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Introduction

International and European Union norms on biodiversity protection constitute a branch of law that is continuously evolving. At international level, the scope of this *corpus* of laws is expanding and its degree of specification is being enhanced through legislative means (i.e. the adoption of agreements and protocols aimed at addressing specific issues related to the protection of biodiversity). Both at international and EU level, biodiversity law is being vigorously influenced by the abundant reliance on policy means (i.e. the adoption of strategies, action plans, programmes, decisions and other soft law instruments).

By resorting to legislative and policy channels, States, international and supranational organizations are pursuing a two-fold goal. On the one hand, they widen the range of instruments for the regulation of biodiversity matters (i.e. conservation, sustainable use and access to biological resources) and, on the other hand, they undertake joint efforts for the interpretation, the specification and the implementation of treaty norms.

Given the magnitude of the international law branch concerning biodiversity protection, which entails the regulation of a wide set of biodiversity-related aspects, the present doctoral research will explore international and EU norms on the conservation of

biodiversity and will be specifically focused on the analysis of norms for the *in situ* conservation of biodiversity, that is, the conservation of animal and plant species, ecosystems and natural habitats in their wild state. Consequently, the work is structured in order to assess how and to what extent States comply with supranational norms on biodiversity conservation and which strategies and measures they adopt with the view to implement such norms, both at international and domestic level.

The first Chapter has an introductory character. On the basis of the scientific and legal definition of biodiversity and ecosystems as provided for, respectively, by contributions in the field of biology and by 1992 the United Nations Convention on Biological Diversity, the study opens with a general discussion on the values that are ascribed to biodiversity by the society, certain collective entities and the individuals. In our view, a discussion of this kind, that draws arguments from social science, is aimed at describing the reasons why biodiversity is worth of international legal protection. More specifically, the economic, social and cultural values that are commonly attributed to biodiversity by the subjects indicated above are identified, together with the functions that biodiversity and ecosystem services naturally perform. This preliminary study has been framed in order to open the way for a proper introduction to international biodiversity law, which begins with the examination of international soft law instruments, in order

to explore the legal *status*, if any, that biodiversity conservation (and sustainable use) has progressively acquired under this other perspective. On this premise, our introduction to international biodiversity law is supplemented by the examination of other sets of international legal instruments. Indeed, the focus of the research shifts afterwards to the scrutiny of a representative sample of multilateral environmental agreements. Such agreements, having either of universal or regional character, were concluded for the regulation of international relations on non-biodiversity related themes and/or to channel international cooperation on certain global environmental problems not directly linked to biodiversity management. They are taken into consideration in order to see if their provisions point to the existence of a general interest (if not to a proper duty) to conserve the constituting elements of biodiversity. The introduction to this branch of international environmental law will be then enriched by a detailed overview of the four major conventions on wildlife and biodiversity protection that, approximately for four decades, have been functioning as the main international legal instruments in this regard (the 1971 Convention on Wetlands of International Importance especially as Waterfowl Habitats, the 1972 Convention for the Conservation of the 1972 World Cultural and Natural Heritage, the 1978 Convention on the Conservation of Migratory Species and the 1973 Convention on the International Trade of Endangered Species). In the light of

description of international environmental norms on nature and biodiversity conservation, the role that international tribunals have played in the definition, interpretation and application of international norms on the conservation of natural living resources is explored at the end of Chapter 1, before extensively addressing the obligations established under the 1992 United Nations Convention on biological diversity. This passage deals with already settled case law of international tribunals as well as with some pending cases featured by an evident element of transnational harm to biodiversity. This circumstance enabled us to engage in a brief consideration of some alternative approaches for the adjudication of biodiversity-related international disputes, provided that so far the international judiciary has not always been comfortable in dealing with issues of living natural resources management.

Chapter 2 is entirely dedicated to the 1992 United Nations Convention on Biological Diversity and to how its Contracting Parties act in order to achieve the goal of biodiversity conservation. The UN Convention has a framework character and currently stands at the centre of the body of international law instruments that has been taken into account in the previous chapter. The starting point will consist in an analysis of the provisions which define the objectives, the principles and the scope of the Convention. The institutional mechanisms that ensure the functioning of the Convention will be also considered, together

with a critical assessment of the norms of the Convention. More precisely, the assessment of the conventional text will be divided in order to address how distinct issues are regulated. After introducing the general and procedural obligations held by the Convention, attention will be then directed on its substantial obligations, which can be viewed as an expressed articulation of the ‘common but differentiated responsibilities and capabilities’ principle. Such obligations, respectively, entail the adoption of measures in the fields of biodiversity conservation and sustainable use, access to genetic resources, technology and biotechnology transfer and financial assistance (for the compliance with the Convention by its ‘developing’ Contracting Parties). In the light of the framework thus outlined, the 2001 Cartagena Protocol on biosafety and the more recent 2010 Nagoya Protocol on access to genetic resources are similarly addressed, as additional instruments that complement the legal regime created by the UN Convention. Hence, after offering the full scenario established under the Convention, the analysis turns to the implementation of the obligations concerning the conservation of biodiversity in the wilderness. In this regard, our work proceeds on two distinct although mutually interacting plans. Firstly, consideration is given to the mechanisms through which the Contracting Parties to the UN Convention jointly address implementation at international level (e.g. adoption of relevant decisions on biodiversity conservation, the latest Strategic Plan for

Biodiversity, the Aichi Biodiversity Targets and decisions on the thematic issue of ‘protected areas’). Secondly, consideration is given to the practice of implementation of the Convention (especially in the field of *in situ* conservation) that has been developed by a chosen group of Contracting Parties (Italy, Brazil, China and South Africa). These countries, amongst many, were selected for a number of reasons. Specifically, the examination of Italian measures of implementation can be significant both under an international law and European Union law perspectives (when compared to EU legislative and policy instruments or to the practice developed by other UE Member States) whereas, national implementation of the UN Convention by China, Brazil and South Africa, may bring to surface the traits of the strategies adopted by countries which are commonly referred to as ‘emerging economies’ but which are nevertheless featured by profoundly different social, political and geographical conditions. Finally, Chapter 2 closes with a survey of the factors that, from a global environmental governance perspective, obstacle a better functioning of the UN Convention on Biological Diversity (i.e. the fragmentation of the COP decision-making process, the absence of monitoring mechanisms on national implementation, the ineffectiveness of the global biodiversity global itself), which ultimately lead to put into question the legal *status* that is acknowledged to biodiversity conservation in international law.

Chapter 3 has been entirely structured as a reconstruction of the law of the European Union on the conservation of biodiversity. Such reconstruction is premised on the genesis and the evolution of the competences of the EU and of those of its Member States in the field of environmental protection, on the basis of which the whole European environmental law and policy are framed. In particular, the shared competence in the field of environmental protection are analysed under a diachronic perspective, that takes into account the revision process that invested the original Treaties, culminating in with the adoption of the Treaty of Lisbon. A specific section this Chapter addresses biodiversity as a matter falling into the exercise of the external action of the European Union. In this regard, the research traces the main stages of the development of the EU external competence in the environmental area, in order to focus, then, on the participation of the EU to biodiversity-related multilateral agreements, which under a EU perspective, fall into the category of ‘mixed agreement’. The questions that such agreements pose to the exercise of the shared competence of the EU and its Member States in terms of their implementation are commented. Means for a better, non confrontational, implementation are proposed, in an attempt to strengthen the existing connections between the EU legal order and biodiversity-related multilateral agreements, with particular reference to the 1992 UN Convention on Biological Diversity. On this premises, the Strategy of the

European Union on Biodiversity is assessed, particularly as a means to which the UN Convention is implemented by the EU, the only regional economic organization that participate to the legal regime established by such a Convention.

In the light of the legal developments that interested the development of EU law in the field of the environment, the research turns then to the description of the policy framework for the conservation of biodiversity within the EU, comprising a whole set of instruments of both legal and policy nature, that has reached a high degree of thematic specialization and that has been increasingly shaped on the basis of the principle of integration, which generally pervades the environmental law and policy of the EU. An overview of such framework, as it will be seen, allow us to set the context in which EU legislative measures for the *in situ* conservation of biodiversity are embedded. Therefore, these latter measures, namely, the Birds Directive, on the one hand, and the Habitats Directive, on the other hand, are thoroughly scrutinized in a manner that simultaneously attempts to describe the content of their provisions, in the light of the jurisprudence of the European Court of Justice, and to underline the critical aspects of their compliance and implementation, in the light of practice of the Member States. Furthermore, it is important to make clear that the study on the obligations established under the so-called ‘Nature Directives’ is carried out in a manner by which the rules on habitats

protection are separated from those on species protection, in an attempt to facilitate the comprehension of the obligations they entail.

CHAPTER 1

1. An introductory study on International Biodiversity Law as a branch of International Environmental Law

1.1. Defining the notion of ‘biodiversity’ or ‘biological diversity’

The term biodiversity has firstly appeared in the vocabulary of scholars and practitioners of international law during the 1970s and it has subsequently affirmed itself with growing strength within the field of international environmental law (hereinafter IEL) in the last three decades, starting in particular with the adoption of the UN Convention on Biological Diversity (hereinafter referred to as CBD)¹ at the 1992 Rio Conference on Environment and Development (hereinafter UNCED). Before that milestone occasion that fundamentally contributed to the development of IEL, the subject that is currently referred to as “international biodiversity law” had quite blurry boundaries and was not studied by scholars

¹ United Nations Convention on Biological Diversity, Rio de Janeiro (Brazil), of 5 June 1992, in force 29 Dec. 1993, in (1993) *United Nations Treaty Series*, Vol. 1760, at 79.

and practitioners as a properly defined branch of IEL. The relevant regulation was formed on one hand by a rather large group of treaties on the conservation of wildlife and, on the other hand, by a few international agreements that regulated access to and utilization of genetic material². The lack of any international legal connection between these two treaty families was overcome during the preparatory works that led to the adoption of the CBD, when awareness on the need of a linkage finally emerged³. Despite the high degree of indeterminateness of many provisions contained in its text, which came out as the result of dramatically difficult negotiations between countries with extremely diverging views and conflicting interests on environmental and developmental matters, the CBD constitutes the legal instrument that provides the international community with the most comprehensive and overarching legal framework to deal with biodiversity-related issues⁴.

² For a definition of wildlife, see C. Maffei, 'Wildlife' in T. Scovazzi, T. Treves (ed.), *World Treaties for the Protection of the Environment*, Milan, 1992, at 323: 'a wide definition of wildlife (...) includes not only the native flora and fauna of a particular place, but more generally the natural habitats which are indispensable for the survival of wild species'.

³ See A.O. Adede, 'The Road to Rio: The Development of Negotiations', in L. Campiglio et al. (eds.), *The Environment After Rio. International Law and Economics*, London, 1994, at 3-13.

⁴ The 'framework' character is highlighted by most commentators. *Ex multis*, see P. Birnie, A. Boyle, C. Redgwell, *International Law and the Environment*, Cambridge, 2009, at 617. Part of the doctrine suggests that in the field of IEL the adoption of framework conventions and subsequent additional protocols is a strategy employed to overcome the 'dilemma' between universality (of the regime) and effectiveness (of the obligations contained therein). On the point,

In order to proceed further with this research, aimed at identifying the most relevant international obligations in the field of nature conservation, with a particular focus on the *in situ* conservation of biodiversity and on how States comply with international and EU norms in this regard, it is of crucial importance to provide a definition to the term ‘biodiversity’. Preliminarily, it will also be necessary to describe, in general terms, what ecosystem services are, thus, how the dynamic interactions between the various components of biodiversity and the environment in which they are embedded actually work and, consequently, it will also be necessary to explain why the protection of such ecosystem services does matter in order to preserve life on Earth⁵.

