)

The Convention (23 June 1979, 1651 UNTS 333), having 118 parties,²⁴ addresses the conservation of species of wild animals that migrate across national boundaries. The central mechanism of the Convention is listing species in two appendices and the establishment of obligations for their protection.²⁵ Endangered migratory species are listed in appendix I. Takings of such species are prohibited with limited exceptions, such as for scientific purposes (Article III). Appendix II deals with migratory species that would significantly benefit from international co-operation and those having an unfavourable conservation status which require international agreements for their conservation (Article IV). A number of regional agreements and memoranda of understanding (MOUs) have been concluded for marine species.

Global environment and development conferences/ summits

The first global environmental summit was held in Stockholm in 1972. Often forgotten today, it initiated the establishment of the United Nations Environment Program (UNEP). In relation to living marine resources it is remembered for initiating the discussions on a moratorium on

whaling.²⁶ Subsequently, three global environment and development conferences and summits have been held in 1992, 2002 and 2012.

The 1992 UN Conference on Environment and Development (UNCED)

UNCED resulted in a global action plan for the sustainable development, Agenda 21²⁷ and the Rio Declaration on Environment and Development.²⁸ In Agenda 21, chapter 17 sets forth a program for the international community in pursuing the objective of sustainable development of the oceans and coasts. A number of program areas are listed, among them integrated management of coastal areas and implementation of obligations for international cooperation to conserve marine living resources found on the high seas. The latter called for the convening of an intergovernmental conference on straddling and highly migratory fish stocks (chapter 17, para. 17.50) which led to negotiation and adoption of the UN Fish Stocks Agreement; in that respect, the significance of Agenda 21 for the management of living marine resources has been substantial.

The Rio Declaration sets out 27 principles supportive of achieving sustainable development. Among key principles relevant to fisheries management are the principles of public participation (Principle 10), the precautionary approach (Principle 15) and environmental impact assessment (Principle 17).

The 2002 World Summit on Sustainable Development

The 2002 World Summit of Sustainable Development resulted in the Johannesburg Plan of Implementation (JPOI).²⁹ The JPOI also deals with oceans issues and calls for a number of institutional improvements with deadlines set (Garcia and Doulman, 2005). To provide for sustainable development of the oceans, it calls for: the application of the ecosystem approach by 2010; the promotion of integrated oceans management at the national level; the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012; and the establishment of the Regular Process to study the status of the global marine environment by 2004 (paras 30–36). The JPOI sets certain targets to achieve sustain-

able fisheries including the goal of maintaining or restoring stocks to levels that can produce the maximum sustainable yield, with the aim of achievement for depleted stocks on an urgent basis and where possible no later than 2015 (para. 31(a)).

The JPOI has also had substantial impact in terms of initiating new processes and targets for the management of the marine environment and living marine resources. The Regular Process has started and will deliver its first report in 2014 (see below). While unrealistic, the 2015 MSY target is nevertheless being addressed in practice by many countries.

The 2012 UN Conference on Sustainable Development (Rio+20)

While oceans texts dealing with living marine resources in the 1992 Agenda 21 and in the 2002 Plan of Implementation are somewhat concrete and, in the case of the latter, establish specific objectives with deadlines, the Rio + 20 'The Future We Want' oceans text³⁰ is short (4 pages) and general in nature. Of the 20 paragraphs dealing with oceans issues, about half deal directly with living marine resources.

The 2002 JPOI commitment to maintain or restore stocks at MSY levels is reiterated, pointing to science-based management plans, reduction of discards and reduction of adverse impacts of fishing on ecosystems as relevant measures. Also, the implementation of the 1995 UN Fish Stocks Agreement and the FAO Code of Conduct for Responsible Fisheries is urged, and measures in accordance with the FAO IPOA to combat IUU fishing are referred to. The document furthermore calls on States to ratify the FAO Agreement on Port State Measures in order to bring it into force. RFMO transparency, the commitment to eliminate fisheries subsidies and the needs of developing States are also addressed.

The text notes the ongoing discussions under the UN General Assembly (see below) on the conservation and sustainable use of marine biodiversity beyond areas of natural jurisdiction and sets a target date for deciding whether a new global instrument addressing marine biological diversity in areas beyond national jurisdiction is needed.