In an attempt to go beyond the scientific definition of biological diversity, with a view to get full comprehension of the importance of its conservation, the multiple values generally attributed to biodiversity will also be addressed in this preliminary reflection.

The term ‘biodiversity’, which stands for the abbreviation of ‘biological diversity’, commonly refers to the layers in which the

see N. Matz-Lück, ‘Framework Conventions as Regulatory Tools’, in (2009)1(3) *Goettingen Journal of International Law*, at 445.

⁵ For a comment, refer to, K. Marteens, A. Cliquet, B. Vanheusden, ‘Ecosystem Services. What’s in it for a Lawyer?’, in (2012) *European Energy and Environmental Law Review*, at 31-40.

biological world is organized⁶. According to article 2 of the CBD, the notion of ‘biodiversity’ defines:

‘the variability of living organisms from all sources including *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part’ and it includes the ‘diversity within species, between species and of ecosystems’.

Such a tripartite definition is constructed on the core elements of biodiversity. The first of these elements is given by all the naturally occurring variations within the genetic pool of living organisms; the second one is determined by the ecological variability among species and by the genetic variability of individuals belonging to the same specie; finally, the third element of the above definition is given by the variability of ecosystems which, in turn, results from the continuously occurring interaction between biological communities (of plant and animal species) and their surrounding environment.

Out of the three elements of the definition, the third level assumes particular relevance for our ends, since it links biodiversity

⁶ See, e.g., M. Bowman, C. Redgwell (eds.), *International Law and the Conservation of Biological Diversity*, The Hague.1996, at 1.

to ‘nature as a whole, not only to the living nature’⁷. Differently, the first and partially also the second element of the definition address, instead, core aspects of biodiversity that are more related to genetic resources and their conservation/utilization. As it will be shortly considered onwards, issues such as the access to gene pools, their utilization and the equitable sharing of benefits resulting from their utilization have always been sensitive under an international law perspective, hence it does not surprise that the drafters of the CBD had troubles in striking a balance between the opposing interests of the North (industrialized Countries) and the South of the world (developing Countries and emerging economies) especially on these issues⁸.

Ecosystems, the third component of the definition of biodiversity, provide services that are commonly referred to as ‘ecosystem services’ which, in order to be maintained, presume safeguarding an adequate level of protection for plant and animal

⁷ See. K. Kokko, ‘Biodiversity Law’, Working Paper of the Finnish Research Group on Forests, 2004, at158. The paper is available at: <http://www.metla.fi/julkaisut/workingpapers/2004/mwp001-14.pdf>.

⁸ It was recorded that: “From the outset, the negotiations were set on a North-South axis. Developing countries were generally of the view that the Convention should deal with the conservation of wild species, while developing countries felt that it should also address issues related to the utilization of domesticated species, *in situ* and *ex situ* conservation, access to genetic resources and to relevant technology, including biotechnology, and provision of financial support”, see A. Yusuf, ‘International Law and Sustainable Development: The Convention on Biological Diversity’ in (1993) *African Yearbook of International Law*, at. 112-113. On the negotiation of the CBD, see also F. McConnel, *The biodiversity convention: A negotiating history: A personal account of negotiating the United Nations Convention on biological diversity - and after*, London, 1996.

species and their related habitats. According to an authoritative scientific definition, an ecosystem exists in presence of:

‘a community of “interdependent organisms” and of a “physical environment” where they interact as a whole ecological unit, thus when living (biotic) and non-living (abiotic) elements of nature interact with each other’⁹.

Always from a scientific point of view, ecosystem services are regarded as the means by which nature contributes to human welfare, as they provide the ‘infrastructure on which all societies depend’¹⁰. Ecosystem services are also commonly identified with the same tangible benefits that the ecosystems offer to the people¹¹. In any case, it can be rightly affirmed that ecosystem services constitute the very precondition for the existence of life on Earth and, in particular, the enabling factor of human development and human well-being.

⁹ See S. Battersby, *Dictionary of Environmental Science for Lawyers*, Chichester, 1997, at 22.

¹⁰ See the Millennium Ecosystem Assessment, ‘Ecosystems and Human Well-Being: Synthesis’ Washington, 2005, at 16. The study is available online at: <http://www.maweb.org/en/index.aspx>. The Millennium Ecosystem Assessment is a scientific work aimed at providing a solid base for the elaboration of policy and legal instruments to better protect biodiversity and ecosystems. In that, it addresses the drivers of ecosystem change (either direct or indirect), effective responses to them, as well as barriers that need to be overcome in order to control undesirable changes of the ecosystems.

¹¹ See J.A. McNeely et al., *The Wealth of Ecosystem Nature. Ecosystem Services, Biodiversity and Human Well-Being*, Washington, 2009, at 3.

Water and air purification, fisheries, pollination carried out by bees and other insects are just a few examples of how essential ecosystem services work¹². Forests and wetlands constitute particular kinds of ecosystems and, being home to an immense number of animal and plant species, they act as repositories of biodiversity. These ecosystems, however, do much more than hosting biodiversity because they allow humanity to give satisfaction to its vital needs. Forests, for instance, provide timber used for various activities and they also function as carbon sinks reducing the amount of carbon dioxide and other greenhouse gases in the atmosphere; wetlands constitute natural reservoirs of water that can serve various purposes in times of drought and, at the same time, they absorb water exceeding from rivers in the event of heavy rains, thus reducing the risk associated with floods.

The essential feature of the ecosystem services lies in the fact that, as pointed out above, they occur naturally. For their being free of costs, they are commonly viewed in the economic literature as ‘public services’¹³. As such, ecosystem services can stimulate, for instance, the emergence of market-based activities undertaken by

¹² The Millennium Ecosystem Assessment (see *above* n.10) identified four types of ecosystem services: ‘supporting services’, ‘regulating services’, ‘provisional services’ and ‘cultural services’.

¹³ See D. Hunter, J.Salzman, D. Zaelke, *International Environmental Law and Policy*, Eagan, 2007, at 1008: “the value of ecosystem services is likely to be more than the total value of the world’s economy”. On biodiversity services as ‘economic public goods’, see G. Heal, *Biodiversity and Globalization*, FEEM, Milan, 2002, at 8-12 and J. Spurgeon, ‘Business and Biodiversity’, in (2008) *Business Law Review*, at 58-63.

private individuals. This last aspect is of growing relevance in a world that is more and more characterized by an increasing degree of interdependences, where individual and local actions are capable of generating global effects.

Biodiversity and ecosystems serve broad economic processes, as well as social and cultural ones. In the light of this considerations and, primarily, with the intention of assessing the objectives set out under the most relevant international environmental agreements concerning biodiversity (hereinafter referred to as biodiversity-related multilateral environmental agreements or biodiversity-related MEAs), we must first address the values generally attributed to biodiversity and ecosystems either by individuals, groups and societies as a whole. We are going to proceed in this regard, keeping in mind, however, that biodiversity has an intrinsic value (as affirmed by the first indent of Preamble to the CBD)¹⁴, whose existence precedes each of the ‘man-created’ values attributed to biodiversity and that will be addressed in the following subparagraph.

¹⁴ See CBD Preamble, 1st indent: ‘Conscious of the intrinsic value of biological diversity and of the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components’.

1.2. Some reflections on the economic, social and cultural values of biodiversity as modeled by individual, groups and society

1.2.1. The economic value of biodiversity: why does biodiversity matter for economic development and growth?

As briefly stated above, biodiversity and ecosystems can foster the development of market-driven activities, thanks to their character of economic public goods. Ecotourism may be just one example in this regard, amongst many. A steadily increasing slice of the population of industrialized Countries has the possibility to travel around the globe, often to exotic destinations that are located in the jurisdiction of developing Countries. The Coral reefs of the South Pacific, the remainder of the Brazilian Rain Forest, but also the Alps and the Himalaya or many coastal spots in the Mediterranean Sea, are the destinations of many (eco)tourists attracted by the aesthetic and ecological values of these places. Some of these sites may constitute 'biodiversity hotspots' because they may give hospitality to a big concentration of keystone

species¹⁵ or, alternatively, they may constitute the environment of a limited quantity of either rare or fascinating species. In mega-diverse countries, local communities, tour operators and public authorities at all levels normally undertake initiatives aimed at conserving biodiversity and ecosystems, because of the general awareness on the benefits and returns that may be gained from their sustainable utilization.

Moreover, beside the fact that the conservation of biodiversity and ecosystems may incentivize the emergence of activities of the kind illustrated above, they may be valued in economic terms also for other two bounded reasons. Biodiversity, in fact, is primarily a tradable commodity. As a matter of fact, a relevant part of international commerce is made up by trade in primary agricultural commodities. Notwithstanding the fact that the bulk of such trade consists in the exchange of a few varieties of selected plant species (e.g. rice, maize, wheat and corn) in the global markets, wild varieties and sub-varieties of these species (i.e. the varieties that undergo processes of cross-breeding or genetic engineering) are frequently used with a view to increase crop resilience to extreme heat waves, pesticides, pathogens and other factors that affect the optimal yield of harvests. In this sense, biodiversity assumes an economic value also in relation to its being a source of knowledge. Besides serving the interest of increasing the output of harvested

¹⁵ The term refers to those species of vital support to ecosystems because of the indispensable functions they perform, allowing ecosystems to function properly.

cultures, the information contained into DNA sequences of plants and animals is studied in biotech laboratories and research centers and is crucial, for instance, to the development of cutting-edge drugs by pharmaceutical companies. The utilization of animal and plant enzymes, proteins and other substances constitutes a core activity for these businesses and the record of their accomplishments in curing diseases or in decelerating the appearance of their effects is quite long and ever expanding, though many critical voices (mostly from developing countries) have been legitimately raised against the methods and the practices of North-based biotech and pharmaceutical enterprises. The entities carrying out these activities are frequently multinational enterprises (MNEs) whose behavior is often deemed exploitative, biodiversity-depleting and irrespective of the sovereign rights of developing States and prejudicial to the rights of local communities and indigenous people that either guarded these sources of information or contributed to their development through their traditional practices¹⁶. Traditional knowledge (TK) – and the lack of any robust international regime granting legal protection to its makers/guardians – is since many years at the center of a heated debate that takes place in a plurality of international *fora*, ranging

¹⁶ Above all, see V. Shiva, *Monocultures of the Mind: Perspectives on Biodiversity and Biotechnology*, London, 1995 (where the author addresses with criticism also the way in which the CBD is structured, mirroring an unequal bargain between industrialized and developing countries) and S. Latouche, *Petit traité de la décroissance sereine*, Paris, 2007.

from bodies belonging to the CBD system of governance to those that were instituted within the World Trade Organization (WTO) as, for instance, the WTO Committees entrusted to deal with environmental matters and trade-related aspects of intellectual property¹⁷. This particular issue will be briefly described later on, when the whole structure of the CBD and the content of its provisions will be object of a critical examination.

1.2.2. The non-economic values attributed to biodiversity by societies, groups and individuals

As pointed out above, the values ascribed to biodiversity are multiple. Some components of biodiversity undoubtedly matter to individuals, groups and societies because of the tangible or intangible functions that they display. In order to start the reflection on the other, non-economic values of biodiversity, the point of departure will be the society level. From this perspective, we will then shift from the collective level to the level of the individual, in an attempt to find out how and why the conservation and the

¹⁷ See, e.g. WTO Council for Trade-related Aspects of Intellectual Property Rights, 'Review of the provisions under Article 27.3(b)', IP/C/W/369/Rev.1, of 9 Mar. 2006.

sustainable use of biodiversity do matter according to each of the three levels of analysis.

Modern societies are deeply interconnected and interdependent from a global perspective to such an extent that distinguished social science commentators portrayed the world itself as a global village¹⁸. This development has been triggered by information and communication technology that has expanded the access to a potentially infinite amount of information that is both disseminated and absorbed by and from people all over the planet. However, regardless the idea of society we apply, either the idea of global village or a narrower idea of society that roughly corresponds to the one of nation (in its connotation of a national society that has established itself within a given State), the values attached to biodiversity and ecosystems from the society point of view do not vary in any meaningful way.

First of all, societies tend to recognize the intrinsic environmental value of biodiversity-rich areas through the creation of institutional and administrative arrangements by which they try to crystallize the existence of such richness¹⁹. Secondly, societies

¹⁸ M. MacLuhan, *The global village: Transformations in world life and media in the 21st century*, Oxford, 1992. The sociologist introduced the expression ‘global village’ focusing on the effect of one specific driver of globalization, namely, information technology and communication.

¹⁹ Conservation policies, also at international level, might be pursued in a manner that does not allow the achievement of desirable social goals because they are based on the assumption that whichever human intervention is detrimental to biodiversity. In this vein, for biodiversity conservation paradigms premised on

attribute aesthetic or cultural value to species, habitats and ecosystems, especially when they are physically integrated into the landscape or some parts of the landscape retained to be essential elements of the idea of a nation. Thirdly, societies tend to recognize the recreational value of biodiversity and ecosystems, by putting in place systems incentivizing their sustainable use. Whale or bird watching, but also less adventurous activities like a simple visit to a protected area, may be enjoyed not necessarily by executing monetary transactions.

The values attributed to biodiversity at society level are also shared by groups and communities (smaller organized entities which form part of a society). At group level, however, the values attributed to biodiversity may even intensify their relevance since the variable determined by the collective interaction with a certain territory and a certain environment comes into the equation. In fact, both indigenous people and local communities are collective and dynamic subjects deeply rooted onto the lands they inhabit. In certain cases, such bonds to the land (or to the nature hosted by that same land) are so pervading that they can trigger the emergence of movements of various kind that, in spite of likely methodological,

concepts such as “human dignity” and social justice see, respectively, E. Louka, *Biodiversity and Human Rights. The international Rules for the Protection of Biodiversity*, Ardsley, 2002, at 32-46, and S. Brechin, P. Wilshusen, C. Fortwangler, et al., ‘The Road Less Travelled. Toward Nature Protection with Social Justice’ in S. Brechin (et al.) *Contested Nature. Promoting International Biodiversity with Social Justice in the Twenty-first Century*, London, 2002, at 251-270.

strategic or political differences, are driven by the need to preserve the integrity of their territory against external interferences (e.g. activities or projects that are perceived as threatening to the environment, unnecessary or unable to engender substantial returns to the collective welfare).

Other functions displayed by biodiversity can also be appreciated through the lenses of anthropology. The traditional uses of biodiversity by groups and communities have been extensively explored by legal scholars. Besides responding to consumptional needs, plant and animal species may be employed within these collectivities in order to satisfy other purposes. In particular, they can be given with symbolic values. As a matter of fact, some species may be the object of precise rituals, respect or superstition, as long as their presence or absence over a certain land is believed to influence the course of events and, ultimately, the faith of a community²⁰.

Moving to the level of the individual, it must be noted that the values attributed to biodiversity, as well as the functions that biodiversity performs, are reasserted. However, at individual level, the role that is played by perception must be included into the analysis. In fact, phenomena like the loss of (or the damage to)

²⁰ See e.g., C. Potvin, J.P. Revert, G. Patenaude, J. Hutton, 'The Role of Indigenous People in Conservation Actions: a Case Study of Cultural Differences and Conservation Priorities' in F. Le Preste, *Governing Global Biodiversity: The Evolution and Implementation of the Convention on Biological Diversity*, Aldershot, 2002, at 58 ff.

biodiversity may trigger psychological mechanisms that induce a person to feel empathy with or concern for the environment. These feelings, in turn, might eventually lead individuals to join environmental protection organizations, in order to take a stand in favor of certain environmental causes (e.g. initiatives organized by animal rights defendants against vivisection, sensitizing campaigns against the use of nuclear energy, voluntary cleansing of coastal areas damaged by oil spilled either from tankers or off-shore wells). The process has acquired considerable proportions as global interdependencies have grown and, as a result, it has partially lost its primarily local character. People, in fact, may just feel sorry for environmental problems occurring thousands of miles away from their homes as, for instance, the loss of biodiversity in South America or the melting of the polar ice caps, but at the same time, they may also undertake some concrete steps, like changing their consumption patterns, adopting energy-saving mobility solutions and other small scale behavioral adjustments that can contribute to alleviate the threatening character of some global environmental issues. Furthermore, the potential of the effects triggered on the individual by environmentally harmful events can increase, if the awareness about the linkages between apparently distinct environmental issues is fostered by institutions and through education. Climate change and biodiversity offer a right example in this regards. Far from being compartmentalized issues, they are

rather dependent from each other. Climate change resilience can be realized, *inter alia*, if ecosystems are efficaciously preserved. The control of rising temperatures, in turn, can decelerate the rate of worldwide biodiversity loss.

These preliminary considerations on the definition of biodiversity and the observations made on the values which biodiversity, ecosystems and their services assume are aimed at defining biodiversity as a matter which is worth of legal protection under a series of multilateral environmental agreements (MEAs). The objective of the present paragraph, however, was also to outline the contours of a matter that has implications of immense proportions, that poses questions which go beyond those of interest for the international lawyer. Obviously, it must be said, these latter questions will be fully addressed throughout this research. The remainder of this Chapter, will be devoted to defining the *status* enjoyed by the conservation of biodiversity in international law by, respectively, taking into consideration *soft law* developments in the field of IEL, the presence of biodiversity-related clauses in non-biodiversity-related MEAs, the general characteristic of universal biodiversity-related MEAs with a sectorial scope of application and, finally, the role that international tribunals may play in asserting and applying international norms on biodiversity conservation.

1.3. The gradual evolution of biodiversity conservation and sustainable use as tenets of the principle of sustainable development by means of soft law instruments

The analysis of the UN practice in the field of economic, social and cultural issues reveals that the organization has been increasingly active in adopting declarations and resolutions on the sovereignty over natural resources as well as on environmental global problems. The goal of this section is to explore if and to what extent it is possible to intercept elements, within the international *soft law* realm, which may provide signaling effects about the emergence, if any, of general obligations on the protection of global biodiversity (i.e. elements pointing to a possible transition from prescriptions of exhortative nature to legal rules with binding character).

The first acts that we are going to take into consideration here, are those adopted by the international community during the Cold World, starting from 1962, at a time when the bipolar system went close to a clash and at a time when the UN still lacked an explicit mandate for environmental protection²¹. The General Assembly of

²¹ Under art. 1, par. 2, of the UN Charter the protection of the environment does not appear among the objectives of the organization. However, the competence of the UN in the field of the environment can be deduced from the provisions of Chapter IV ('International Economic and Social Co-operation') and emerges

the UN, by adopting these resolutions, declared that each State has the sovereign right to use the natural resources found within its jurisdiction to pursue the objectives established by its government and primarily to respond to its own developmental imperatives²². In this manner, the principle of sovereignty over natural resources (a category that also include natural living organisms) was affirmed as a corollary to the principle of sovereignty, which shapes the way the international order is organized.

In 1972 the UN Conference on the Human Environment was convened in Stockholm. This occasion has proved crucial for the future development of international law since a ‘Declaration of Principles on the Human Environment’ was adopted²³. The decision to start an environmental program within the UN system was another outcome of this Conference. The principle of State sovereignty over national resources was reaffirmed in this venue, as Principle 21 recognized that

from the practice of the organization, starting from the creation of the United Nations Environmental Programme (UNEP) in 1979.

²² See UN GA resolution A/RES/1803 (XVII) of 14 Dec. 1962, on ‘Permanent sovereignty over national resources’, UN GA resolution A/RES/2158(XXI) of 25 Nov. 1966, UN GA resolution A/RES/2386 (XXIII) of 19 Nov. 1968, UN GA resolution A/RES/2625 (XXV) of 24 Oct. 1970, UN GA resolution A/RES/2692 (XXVII) of 18 Dec. 1972, Security Council resolution 330(1973) of 21 Mar. 1973 and UN GA resolution A/RES/3171 (XXVIII) of 17 Dec. 1973.

²³ ‘Declaration on the Human Environment’ in UN Report of UN Conference on the Human Environment (Doc. A/CONF/48/14/Rev 1, New York, 1973).

‘States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies’²⁴.

However, the Stockholm Conference paved somehow the way for the subsequent adoption series of documents, resolutions and declarations, whose content has been marked by an increasing awareness about the global nature of environmental problems and the urgency to conserve natural living resources (which was being raised both by the scientific community and the civil society in those years). Among these documents, of utmost importance is the 1980 World Conservation Strategy (WCS)²⁵. Part of the doctrine retained that the Strategy has laid down the ‘real foundation for the biodiversity concept in international law’²⁶. The WCS was then revised in 1991. Among others, a review was needed in order to insert an explicit reference to the conservation of biodiversity as an indispensable element for the preservation of a sustainable life²⁷. In

²⁴ Two years later, in 1974, the UN General Assembly reaffirmed the permanent sovereignty over natural resources and the inalienable State right to nationalization, in the context of the establishment of the New International Economic Order (see UN GA resolution A/RES/S-6/3201 and UN GA resolution A/RES/S-6/3202 of 1 May 1974).

²⁵ IUNC/UNEP/WWF/FAO/UNESCO, *World Conservation Strategy: Living Resource Conservation for Sustainable Development*, Gland, 1980.

²⁶ See M. Bowman, P. Davies, C. Redgwell, *Lyster’s International Wildlife Law*, Oxford, 2010, at 589.

²⁷ IUNC/UNEP/WWF, *Caring for the Earth: A Strategy for Sustainable Living*, Gland, 1991.

this regard, the revised WCS set out three explicit objectives: i) to maintain essential ecological processes and life-support systems, ii) to preserve genetic diversity and iii) to guarantee the sustainable use of species and ecosystems.

The 1982 World Charter for Nature (WCN) was drafted by the International Union for the Conservation of Nature (IUNC) and then endorsed by the General Assembly in 1982²⁸. The Charter was aimed at contributing to the elaboration of customary international law on environmental matters²⁹. In particular, it identifies the responsibility that States have in order to guarantee the protection of unique areas and representative ecosystems as well as to manage natural resources with a view to achieve their optimal sustainable productivity. Equally noteworthy is the report entitled ‘Our Common Future’, also known as the *Bruntdland* Report, published in 1987 as the result of the work carried out by the World Commission on Environment and Development (WCED). The report, by which the Commission elaborated the concept of sustainable development³⁰, explicitly refers to biodiversity

²⁸ See UN GA resolution A/RES/37/7 of 28 Oct. 1982 on the ‘World Charter for Nature’, in (1983) 23 *International Legal Materials*, at 455. The resolution was adopted by a majority of 111 UN members in favour and 18 abstentions. The United States were the only country that voted against its adoption.

²⁹ See P. Birnie, A. Boyle, cit., at 605.

³⁰ See. World Charter For Nature (*above* note 28), Preamble: ‘meeting the needs of the present without compromising the ability of future generations to meet their own needs’ and ‘should become a central guiding principle of the United Nations’.

conservation as an essential requirement for the realization of such development³¹.