The Rio+20 text reiterates previous commitments and refers to ongoing processes in the UN system. This is probably just as well: the JPOI commitments are quite ambitious and time is needed to achieve them. A new issue raised by the 2012 Rio text is that of food security and nutrition in the context of living marine resources.

UN General Assembly resolutions and processes

UN General Assembly resolutions

The General Assembly adopts annual resolutions on oceans, the law of the sea and sustainable fisheries that address a wide range of issues. The resolutions are not binding on States, but carry a substantial normative weight.

The annual oceans and law of the sea resolutions are very comprehensive and have run to some 40 pages and over 250 paragraphs.31 They address a broad range of issues including: implementation of the Law of the Sea Convention and related instruments; capacity building; the work under various bodies and processes established by the Convention; and substantive issues such as maritime safety, marine biodiversity and marine science.

As regards to living marine resources, many paragraphs in the oceans and law of the sea resolutions are relevant. For example, Resolution 61/222 of 20 December 2006 urged application of ecosystem approaches in ocean management and noted key elements of an ecosystem approach (para. 119).

The annual fisheries resolutions³² are somewhat briefer and address issues that States need to tend to in order to achieve sustainable fisheries. The 2011 Resolution 66/68 addressed factors for achieving the objective of sustainable fisheries, implementation of the 1995 UN Fish Stocks Agreement, IUU fishing, enforcement, fishing overcapacity and shark finning,³³ among other things.

Sustainable fisheries resolutions have been helpful in setting the international wheels in motion for strengthening the regulation of bottom fisheries (Russell and VanderZwaag, 2010). For example, Resolution 61/105 of December 2006 called upon RFMO/As to assess whether individual bottom fishing activities would have significant impacts on vulnerable marine ecosystems (VMEs, cf. Chapter 14) not later than 31 December 2008; to close VME areas to bottom fishing unless preventive conservation and management measures have been established; and to require members to mandate vessels flying their flag to cease bottom fishing activities where VMEs are encountered and to report the encounter (para. 83).

The most important provisions with regard to living marine resources vary from year to year and depend on the current political agenda. In 2011 for example, the establishment of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment (see below) was subject to in-depth treatment in the Ocean and Law of the Sea resolution.34

Ongoing processes under the UN General Assembly

The General Assembly has also initiated several processes and meetings that consider specific ocean issues in more detail and may make recommendations for consideration by the UN General Assembly.

Following the entry into force of the Law of the Sea Convention in 1994, the UN General Assembly started annual oceans debates and resolutions. In 1999, it established the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (the Informal Consultative Process or UNICPOLOS, resolution 54/33).35 UNICPOLOS facilitates the annual review by the General Assembly of developments in ocean affairs and the law of the sea by considering the Secretary-General's report on oceans and the law of the sea and by suggesting issues and possible elements for addressing them. The emphasis of UNICPOLOS has been on identifying areas where coordination and cooperation at the intergovernmental and inter-agency levels needs to be enhanced. The consultation process has reviewed the status of, for example, marine science, vulnerable marine environments and ecosystem approaches to management (UNGA, 2006).

The UN General Assembly has also initiated processes for specific issues. The Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (referred to as the BBNJ meeting) was launched in 2004.36 The Working Group held its sixth meeting in August 2013 and has discussed the scientific, socio-economic and environmental dimensions of marine biodiversity in areas beyond national jurisdiction. Substantial disagreement exists among States regarding the applicable principles governing access to marine genetic resources and whether a further implementing agreement under LOSC should be negotiated to strengthen the governance framework for marine biodiversity in areas beyond national jurisdiction. Led by the Working Group, the UN General Assembly initiated a process through resolution 66/231 to ensure that the legal framework for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction effectively addresses those issues by identifying gaps and ways forward, including through the implementation of existing instruments and the possible

development of a multilateral agreement under the United Nations Convention on the Law of the Sea (paras 166 and 167).³⁷

A recommendation from the 2002 WSSD was to strengthen the monitoring of the status of the world's oceans. The UNGA Assembly in 2005 initiated the start-up phase of a Regular Process for Global Reporting and Assessment of the State of the Marine Environment.³⁸ A framework was endorsed in 2009, and the formal establishment of the Regular Process and its institutional mechanisms was agreed in 2010. Following considerable discussions on format, content and process, the actual work to produce a first global marine assessment by 2014 started in 2012. The intention is that this will be an ongoing process, producing reports at regular intervals.