Twenty years after the Stockholm Conference, by adopting the 1992 'Declaration on Environment and Development', which 'represented a series of delicate compromises adopted in an effort to achieve a balance between the objectives of environmental protection and economic development (...) accepted to both developed and developing countries'³², the Rio Conference contributed to a better codification of the general principles of IEL applicable, that States should refer to and apply in the development of their relations (some of which had already been included into the Stockholm Declaration)³³. Each of one the twenty-seven principles enucleated by the Rio Declaration refers to the environment or to environmental protection in rather broad terms as the *conditio sine qua non* for the realization of sustainable development. As such,

³¹ See UNGA Resolution A/RES/42/427, of 20 March 1987, on *Our Common Future*, Report of the World Commission on Environment and Development, available at: <http://www.un-documents.net/ocf-02.htm#I>. Chapter 6 regards 'Species and Ecosystems'. According to par. 1 the "conservation of living natural resources - plants, animals, and micro-organisms, and the non-living elements of the environment on which they depend - is crucial for development".

³² United Nations Conference on Environment and Development, Rio Declaration, UN Doc. A/Conf.151/5/Rev.1 (of 14 June 1992). On the Declaration, observations of Sands (cited), see P. Sands, 'International Law in the Field of Sustainable Development', in (1994) 25 *British Yearbook of International Law*, at 321.

³³ See the comments on the Rio Declaration by S.P. Johnson (ed.), *The Earth Summit. The United Nations Conference on Environment and Development*, at 117-118.

each of them has either direct or indirect implications for biodiversity conservation.

However, in spite of the relevance that biodiversity assumes for the attainment of the sustainable development goal, the notion of biodiversity has not been explicitly included in the text of the Declaration. However, two of its Principles contain the terms ‘natural resources’ and ‘ecosystem’ which are linked to the notion of biodiversity.

Natural resources form a macro-category that comprises natural living resources (i.e. biological resources) as well as the non-living ones. Although much emphasis has traditionally been attached, under international law, to non-living natural resources because of their capacity to fulfill the needs of societies (e.g. energy supply and energy security), living natural resources equally enable States and societies to pursue their own developmental strategies. Ecosystems, the other notion referred to in the Rio Declaration, as seen earlier, do constitute one of the core elements of biodiversity, as they constitute a matter worth of legal protection under the CBD.

Principle 7 of the Rio Declaration concerns international cooperation, which has to be carried out in a ‘spirit of global partnership’ for the conservation, protection and restoration of the health and integrity of the Earth’s ecosystem. Principle 7 enunciates also the principle of common but differentiated responsibilities (also referred to as ‘CBDR principle’), which has

been pivotal both to the negotiation of the CBD and to the consolidation of its system of governance, by acknowledging the different contributions that States have made (are making) to the degradation of the environment and, to the same extent, by acknowledging also the different capabilities that States possess in order to deal with the consequences of global environmental problems³⁴.

Principle 23 states as follows: ‘the environment and natural resources of people under oppression, domination and occupation shall be protected’. This principle is clearly characterized by the distinction drawn between environment, on one hand, and natural resources on the other, as if they were two separate elements whose maintenance is fundamental to preserve the possibility for oppressed people and occupied territories to develop sustainably in the future. The relevance of the principle is further undermined by a certain degree of vagueness since the criteria by which occupation, domination and oppression phenomena are identifiable may be subject to different interpretations. However, this principle

³⁴ As authoritatively pointed out, the CBDs principle does not enjoy legal autonomy for it must be necessarily translated into treaty norms establishing dual regimes for the attainment of environmental objectives in order to find application. In this respect, F. Munari, L. Schiano Di Pepe, *Tutela transanzionale dell’ambiente*, Bologna, 2012, at 47. *Ex multis*, see also P. Cullet, ‘Differential Treatment in International Law: Towards a New Paradigm for Inter-States Relations’, in *European Environmental Law Journal*, 1999, at 549-577; L. Rajamani, ‘The Doctrinal Basis for and Boundaries of Differential Treatment in International Environmental Law’, in L. Rajamani, *Different Treatment in International Environmental Law*, Hamburg, 2007, at 128-173.

may be read in conjunction with Principle 24, which relates to the respect of international environmental law in the conduct of war, which is described as ‘inherently destructive for sustainable development’.

The wording of the Principles here taken into account reveals the difficulties that the drafters of the Declaration have encountered in shaping the content of internationally accepted norms of conduct with regard to the protection of the environment. The fact that also developmental considerations, beside environmental ones, have equally inspired the drafters does not, however, justify the impossibility of reaching a *consensus* on a formula that would adequately address the theme of biodiversity. Conservation and biodiversity constituted cross-sectional themes that deserved (and still deserve) the adoption of actions and measures to be taken both considering environmental (e.g. conservation of species, habitats and ecosystems) and developmental aspects (e.g. the sustainable use of the essential component of biodiversity in order to foster human development and well-being). The fact that UN Member States gathered in Rio did also adopt a legally binding instrument that precisely address the issue of biodiversity does not compensate for the absence of an explicit reference to biodiversity in the Declaration of Principle, a soft law document that is commonly regarded as a turning point for IEL.

Hence, it must be noticed that the Rio Declaration registered quite a setback from the Stockholm Declaration, a document that better appreciated the multi-faceted or transversal character of the questions posed by biodiversity conservation (and utilization). In particular, the text of the 1972 Declaration targeted conservation and sustainable use of resources in a more systematic or functional manner³⁵.

First of all, Principle 2 of the 1972 Declaration addressed conservation, by affirming that it was in the interest of the international community to preserve ‘the natural resources of the Earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems’. In the second place, the Stockholm Declaration can be appreciated for having drawn a clear distinction between the renewable and the non-renewable natural resources, stressing that the former, according to Principle 3, are vital and ‘must be maintained and, wherever practicable, restored or improved’. Furthermore, Principle 7 addressed the specific issue of marine biodiversity, urging States to refrain from the adoption of behaviors that could, *inter alia*, affect the conservation of marine living resources in a negative manner.

In turn, Principle 4 of the Stockholm Declaration, account taken that the integrity of wildlife and natural habitats were being

³⁵ It must be noted that some IEL scholars have suggested, on the contrary, that ‘there is little sign, however, of the biodiversity concept at Stockholm’. See M. Bowman, P. Davies, C. Redgwell, cit., at 589.

jeopardized ‘by a combination of adverse factors’, underlined the importance that States shall give to nature conservation in planning their economic development. The same Principle stressed also the special responsibility of humankind to safeguard and wisely manage the natural heritage. The weight of this principle, however, is somehow diminished by the fact that, throughout the Declaration, the conservation of wildlife is primarily seen as a responsibility of the individuals, hence leaving undetermined the role, if not the obligations, that States should fulfill in this respect. Notwithstanding this, the lack of an explicit reference to a State responsibility for the conservation of nature is partially filled by the emphatic reiteration, in other Principles of the Declaration, of rational planning, as the mean through which States can reconcile the use of resources for economic development with resources conservation³⁶.

Together with the adoption of the 1992 Rio Declaration and the CBD, whose norms will be later analyzed, the UNCED has produced another non-legally binding document that had been conceived to serve as an instrument of guidance to the governments and the peoples of the world, in their efforts to achieve sustainable development during the twenty-first century. Such a document is commonly referred to as ‘Agenda 21’³⁷. Notwithstanding its non-legally binding prescriptions are far from being followed in a

³⁶ See Stockholm Declaration, Principles 12, 13, 14, 15 and 17.

³⁷ UNCED, Report I (1992)

consistent fashion, as the evidence gathered in the occasion of the 2002 review operated during the Johannesburg World Summit on Sustainable Development (WSSD)³⁸ has shown, it has not lost its guiding function and still is at the heart of the environmental mandate of the UN, a mandate that seems to have been diluted by the focus on developmental priorities adopted by the organization in recent years.

Chapter 15 of Agenda 21 deals precisely with the conservation of biodiversity and at the basis of its ‘programme area’ on the conservation of biodiversity, it recognizes that ‘biological resources constitute a capital asset with great potential for yielding sustainable benefits’³⁹. Accordingly, governments are called to undertake actions supportive to the CBD (i.e. developing national strategies for the conservation of biodiversity and its sustainable use, integrating such strategies into national development strategies and/or plans, carrying out country studies and producing world reports on biodiversity based upon national assessments, recognizing and fostering the traditional methods and the

³⁸ UN Department for Economic and Social Affairs (Division for Sustainable Development), UN World Summit on Sustainable Development, Johannesburg Plan of Implementation, at: <http://www.un.org/esa/sustdev/documents>. In the wake of the WSSD, the General Assembly also urged the international community to provide assistance to developing countries in order to halt biodiversity loss. See UNGA resolution A/RES/57/260, of 20 Dec. 2002, on the Convention on biological diversity, para. 7. According to some authors the WSSD provided a ‘further recognition of the contribution which conservation of biological diversity can make to the sustainable development process and to poverty eradication in particular’. See P. Birnie, A. Boyle, cit., at 611.

³⁹ See Agenda 21, Chap. 15, para.15.3.

knowledge of indigenous people and their community, as well as the role of women, and promoting broader scientific and economic understanding of the importance of biodiversity and its functions in ecosystems)⁴⁰. However, as the objectives thus set by Agenda 21 do not possess any binding legal character, from these prescriptions on biodiversity conservation it is not feasible to derive any international obligation for States in this regard.

The 2002 Johannesburg Plan of Implementation (JPOI) affirmed, at paragraph 44, that biodiversity plays a ‘critical role in overall sustainable development and poverty eradication’ and that the preservation of biodiversity ‘is essential to our planet, human well-being and to the livelihood and cultural integrity of people’. The 2002 JPOI recognized also that the main cause for biodiversity loss, which is occurring at unprecedented rates, is to be found in human activities. Hence, the Plan invited the international community to take measures in order to achieve a significant reduction in biodiversity loss by the year 2010. The prescriptions contained in the JPOI, in spite of being more interweaved with the obligations under the CBD and the CBD system of governance that in the meantime had come into existence, however, like the prescriptions listed by Agenda 21, are, once again, of exhortative nature

⁴⁰ *Ibidem*, para. 15.4., letters b), c), e), f), g) and i).

In the light of the examination that has been carried out here, we can conclude that all these documents do envision the practice of biodiversity conservation (as well as its sustainable utilization) in a functionalist manner, as a means through which the goal sustainable development can be achieved. In other words, soft law does not seem to offer any evidence which may suggest that the formation of any general international norm on the protection of biodiversity is currently occurring⁴¹.

1.4. The duty to protect and conserve elements of biodiversity and their residual function in non biodiversity-related MEAs.

Among non biodiversity-related MEAs some treaties contain either accidental or substantial rules of particular relevance for the conservation of biological diversity. This is so, even though the primary objective of the conventional text in which they have been

⁴¹ The prevailing orientation of States towards the development of a general obligation on biodiversity protection has not changed in occasion of the Rio+20 Summit held in Rio de Janeiro (Brazil) on 20-22 June 2012. Focusing on the theme of ‘green economy’ in the context of poverty eradication and on the enhancement of the international governance for sustainable development, participating States adopted a Declaration (UN Doc. A/66/L.56, ‘The Future We Want’, available at www.uncsd2012.org) where, albeit biodiversity issues are frequently referenced, the functionalistic perspective on them is fully maintained. For a comment, see A. Powers, ‘The Rio+20 Process: Forward Movement for the Environment?’, in (2012) *Transnational Environmental Law*, at 403-412.

included may be to regulate other aspects of inter-State relations and to provide the basis for cooperating in order to address either a certain global environmental problem or, alternatively, to address the broad problem of environmental protection in a given region. In this scenario, it is worth to take a brief look, on a sample basis, to biodiversity-related norms contained in some non-biodiversity-related MEAs.

1.4.1. Biodiversity conservation in the Law of the Sea and Ocean-related Treaties

The 1982 United Nations Convention on the Law of the Sea, contains one specific provision on the protection of the marine environment and several rules on the conservation and management of marine living resource⁴². Among these, UNCLOS article 145 places States under the obligation to protect and conserve natural resources that are found in the ‘Area’, that is, the natural resources on the seabed and ocean floor and in their subsoil, beyond the limits of national jurisdiction⁴³. The extent to which the reference to the natural resources in the seabed and ocean floor regards also

⁴² United Nations Convention on the Law of the Sea, Montego Bay (Jamaica) of 10 Dec. 1982, in force 16 Nov. 1994, in (1994) *United Nations Treaty Series*, at 3.

⁴³ *Ibidem*, article 1, paragraph 1.1 (definition of ‘Area’).

marine living resources remains, nevertheless, uncertain according to some authors⁴⁴.

The UNCLOS is a treaty that enjoys an almost universal participation and contains provisions with a broad scope that were the result of a lengthy and complicated multilateral negotiation process⁴⁵. Hence, some more clear-cut provisions on the conservation of marine biodiversity can be better found under regional Conventions establishing peculiar and distinct regional systems of governance on the protection of the marine environment with a more specific scope of application. One example in this regard can be given by the 1979 Convention for the Protection of the Mediterranean Sea against Pollution⁴⁶ and its 1995 Protocol on

⁴⁴ Explaining this legal uncertainty, A. Broggiato, 'Marine Biological Diversity Beyond Areas of National Jurisdiction', in (2008) 38(4) *Environmental Policy and Law*, at 18.

⁴⁵ For instance, according to art. 192 UNCLOS, Contracting Parties are obliged to protect the marine environment. This obligation, however, is vague and indistinct. Harm to the marine environment, in general, is not qualified as it not qualified any harm to marine living resources or habitats, either (on this, see P. Birnie, A. Boyle, cit., at 387). Moreover, UNCLOS does not contain any reference to harmful activities capable of damaging the environment but it just indicates some hypothetical sources of pollution (UNCLOS arts. 210-212). According to some authors, this duty is too generic in order to be materially complied with since it is not clear how Contracting Parties are supposed to proceed. See, in this regard, V. Starace, 'La protezione dell'ambiente marino nella convenzione delle Nazioni Unite sul diritto del mare', in Starace V. (ed.), *Diritto internazionale e protezione dell'ambiente marino*, Milano, 1983, at 404-407.

⁴⁶ Convention for the protection of the Mediterranean Sea against pollution, of 16 Feb. 1976, in force 12 Feb. 1978, in (1978) 1102 *United Nations Treaty Series*, at 44.

Specially Protected Areas and Biological Diversity⁴⁷. The latter can be regarded as the implementing instrument of the former, since it regulates in detail the establishment of adequate-size and habitats-representative marine and coastal protected areas in the Mediterranean Sea⁴⁸. By the same token, it is worth citing Annex V to the Convention for the Protection of the Marine Environment in the North Atlantic (also known as the OSPAR Convention)⁴⁹ for it clearly links the OSPAR Convention to the CBD by making an explicit reference, at articles 1 and 2, to the ‘definitions’, on the one hand, and to the ‘cardinal objectives’ related to the conservation,

⁴⁷ Protocol on Special Protected Areas and Biodiversity, Barcelona (Spain) of 10 Jun. 1995, in force 12 Dec. 1999. The text of the Protocol is available at: http://195.97.36.231/dbases/webdocs/BCP/ProtocolSPA9596_eng_p.pdf. Marine protected areas (MPAs) are designated by each Contracting Parties of the Protocol. MPAs can be international, thus administrated by two or more countries. The Barcelona Protocol combines the definition of lists of endangered/threatened species (Annex II) and of species whose exploitation is regulated (Annex III) with the definition of *common criteria* for the choice of the marine and coastal areas to be put under the obligation s set by the Protocol (Annex I).

⁴⁸ *Ibidem*, art. 4: specially protected area shall also aim at the protection of “(b) habitats which are in danger of disappearing in their natural area of distribution in the Mediterranean or which have a reduced natural area of distribution as a consequence of their regression or on account of their intrinsically restricted area; (c) habitats critical to the survival, reproduction and recovery of endangered, threatened or endemic species of flora or fauna; (d) sites of particular importance because of their scientific, aesthetic, cultural or educational interest”. See O. Ferrajolo, ‘Specially Protected Areas and Biodiversity in the Mediterranean’ in *The Euro-Mediterranean Co-operation for Sustainable Development*, Rome, 1999, at 68-77.

⁴⁹ OSPAR Convention, Paris (France), 22 Sep.1992, in 25 Mar 1998 (www.ospar.org).

sustainable use and access to biological resources, on the other hand, that have been consecrated in the text of the CBD⁵⁰.

1.4.2. Biodiversity conservation in Treaties on the Antarctica

The 1991 Protocol on Environmental Protection to the Antarctic Treaty (PEPAT)⁵¹ is a MEA founded on the ‘ecosystem approach’. Such an expression is used in order to indicate an approach that is based on the integration of policy developments and sound scientific evidence on the functioning of ecosystems, with the view to ultimately preserve the quality of the services that ecosystems perform⁵². Accordingly, the Protocol has made the protection of the Antarctic environment inherently linked to and dependent from the protection of its associated ecosystems. The 1959 Parties of the

⁵⁰ *Ibidem*, art. 1: “for the purposes of this Annex (...) the definitions of “biological diversity”, “ecosystem” and “habitat” are those contained in the Convention on Biological Diversity of 5 June 1992”; art. 2 refers to the CBD and specifically to the duty to “develop strategies, plans or programmes for the conservation and sustainable use of biological diversity”.

⁵¹ On the evolution of the Antarctica Treaty System as an environmental regime, see S. Blay, ‘New Trends in the Protection of the Antarctic Environment: The 1991 Madrid Protocol’, in (1992) *American Journal of International Law*, 86(2), pp.377-399.

⁵² The expression ‘ecosystem approach’ permeates the text of the Protocol in its entirety.

Antarctic Treaty⁵³ decided that Antarctica would be a ‘Special Conservation Area’. This decision was subsequently backed up and reinforced by article 2 of the 1991 Protocol which provides for a ‘comprehensive protection’ to be given to the Antarctic environment and to its dependent and associated ecosystems and to this end, by the designation of Antarctica ‘as a natural reserve, devoted to peace and science’. Accordingly, article 3 the Protocol’s requires its Contracting Parties to take into account the intrinsic value of the Antarctica, including its wilderness, when planning to conduct research activities there, with the objective of limiting any eventual negative impact on the ecosystems hosted in the Antarctic continent.

Finally, it is noteworthy is that, among the five Annexes to the 1991 Protocol on the Antarctic environment (the PEPAT has framework character) one relates to the conservation of the Antarctic flora and fauna (Annex II). The network of the international agreements that were concluded for a better regulation of States activities in the Antarctic region is completed by the Convention for the Conservation of the Living Marine Antarctic Resources (CCAMLR), which has been described by the doctrine as a proper ‘conservation treaty’ with a limited regional scope⁵⁴. In

⁵³ Antarctic Treaty, Washington (United States) of 1 Dec. 1959, in force 23 Jun. 1961, in (1961) 402 *United Nations Treaty Series*, pp.71

⁵⁴ Convention for the Conservation of the Living Marine Antarctic Resources, In (1983) 1329 *United Nations Treaty Series*, at 44. It must be added that the work of the Commission is supported by a Scientific Committee, entrusted with the

particular, under the CCLMAR a Commission for the Conservation of Marine Antarctic Living Resources has been instituted. This body is responsible for the management of the living marine resources that inhabit the Antarctic region and practices monitoring activities, according to the ecosystem-based management approach (e.g. the Commission ensures that harvesting of fishing resources does not run counter to overall ecological balance of the Antarctic environment).

1.4.3. Biodiversity conservation in UNECE-promoted Conventions

Some of the Conventions promoted by the United Nations Commission for Europe (UNECE) also contain ‘incidental’ provisions from which it emerges either a duty to conserve biodiversity or the duty to consider biological diversity when decisions affecting the environmental sphere must be taken.

In this regard, Article 7, letter d) of the 1979 Convention on Long-Range Air Pollution⁵⁵ established that States shall cooperate

task of producing state-to-the-art knowledge about the Antarctic ecosystem. For further information, see www.ccamlr.org. On the CCLMAR, see also M. Bowman, P. Davies, C. Redgwell, *cit.*, at 356-373 and R. Frank, ‘Convention on the conservation of Antarctic marine living resources’, in (1983)13(3) *Ocean Development & International Law*, at 291-345.

⁵⁵ Convention on Long-Range Transboundary Air Pollution, Vienna (Austria) of 13 Nov. 1979, in force 1983. The text of the Convention can be consulted at:

in the field of research and development to limit the effects of sulfide compounds and other major air pollutants on human health and the environment, including “aquatic and other natural ecosystems”. Under the 1991 Convention on Environmental Impact Assessment in a Transboundary Context⁵⁶ and its 2003 Protocol on Strategic Environmental Assessment⁵⁷, addressing procedural and administrative matters recognizing that the environmental impact assessment procedures of proposed programs, projects and activities that are likely to harm the environment must include the evaluation of the eventual harm to the various components of biodiversity (i.e. flora and fauna), to their mutual interaction and to their interaction with other elements of the physical environment (i.e. soil, climate, landscape)⁵⁸.

<http://www.unece.org/fileadmin/DAM/env/lrtap/full%20text/1979.CLRTAP.e.pdf>

⁵⁶ Convention on Environmental Impact Assessment in a Transboundary Context, Espoo (Finland) of 25 Feb. 1991, in force 10 Sep. 1997, in *United Nations Treaty Series* Vol. 1989 (1991), p. 30.

⁵⁷ Protocol on Strategic Environmental Assessment, Kiev (Ukraine) of 21 May 2003, in force 11 July 2010, text available at: <http://www.unece.org/env/eia/>.

⁵⁸ See Espoo Convention, art. 1 (vii), definition of “environmental, including health effect” and Kiev Protocol, art. 2, para. 7.

1.4.4. Biodiversity conservation in the UN Climate Change and Desertification Conventions

The 1992 United Nations Framework Convention on Climate Change (UNFCCC) and the 1994 UN Convention to combat desertification (UNCCD) qualify as MEAs primarily aimed at addressing threats posed to human-well being and survival, they do not overlook the contribution that the preservation of species and their habitats, as well the preservation of ecosystems as a whole, may have for the attainment of their respective goals. The content of some of their provisions suggests, in fact, that their drafters were aware of the existing relations between different environmental phenomena.

The UNFCCC is another example of agreement permeated by the ecosystem approach. In the Preamble, it repeatedly refers to the general adverse impact that climate change may have on the Earth and on vulnerable ecosystems in particular (e.g. marine and mountain ecosystems) and, more importantly, it affirms that its objective, namely, the ‘stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system’

should be achieved within an adequate time span that can accommodate the *adaptation of ecosystems* to climate change⁵⁹.

On its part, the UNCCD, mandates its Contracting Parties to include in their respective national action programs some specific measures in order to pursue the objectives of the conservation and sustainable use of biodiversity, as defined into the main provisions of the CBD⁶⁰.