Conclusion: Future developments

The global legal regime for living marine resources might be described as a partial success. More than 160 countries have ratified the Law of the Sea Convention which, together with a number of other global instruments, provides a broad framework for the management of living marine resources. Without this regime, which establishes rights and obligations for States, the status of the world's living marine resources would undoubtedly be worse than it is now.

Moreover, the regime has secured a stable framework for the further development of oceans governance at international as well as domestic levels of governance. One major power, the US (along with Venezuela and Iran, among others), has not acceded to the Convention. The United States of America (USA) does however consider most of the provisions of the Convention customary international law and abides with them. Its non-ratification is more of a problem to the US itself than to others, as it is prevented from participating in the work in the institutions established by the Conventions such as the Commission on the Limits of Continental Shelf.

The implementation and enforcement of the principles and provisions embodied in the evolving global framework accounted for here (see also Annex 1 and 2) is a key issue. Regional Fisheries Management Organizations and national governments implement the provisions of the global regime with varying degrees of success. It appears that, over time, results in terms of reduced fishing pressure are manifesting themselves (Hilborn and Hilborn, 2012, p. 123). While a lot is still to be desired with respect to the status of many fish stocks, the evidence is that more than two-thirds

of the world's fish stocks are exploited at MSY levels or below, that is, at 'sustainable levels'. About one-third of fish stocks are overexploited according to the FAO (2012), and the trend is one of an increasing number of depleted stocks.

The global regime is gradually evolving in response to new and emerging problems. When fisheries on the high seas were growing during the 1980s (Burke, 1994), the eventual response was the 1993 Compliance Agreement and the 1995 UN Fish Stocks Agreement. When IUU fishing was increasing, the global response came in the form of FAO IPOAs and the 2009 FAO Port State Measures Agreement. A set of performance criteria targeting flag States are progressing under the auspices of the FAO. A major challenge which has not yet been sufficiently addressed is allocation of fish resources between states (Henriksen and Hoel, 2011), an issue that may well be accelerated with climate change (Chen et al., 2011).

Over time, environmental considerations have become more important in the management of living marine resources. One important driver in this regard is the advances in fisheries economics, demonstrating that living marine resources are common pool resources susceptible to overexploitation and needing regulation (Hannesson, 2004). Another driver is learning in the fishing industry itself, a realization in the industry that it stands to gain from government intervention. Ideas and experiences from the environmental sector have been important, for example in the introduction of ecosystem-based management. While such ideas catch on early at a theoretical level in the management of living marine resources the first international ecosystem-based management agreement for living marine resources was adopted as early as 1982 - it takes considerable time to translate the concepts into practice (Fluharty, 2005; Garcia et al., 2003).

The most important challenge for the continued development of the global legal regime for living marine resources is therefore the actual implementation of new concepts and ideas at the regional and domestic levels of governance. Considerable attention has been devoted to studying how Regional Fisheries Management Organizations face up to such challenges (Molenaar, 2003; Russell and VanderZwaag, 2010) and how their performance in this regard can be measured (Kvalvik, 2010). Up to now, less attention has been paid to implementation at the State level, although studies exist to indicate that much can be improved even in countries considered to have strong management regimes (Pitcher et al., 2009) and that strong performance over time is possible (Hønneland, 2012).

Tracking all the future evolutions in international law relating to fisheries and marine biodiversity will continue to be a challenging task. Future decisions and initiatives can be expected to multiply under a fragmented array of legally binding and soft law instruments. International legal development remains a voyage in progress.