The presence of these articles, that incidentally address the issues of biodiversity conservation and the prevention of harm to biodiversity components within non biodiversity-related MEAs, points to the existence of, at least, a diffused interest in the protection of biodiversity within the international community, if not to the existence of a customary obligation in this regard. A deeper investigation on these and other non biodiversity-related MEAs and regional conservation treaties is beyond the scope of the present research. However, before addressing directly the CBD and – within its system of governance – the practice that States have so far developed in the field of *in situ* biodiversity conservation pursuant to article 8, letters a) to e) of the Convention, the focus has to be shifted on the provisions and on the functioning of the major biodiversity-related Conventions that were concluded and have entered into force before the CBD. These global conservation

⁵⁹ See UNFCCC, art. 2 on the objective of the Convention (*emphasis added*).

⁶⁰ The Contracting Parties of the UNCCD are required to encourage coordination, *inter alia*, with the CBD (art. 8, para. 1).

conventions, as we shall see, pursue the ultimate objective of the CBD but they all have a limited scope, since they have laid down the rules that shape the relations amongst States with reference to precise and limited elements of biodiversity, namely, wetlands of international importance, natural heritage sites and migratory animal species.

1.5. An overview of the major global conventions entailing obligations for the conservation and management of biodiversity

The present chapter is firstly aimed at defining the notion of biodiversity the values attached to its conservation by individuals and collective subjects. This preliminary analysis was followed by an attempt to reconstruct the legal status of biodiversity conservation as emerged the text of *soft law* instruments that have been widely endorsed by the international community. We saw also that many obligations requiring States to behave in such a way that is not harmful to biodiversity and do not hamper the conservation of some of its fragile elements were inserted in a number of MEAs negotiated in order to channel international cooperation on other major environmental problems. Such an approach, however, would

not be comprehensive without focusing also on those MEAs that were finalized way before the conclusion of the CBD and have constituted the main legal framework through which multilateral conservation efforts have been conveyed, albeit on sectorial bases.

1.5.1. The Convention on Wetlands of International Importance especially as Waterfowl Habitat

The Convention on Wetlands of International Importance especially as Waterfowl Habitat (hereinafter referred to as the “Ramsar Convention”)⁶¹ was adopted in Ramsar (Iran) on 4 February 1971 and to date counts on the participation of 160 States. So far, in the year of its 40th anniversary, 1,968 wetlands, covering

⁶¹ Convention on Wetlands of International Importance especially as Waterfowl Habitat, Ramsar (Iran), of 4 Feb. 1971, in force 21 Dec. 1975, in (1976) 996 *United Nations Treaty Series*, p.245. For general comments see M. Bowman. P. Davies, C. Redgwell, *Lyster's International Wildlife Law*, Cambridge, 2011, at 403-450, S. Vriesinga, ‘International Wetlands Conservation and the Ramsar Convention: Do Broad Measures and “Wise Use” Equal Meaningful, Transboundary Solutions?’, in *Southeastern Environmental Law Journal*, at 169-199, P Bridgewater, 'A New Context for the Ramsar Convention: Wetlands in a Changing World', in (2008) 17(1) *Review of European Community and International Environmental Law*, at 100. For an analysis of State practice under the Convention and the role displayed by the latter in granting protection to migratory bird species, see D. Navid, ‘The International Law of Migratory Species: the Ramsar Convention’ in (1989) 29 *Natural Resources Journal*, at 1000-1016, and M. Bowman. P. Davies, C. Redgwell, *Lyster's International Wildlife Law*, Cambridge, 2011, at 403-450.

190,729,546 hectares around the world, were designated as protected sites under the Convention. Many of these wetlands are transboundary river basins (transnational rivers and lakes) under the meaning of the 1991 Convention on the Protection and Use of Transboundary Watercourses and International Lakes⁶².

The Ramsar Convention is the first MEAs to have imposed upon its Contracting Parties a set of obligations aimed at the conservation of a particular kind of habitat⁶³. The purpose of the Convention is to protect wetlands and their associated ecosystems. Specific conservation measures implemented under the Convention, as its name clearly suggests, are finalized to the maintenance of those functions displayed by wetlands that also ensure the survival of ecologically dependent birds⁶⁴.

The peculiarity of the Ramsar Convention is that, according to article 2, paragraph 4, State ratification is subordinated to the insertion of a wetland in the so-called 'List of Wetlands of International importance', with a view to achieve the objective of

⁶² Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Helsinki (Finland) of 12 Mar. 1992, in force 7 May 1996. Text available at: <http://www.unece.org>.

⁶³ With reference to the rather general principles that Contracting Parties shall comply with, the 'framework convention' character of the Ramsar Convention has also been underlined. In this respect, see O. Ferrajolo, *Il sistema giuridico della Convenzione di Ramsar sulle zone umide*, Milano, 2006, at 24. This approach, however, appears to be misleading since compliance with the Ramsar Convention may in turn facilitate compliance with the CBD, widely regarded as the only 'framework convention' or 'umbrella agreement' in the field of nature conservation.

⁶⁴ See Ramsar Convention, art. 1, para. 2.

the Convention⁶⁵. Participation to the Ramsar Convention without designation is excluded, that is, States cannot become Parties unless they choose to designate a wetland of international importance amongst those present on their territory. According to article 1, paragraph 1, a wetland is an area of:

‘marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt’.

Encompassing also areas of marine water (provided that their depth at low tide is inferior to six meters), the Ramsar Convention aims at ensuring protection to a broad set of ecosystems, situated at all latitudes. The Ramsar Convention did not introduce any screening process for the selection of sites to be included in the List of Wetlands of international importance. This means that there is no *super partes* international authority entrusted by Contracting Parties to select wetlands for designation. Hence, States have the fullest discretion in deciding which sites should enter the List. As a consequence, the act of designating wetlands of international importance remains an exercise of full sovereignty which, as explicitly affirmed at article 2, paragraph 3, is not undermined at all

⁶⁵ The List is kept by the Ramsar Convention Bureau, a body with seat at the International Union for the Conservation of Nature (IUNC), acting under the supervision of the Standing Committee of Contracting Parties.

by the act of designation. In other words, according to the text of the Ramsar Convention, the Contracting Parties maintain their exclusive sovereignty right on the portions of their territory that become part of the List⁶⁶. It seems unlikely, though, that by joining the Ramsar Convention, States do not accept any sort of limitation upon their territorial sovereignty, at least with respect to designated and listed sites⁶⁷.

In order to address urgent matters, Contracting Parties may also decide to delist one or more of their wetlands. Similarly, article 2, paragraph 5, of the Ramsar Convention establishes that Parties can also decide to review the boundaries of the protected wetlands already included in the List, either to restrict or to extend them beyond the areas initially designated. Article 4, paragraph 2, however, provides also that deletions and restrictions ought to be balanced and compensated by the simultaneous creation of additional protected areas, either on the same territory interested by the deletion/restriction or elsewhere.

As for the substantial provisions, article 3, paragraph 1 of the Ramsar Convention puts the Contracting Parties under the general obligation to:

⁶⁶ The persistent remarks on sovereignty as being not affected by the designation of a wetland which, in turn, enables the participation to the Ramsar Convention, seem partly pleonastic. See, in this regard, P. Sands, *Principles of International Environmental Law*, Cambridge, 2003, at 187.

⁶⁷ See D.M. Ong, 'International environmental law governing threats to biological diversity' in M. Fitzmaurice, D.M. Ong, P. Merkouris (eds.), *Research Handbook on International Environmental Law*, Cheltenham, 2010, at 531.

‘formulate and implement their planning so as to promote the conservation of the wetlands included in the List and (...) the *wise use* of wetlands in their territory’⁶⁸.

The concept of ‘wise use’ is pivotal to the functioning of the Ramsar system. Even though this concept may appear as opposed to the concept of wetland conservation, the practice under the Ramsar Convention has overcome any opposition in this respect and has acknowledged ‘wise use’ as a general objective for all wetlands that are present within the territories of the Contracting Parties⁶⁹.

However, the Convention did not originally provide any guidance as to how wetlands and their resources should be wisely used. The deficiency of the conventional text was consequently overcome by the adoption of Recommendation 1.4 by the Ramsar COP that was held in Cagliari (Italy) in 1980. In that occasion Contracting Parties agreed on the concept of wise use as implying ‘the maintenance of the ecologic balance of the area as the premise not only to its conservation but also to sustainable development’⁷⁰.

⁶⁸ *Emphasis added.*

⁶⁹ See D. Bowman, ‘The Ramsar Convention Comes of Age’, in (1995) 1 *Netherlands International Law Review*, at 15.

⁷⁰ Ramsar COP3 (Regina, Canada) of 27 May-5 June 1987 adopted Recommendation 3.3 on the ‘Wise Use of Wetlands’, specifying that such concept indicates the ‘human use of wetlands that may yield the greatest continuous benefit to present generations whilst maintaining its potential to meet

The silence on procedural obligations is another striking feature of the original version of the Ramsar Convention. For instance, a Contracting Party was not originally bound by the duty of regularly informing its counterparts on the *status* of internationally important wetlands located on its territory (this obligation had rather to be satisfied only in cases of ecological deterioration). However, in the attempt to harmonize the practice under the Convention to that which was being developed elsewhere under other MEAs, Recommendation 2.1 of 1984 introduced the duty to submit detailed National Reports (NRs) to the Secretariat at least six months before each ordinary meeting of the Contracting Parties is officially convened.

The need to modernize the Ramsar Convention and to equip it with the right tools for helping Contracting Parties in the pursuit of its goals was also recognized by its Contracting Parties when they decided to modify the conventional text in two occasions. On 3 December 1982 the Ramsar COP that had been convened in Paris adopted a Protocol which introduced a new norm (article 10 *bis*) establishing a procedure for amending the Convention. On the basis

the needs and aspirations of future generations'. Ramsar COP 4 (Montreaux, Switzerland) of 27 June-4 July 1990 took note of the 'Guidelines for the implementation of the Wise Use Concept' by adopting Recommendation 4.10 (Annex). Ramsar COP5 (Kushiro, Japan) of 9-16 June 1993 endorsed 'Additional Guidance for the implementation of the Wise Use Concept' (Recommendation 5.6, Annex). All soft law instruments mentioned are available at the Convention site (www.ramsar.org). An affinity between the concept of 'wise use' and the 'amorphous concept of sustainability' has been pointed by S. Vriesinga, *cit.*, at 198.

of such procedure, the extraordinary COP held in Regina (Canada) in 1987 adopted a series of amendments to Articles 6 and 7 of the original Convention. These amendments did modify none of the substantial principles on wetlands protection since they related to the institutional dimension of the Ramsar architecture. The amendments specifically related to the powers of the Conference of the Parties, instituted a Standing Committee, a permanent Bureau and introduced a budget for functioning of the Convention. These amendments came officially into force on 1 May 1994, although Contracting Parties had embraced their innovations on voluntary basis also during the interim period⁷¹.

The Montreux Record (MR) is another relevant mechanism created by the Ramsar COP. It basically consists of a register of wetland sites and constitutes an integral part of the ‘List of Wetlands of International Importance’. Adopted in 1990, with Recommendation 4.8, the MR comprises all the listed wetlands where

‘Changes in ecological character have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference’.

⁷¹ See D. Navid, ‘The Legal Development of the Convention on Wetlands: Getting It Right, or the Importance of Proper Legal Drafting’, in (1994) *A Law for the Environment, Essays in Honour of Wolfgang E. Buhrenne*, Gland, at 196.

In other words, the MR identifies those sites that are likely to require the adoption and implementation of positive national and international conservation measures⁷². By virtue of this instrument, the Ramsar system of governance has been enriched by the possibility of realizing an enhanced form of cooperation in relation to those designated sites that demand a stronger or tailor-made effort in order to diminish, transform and mitigate potential threats. *Prima facie*, however, the MR seems to be more rudimentary than the ‘List of World Heritage in Danger’, an instrument that, at it will be seen in the next section, was established under another treaty (the World Cultural and Natural Heritage Convention) and that, from its early beginning, was backed up by a financial instrument (i.e. the World Heritage Fund) that allocates financial resources giving priority to the most threatened sites⁷³.

⁷² Resolution VI.1 (1996) established procedures for the utilization of the Montreux Record mechanism, with guidelines on the steps to be taken for including or removing Ramsar sites on/from the Record.

⁷³ A Wetlands Conservation Fund, aimed at favouring the implementation of the Convention has been actually introduced by the 1987 amendments. However, its resources, rather than being destined to the management of threatened sites, are conveyed to least developed country Parties for facilitating their implementation.

1.5.2. The Convention for the Conservation of the World Cultural and Natural Heritage

Concluded under the aegis of the United Nations Education, Scientific and Cultural Organization (UNESCO) in Paris on 16 November 1972 and currently ratified by 188 Contracting Parties⁷⁴, the Convention for the Conservation of the World Cultural and Natural Heritage (hereinafter WCNH Convention)⁷⁵ resulted from the international concern caused by the lethal damages that had destroyed a high number of landmarks throughout Europe during World War II. The WCNH Convention stands out in the context of wildlife protection because of its peculiar perspective that it offers in protecting the natural heritage.

The WCNH Convention was the first treaty that addressed the conservation of certain elements of nature conceptually linking them to the notion of heritage⁷⁶. However, the role played by the WCNH Convention as a ‘conservation’ treaty is somehow limited

⁷⁴ As of 12 Nov. 2011.

⁷⁵ UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, Paris (France) of 16 Nov. 1972, in force 15 Dec. 1975, in (1972)11 *International Legal Materials*, at 1358. For a comment see, M. Frigo, *La protezione dei beni culturali nel diritto internazionale*, Milano, 1986, at 170 ss, M. Bowman, P. Davies, C. Redgwell, cit., at 451-482 and F. Francioni (ed.), *The 1972 World Heritage Convention: A Commentary*, Oxford, 2008.

⁷⁶ See M. Bowman, P. Davies, C. Redgwell, cit., at 453.

since it does not provide for any legal protection to wild species and habitats that do not fulfill certain very selective requirements.

Along with the protection of cultural heritage, as established by article 1, the WCNH Convention equally aims to provide additional protection to certain elements of nature defined as ‘physical, biological, geological and physiographical formations’ that, in a figurative sense, belong to all nations and are deemed to be heritage of every individual by virtue of their remarkable and unique features or, as affirmed by article 2, by virtue of their ‘outstanding universal value’⁷⁷.

So far the sites of outstanding universal value are 878 and they are localized in 145 States. Out of this 878, however, only 147 are natural heritage sites whereas only 25 are mixed sites (featured by both natural and cultural elements of value). The disproportion is mainly due to the priority attached to the protection of man-made heritage. As already highlighted, the conclusion of the WCHN Convention was encouraged by those States whose societies endured the devastations that were perpetrated during World War II. In the last two decades, however, awareness about the damages that armed conflicts may also produce to the environment has arisen amongst scholars of international humanitarian law but,

⁷⁷ As established under art. 2, the *outstanding universal value* of such sites can be aesthetic or scientific and can also be determined by the presence of habitats of threatened species of animals and plants that should be conserved.

more relevant to our ends, in the States and bodies that participate into the WCHN system of governance⁷⁸.

The bulk of the tasks established under the WCNH Convention are carried out by the World Heritage Committee, a supranational body made up by the representatives of 21 States appointed with a six-year mandate⁷⁹. This body is entrusted with establishing and managing the World Heritage List comprising natural and cultural heritage sites designated for protection under the WCNH Convention (article 11, paragraph 2) updated and published every two years.

According to paragraph 77 of the WCNH Convention Operational Guidelines⁸⁰, a policy instrument that regulates, among others, the activities of the Committee, natural sites that possess an

⁷⁸ For instance, the inclusion of five national parks of the Democratic Republic of Congo in the World Heritage List. See UNESCO/UN Foundation Biodiversity Partnership, *Biodiversity Conservation in Regions of Armed Conflict: Conserving World Heritage Sites in the Democratic Republic of Congo*, at: <http://portal.unesco.org/culture/en/files/12097/10618379711DRC.pdf/DRC.pdf>. More in general, see C. Bruch et al. 'Post Conflict Peace Building and Natural Resources', in (2009) *Yearbook of International Environmental Law*, at 58-96. Instead, on WCNH Convention as an instrument relevant to the protection of the cultural heritage, see F. Francioni, 'Beyond State Sovereignty: the Protection of Cultural Heritage as a Shared Interest of Humanity, in 2004 (25) *Michigan Journal of International Law*, at 1213-1219.

⁷⁹ See WCNH Convention, arts. 8-14. States are elected to the WH Committee during the General Assembly of Contracting Parties that, in turn, is convened in the framework of the ordinary sessions of the UNESCO General Conference.

⁸⁰ The latest version of the 'Operational Guidelines' were issued in Nov. 2011. See 'Operational Guidelines for the Implementation of the World Heritage Convention'. Available at: <http://whc.unesco.org/archive/opguide11-en.pdf>.

‘outstanding universal value’ and therefore eligible for insertion in the List must, specifically:

‘(ix) be outstanding examples representing significant ongoing ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;

(x) contain the most important and significant natural habitats for *in-situ* conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science and conservation’

The proposals individually put forward by each Contracting Party are assessed in the light of the above criteria. The List, in fact, is prepared on the basis of the ‘inventories of properties forming part of the cultural and natural heritage’ submitted by every Member state and commonly known as ‘tentative lists’.

While under the Ramsar Convention the designation of an internationally important wetland amounts to a mere exercise of national sovereignty, under the WCNH Convention a process of scrutiny (or screening procedure) is foreseen. This includes an independent evaluation of the proposed sites and is performed by two advisory bodies: the International Council on Monuments and Sites (ICOMOS) and the International Union for Nature

Conservation (IUNC) in respect of natural sites. The prevision of such a selection, (carried out in accordance with the specificities established by the Operational Guidelines), can be explained by two reasons.

Firstly, the WCHN Convention is entirely premised on the concept of ‘common heritage’⁸¹. Secondly, the functioning of the Convention is allowed by the mandatory financial contributions that Contracting Parties channel into the World Heritage Fund (article 15). As recalled in the subparagraph dedicated to the Ramsar Convention, the WH Fund is an original and ‘distinctive feature’ later emulated by and adapted to other international conventions on wildlife protection.

As under the Ramsar Convention, also under the WHCN Convention a system of ‘double listing’ has been introduced. In this case, it is the World Heritage Committee that is entrusted for the elaboration of the ‘List of World Heritage in Danger’, which comprises all those sites that require major international cooperation and the implementation of urgent conservation measures is required (article 11, paragraph 4)⁸².

⁸¹ This is however tempered by the WCNH Convention art.4, according to which ‘each State Party (...) recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage (...) situated on its territory, belongs primarily to that State’.

⁸² The two most recent entries are natural sites: the Tropical Rainforest Heritage of Sumatra (Indonesia) and the Rio Platano Biosphere Reserve (Honduras), both entered the List in 2011.

From the designation of a site into World Heritage Lists some obligations derive to be fulfilled by the territorial State of the site in question⁸³. According to WCNH Convention (article 4), every Contracting Party bears the responsibility of ensuring the conservation of a site as well as the transmission of its unique characteristics to future generations. Article 5, then, links responsibility to the adoption of a series of ‘effective and active’ measures concerning the ‘preservation and the presentation’ of hosted sites at national level (i.e. in order to integrate the conservation of the heritage into comprehensive planning programmes, set up ad hoc protection and conservation services, develop scientific and technical studies for heritage conservation, establish regional training centers for this purpose, etc). Finally, article 6 affirms that Contracting Parties shall respect the sovereignty of those States in whose territories World Heritage sites are hosted, acknowledging, in particular, that:

‘such heritage constitute world heritage for whose protection it is the duty of the international community as a whole to cooperate’.

⁸³ The binding nature of such provision was reaffirmed by the Australian High Court. *Commonwealth of Australia v. State of Tasmania and Others*, Australia, High Court, 1 July 1983, in (1985) 68 International Law Reports, at 266. See. M. Bowman, P. Davies, C. Redgwell, cit. at 455-456.

As under the Ramsar Convention but probably under the WCNH Convention in a more evident fashion, there is a tension between the prerogatives of sovereignty and the general interests of the international community⁸⁴.

1.5.3. The Convention on the Conservation of Migratory Species

The Convention on the Conservation of Migratory Species of Wild Animals, hereinafter referred to as the CMS, was adopted on 23 June 1979, in Bonn (Germany) and it entered into force on 1 November 1983⁸⁵. Albeit being universal in scope, it initially counted on a relatively limited participation. Today, however, it enjoys the participation of 116 Contracting Parties. Furthermore, many countries that have not yet either signed or ratified the CMS undertook, however, certain obligations on the conservation of some migratory species that were subsequently introduced into quite a relevant number of international legal instruments that

⁸⁴ See M. Gestri, *La gestione delle risorse naturali d'interesse generale per la Comunità internazionale*, Torino, 1996, at 23. Others observe that the utilization of the 'common heritage' concept at treaty level implies that the nature of an environmental offence (domestic or transboundary) become less relevant in the eyes of Contracting Parties, see F. Munari, L. Schiano Di Pepe, cit., at 52-53.

⁸⁵ Convention on the Conservation of Migratory Species, Bonn (Germany), of 23 Jun. 1979, in force 1 Nov. 1983, in (1991) 1651 *United Nations Treaty Series*, p. 333.

where negotiated on the basis of the CMS (specifically on article 3, paragraph 3 and 4).

The objective of the CMS is to provide protection to species that cross multiple jurisdictional borders during their periodical migrations. In order to achieve this goal, the CMS foresees, like the Ramsar Convention in the case of wetlands and the WCNH Convention in the case of cultural and natural heritage sites, a system of listing. In particular, according to article 3, paragraph 1, Appendix I lists 'endangered' migratory species whereas, according to article 4, paragraph 1, Appendix II lists migratory species characterized by an 'unfavorable conservation *status*'. The main difference between the two lists is that for the former, the obligation to protect is immediate and automatically ensured through the ratification of the CMS by those Contracting Parties interested by the migrating route of a certain endangered species whereas for the latter, as well as for those species with a conservation status that 'would significantly benefit from international cooperation', protection can be achieved through the negotiations of *ad hoc* international agreements. Other differences between the two Annexes are determined by the criteria to be used in order to establish the conservation *status* of species and by the legal nature of the CMS, on the one hand, and the one of the *ad hoc* international agreements just mentioned, on the other hand.

As for the criteria, CMS article 1, paragraph 1, letter e) specifies that endangered migratory species qualify as such if they are in danger of extinction throughout ‘all or a significant portion’ of their range. In practice, CMS COPs are used in order to consider, on a case-by-case basis, the listing of certain species in Appendix I following the variations to IUNC Red List of Threatened Animals⁸⁶ and the independent assessment of the CMS’s Scientific Council.

The issue concerning the legal *status* of the CMS ‘daughter agreements’ is complex and would deserve a deeper reflection under a treaty law perspective. The CMS, in fact, establishes that with reference to the species listed in Appendix II, Contracting Parties, as well as any non-Contracting State (provided that it qualifies as ‘range State’, that is, a State exercising jurisdiction over any part of the range of migratory species or a State with flag vessels engaged in taking migratory species beyond their domestic waters) have the power to negotiate the so-called ‘Agreements’.