Notes

- The UN held the Second Conference on the Law of the Sea (UNCLOS II) in 1960, which did not result in any new agreements.
- LOSC, Article 10 allows for internal waters status to be exerted over historic bays and geographical bays where a maximum closing line of 24 NM may be drawn to delineate internal waters.
- 3. Arrested vessels and their crews must be promptly released upon the posting of reasonable bond or other security and penalties for fisheries law violations may not include imprisonment.
- 4. The Convention provides that the coastal State is to delineate the outer limits of its continental shelf where the shelf extends beyond 200 NM and submit information on the limits to the Commission on the Limits of the Continental Shelf (CLCS). The CLCS then makes recommendations to the coastal State on the outer limits of its continental shelf. The limits of the shelf established by a coastal State on the basis of these recommendations shall be final and binding (LOSC, Article 76 and Annex II regarding the Commission on the Limits of the Continental Shelf).
- 28 July 1994 33 ILM 1309. See http://www.un.org/Depts/ los/convention_agreements/convention_overview_part_ xi.htm.
- Only a non-binding conciliation procedure may be invoked for such disputes.
- 7. 2 December 1946, 161 UNTS 72.
- 8. 24 November 1993 (1994) 33 ILM 969.
- As per 30 January 2013. See also http://www.fao.org/ fileadmin/user_upload/legal/docs/1_012s-e.pdf.
- 10. 4 August 1995, 34 ILM 1542.
- See http://www.un.org/Depts/los/convention_agreements/ convention_overview_fish_stocks.htm. As of 21 January 2013 there were 80 Parties.
- 22 November 2009, available at http://www.fao.org/docrep/013/i1644t/i1644t00.pdf.
- Rio Declaration, Prinicple 15. See http://www.unep.org/ Documents.Multilingual/Default.asp?documentid=78&art icleid=1163.
- Over 20 technical guidelines may be found at http://www. fao.org/fishery/ccrf/publications/guidelines/en.
- See ftp://ftp.fao.org/FI/DOCUMENT/tc-fsp/2011/prospectus. pdf. The Committee of Fisheries (COFI) of the UN Food

- and Agriculture Organization (FAO) meets every second year to consider issues relating to fisheries and aquaculture.
- Progress in the Implementation of the Code of Conduct for Responsible Fisheries and Related Instruments, Including International Plans of Action and Strategies, and other Matters. COFI/2011/2.
- 17. The University of Oregon International Environmental Agreements database project estimates that there are >1100 multilateral environmental agreements; http://iea.uoregon.edu/page.php?file=home.htm&query=static
- 18. 5 June 1992 Convention on Biological Diversity 1760 UNTS 79. The text of the convention is also available at www.cbd.int.
- An elaborated programme of work was adopted in Decision VII/5, available at http://www.cbd.int/decision/ cop/?id=7742.
- 20. Decision IX/20 available at http://www.cbd.int/decision/cop/?id=11663.
- 21. Decision X/2 available at http://www.cbd.int/decision/cop/?id=12268.
- 22. As of 5 December 2012; see http://www.ramsar.org/cda/en/ramsar-home/main/ramsar/1_4000_0___.
- 23. As of 21 January 2013; see http://www.cites.org/eng/disc/parties/alphabet.php.
- 24. As of 1 January 2013, http://www.cms.int/documents/convtxt/cms_convtxt.htm.
- 25. A species may also be listed under both of the appendices.
- 26. 1972 Stockholm United Nations Conference on the Human Environment, recommendation 33, http://www.unep.org/Documents.Multilingual/default.asp?Document ID=97&ArticleID=1506&l=en.
- 27. Available at http://www.unep.org/Documents.Multilingual/ Default.asp?documentid=52
- 28. Available at http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm.
- Available at http://www.un.org/esa/sustdev/documents/ WSSD_POI_PD/English/WSSD_PlanImpl.pdf.
- 30. http://www.uncsd2012.org/content/documents/727The%20 Future%20We%20Want%2019%20June%201230pm.pdf, paras 158–177.
- 31. For example, Resolution 66/231, Oceans and the law of the sea.
- 32. The fisheries resolution is termed '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'.
- 33. Para. 15 called upon States to consider taking further measures to prohibit or restrict fisheries conducted solely for harvesting shark fins, such as requiring that all sharks be landed with each fin naturally attached. See

- http://www.un.org/Depts/los/general_assembly/general_assembly_resolutions.htm.
- 34. Resolution 66/231, para. 198-217.
- 35. See http://www.un.org/Depts/los/consultative_process/ consultative_process_background.htm.
- 36. See A/RES/59/24, para. 73; and http://www.un.org/Depts/ los/bio diversity working group/bio diversity working group.htm.
- 37. Inter-sessional workshops under the auspices of the Working Group were endorsed.
- 38. See http://www.un.org/Depts/los/global_reporting/global_ reporting.htm.

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