In relation to the species whose conservation *status* would significantly improve by virtue of international cooperation, instead, Parties (as well as non-Parties) are only encouraged to enter cooperation, typically through the adoption of *Memoranda of Understanding (MoU)*⁸⁷, that is, the solution adopted in the practice

⁸⁶ See www.iucnredlist.org.

⁸⁷ To date 17 Memoranda were concluded for the protection of various migratory species (e.g. sharks, monk seals, cranes, turtles, antelops, etc). However, on the basis of art. 4, para. 4, were also signed 3 legally binding agreements, namely the Agreement on the Conservation of Small Cetaceans in the Baltic, North-East

for giving effect to article 4, paragraph 4, which speaks of ‘any population or any geographically separate part of the population of any species or lower taxon of wild animals, members of which periodically cross one or more national jurisdictional boundaries’. With a solution of this kind, the drafters of the CMS laid down the basis for the coming into being of a system of protection structured on instruments featured by various degrees of binding force. Specifically, it is not clear if MoU can be considered actual international agreements (with binding force) or if they just belong to the fuzzy realm of *soft law*. This, together with the fact that some range State of species listed in Annex I are not Parties to the CMS is detrimental to the effectiveness of the conventional system. However, seen under another perspective, the prevision of Annex II AGREEMENTS, as well as the power to sign MoUs, might incentivize participation and, as a consequence, facilitate the achievement of the CMS overall objective.

The overall analysis of its obligations leads us to affirm that the CMS is an international convention with an undoubtedly flexible character. This is primarily due to the fact that the Convention acknowledges the variability of the conservation *status* of populations within the same species that are located in different distribution areas. This renders the protection to be granted much

Atlantic, Irish and North Seas (ASCOBANS), the Agreement on the Conservation of Cetaceans in the Mediterranean and Black Seas (ACCOBAMS), as well as the Wadden Sea Seals Agreement. The texts and other relevant data on these agreements are available at <http://www.cms.int>.

more flexible. Secondly, flexibility lies also in the fact that species can be listed in both Appendices, allowing Contracting Parties to adopt different solutions in relation to their conservation. The intrinsic fluidity of the CMS is also evident in the definitions that were inserted in its final text, as well as in the options for cooperation that were established. This can be seen, for instance, in the definition of ‘migratory species’ under article 1, paragraph 1. According to such definition, migratory species are:

‘the entire population or any geographically separate part of the populations of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries’.

The above definition, as the doctrine put it, “does not seek formally to define the taxonomic concept of a species as such”⁸⁸. Conversely, it rather specifies that the term ‘species’ has not to be interpreted from a strictly scientific point of view. This allows, for instance, the protection of particular varieties of a certain species as the mountain gorilla (*gorilla gorilla beringei*), particular subspecies but only within a limited area, as the west Indian manatee (*trichechus manatus*), which is considered to be endangered only between Honduras and Panama and, finally, it allows the

⁸⁸ See M. Bowman. P. Davies, C. Redgwell, cit., at 539.

comprehensive protection of different species as it occurs through the ‘Agreements’, such as the 1991 EUROBATS (for the Conservation of the Populations of European Bats), the 1995 AEWA (for the Conservation of African and Eurasian Water Birds along their routes of migration), the 2001 ACAP (on the Conservation of Albatrosses and Petrels) and the 2007 Agreement on the Conservation of Gorillas and their Habitats ⁸⁹.

Turning to the substantial obligations of the CMS, it is worth to begin with those regarding Annex I species. These species cannot be taken (article 3, paragraph 5) and the derogations to this prohibition must be limited to a) takings for scientific purposes, b) takings to enhance the propagation and survival of affected species, c) traditional subsistence takings and d) taking required by extraordinary circumstances.

Furthermore, according to article 3, paragraph 4, range States, in relation to Annex I species shall also a) conserve and restore habitats fundamental for the survival of endangered species, b) ‘prevent, remove, compensate for or minimize’ the negative effects of activities that affect migrating species and c) ‘prevent, reduce or control’ factors that jeopardize the survival of these species (e.g. the presence or introduction of alien and exotic species). As argued in the literature, the main problem of these rules, however, is that

⁸⁹ For the latest account on the developments under these agreements, see E. Morgera (ed.) ‘Natural Resource Management and Conservation’, in (2009) *Yearbook of International Environmental Law*, p.383 e ss. Texts and data on these ‘AGREEMENTS’ are available, again, at www.cms.int.

they are ‘heavily qualified’⁹⁰ and too dependent from the capabilities of each CMS Contracting Party.

Within the CMS system international cooperation plays an important part but, however, the core aspects of implementation occur at State level, since Contracting Parties must comply with a series of procedural obligations aimed at linking the national conservation efforts to the global ones. These obligations are set under CMS article 6 and they consist in a reporting system that, as in the other two cases, is aimed at monitoring national implementation (e.g. on the adoption of relevant legislation and other administrative and statutory acts with a view to protect migratory species) and to disseminate best practices through a process of peer-to-peer review that occurs at COP level.

Moreover, it must be added that, as decided by CMS Resolution 8.18, Contracting Parties should also integrate strategies, programs and plans for the conservation of biodiversity, pursuant to the requirements of the CBD, with specific actions to address the issues posed by the conservation and management of migratory species⁹¹.

As for the institutional arrangements, the CMS system of governance resembles in all parts that of any MEA and it is formed by a COP, a Secretariat, a Standing Committee and a Scientific

⁹⁰ See C. Redgwell, cit., at 549.

⁹¹ See L. Glowka ‘Complementarities between the Convention on Migratory Species and the Convention on Biological Diversity’, in (2000)3 *Journal of International Wildlife Law and Policy*, at 205.

Council. The COP is the policy and decision-making organ with the primary responsibility for the international implementation of the Convention; the Secretariat, established after the Convention entered into force and according to article 9, paragraph 4, it has administrative function. The Standing Committee oversees the activities of the Secretariat and monitors CMS implementation in between meetings and the Scientific Council, according to article 8, paragraph 1, provides advice to the COP on scientific matters, as the inclusion/exclusion of species to/from Appendices.

1.5.4. The Convention on the International Trade of Endangered Species

The 1973 Convention on the International Trade of Endangered Species (hereinafter CITES)⁹² completes the family of MEAs on biodiversity conservation with a universal scope of application⁹³. Unlike the previous agreements dealt with in this section, it does

⁹² Convention on the International Trade in Endangered Species, signed in Washington (United States) on 3 Mar. 1973, in force 1 July 1975, in (1976) 993 *United Nations Treaty Series*, at 244. For a general overview, see M. Bowman, P. Davies, C. Redgwell, cit., at 483-534, R. Reeve, 'Wildlife trade, sanctions and compliance: lesson from the CITES regime', in (2006) 82(5) *International Affairs*, at 881-897.

⁹³ Despite being a general wildlife protection agreement, it can be inserted in the group of biodiversity-related MEAs. It focuses exclusively on one factor contributing to biodiversity loss, that is, global trade.

not impose to its Contracting Parties any obligation of habitat conservation or species protection through the adoption of legal, regulatory or other administrative arrangements setting up protected areas and natural reserves. Under this aspect, the CITES completely differs from the Ramsar Convention, the WNCH Convention and the CMS. CITES aims only at regulating the international trade in endangered species, in order to ‘ensure that any international trade in wildlife is done in a sustainable manner’⁹⁴

By ratifying this Convention, Contracting Parties decided to accept some restrictions to international trade of endangered species on the basis of the prevailing interest in their conservation rather than in their commercialization. A system of appendices to the CITES prescribes when and in relation to which species the transboundary movement shall be subject to import and export controls⁹⁵. CITES forbids trade of those species that are ‘threatened by extinction’. Contracting Parties, which are obliged to regulate these species in a particularly careful manner, can only export them under exceptional circumstances.

Appendix I lists species that are threatened with extinction that are, or could be, affected by trade. Hence, international trade in this

⁹⁴ See J. Hemmings, ‘Does CITES Work?’, in (2002) 3(7) *Asia Pacific Journal of Environmental Law*, at 97.

⁹⁵ For a detailed look at CITES appendices and related provisions, refer also to W.C. Burns, ‘CITES and the Regulation of International Trade in Endangered Species of Flora: A Critical Appraisal’, in (1990)2 *Dickinson Journal of International Law*, at 208-210.

species, whether alive or dead, in pieces or sub-products is banned across national borders. Appendix II, instead, gathers species that are not necessarily endangered by extinction but which could become so when trade thereof is not regulated. So as not to jeopardize their survival, their trade must be regulated. Finally, Appendix III contains species which individual CITES Contracting Parties decide to submit to unilateral trade regulations. The implementation of said regulations demands the cooperation of the other Contracting Parties.

More in detail, species listed under Appendix I can be exported only under a permit confirming that export will not negatively impact on the survival of the species, that specimens, whether dead or alive, in parts or derivatives thereof, were not obtained in violation of nature protection laws, that shipment of a live specimen will be carried out in the guarantee of minimum animal welfare standards and, finally, that an import permit will be received. Such import permit must specify that import will not have any adverse effect on the survival of the species in question and that, if the exchange involves a live specimens, this latter will be suitably housed by the authorities of the country of import. CITES article 3 further specifies the most fundamental precondition to transboundary movements of Appendix I species, namely, that the import shall not be finalized to the commercialization of the imported specimen.

Species listed under Appendix II, which may become at risk unless trade is restricted, can cross national borders of CITES Contracting Parties provided that an export permit is granted by the competent national authorities under the same conditions provided for species listed in Annex I, even though in this case, as established under article 4, the granting of an import permit is not required.

In relation to the species considered by individual CITES Contracting Parties as requiring international cooperation, they can be traded provided that an export license is granted, confirming that the specimen in question was not obtained in breach of nature protection laws and that, in case of shipment of live specimen, trade will take place in the respect of minimum animal welfare standards (CITES article 5)⁹⁶.

CITES has been generally praised for being a wildlife protection agreement that balances the interests of international trade and those related to environmental protection. However, it has also been the object of criticism for a number of different reasons. First of all, from CITES COP practice a general lack of control on the implementation has emerged especially on developing country Parties, which host the biggest share of globally endangered species.

Tesi di dottorato "Implementation of International and European Union Law on the conservation of biodiversity"
di CITELLI MARCO

discussa presso Università Commerciale Luigi Bocconi-Milano nell'anno 2013

La tesi è tutelata dalla normativa sul diritto d'autore (Legge 22 aprile 1941, n.633 e successive integrazioni e modifiche).

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Further hurdles that can obstruct the functioning of the CITES, hence undermining its effectiveness, are given by the existence of procedural obligations, the compliance to which, as a matter of fact, is likely to lead to situations where ‘biological consideration can be overridden by international politics’⁹⁷. The inscription of a certain species particularly threatened with extinction into Appendices I and II require, in fact, a two third majority vote (article 15, paragraph 1, letter b). In addition, it must be underlined that, even when one or more CITES Contracting Parties, either individually or collectively, manage to get their proposed amendments adopted, the other Contracting Parties withhold the power to make reservations concerning the species to be enlisted. Article 15, paragraph 3 reads as follows:

‘During the period of 90 days provided for by sub-paragraph (c) of paragraph 1 or sub-paragraph (l) of paragraph 2 of this Article any Party may by notification in writing to the Depositary Government make a reservation with respect to the amendment. Until such reservation is withdrawn the Party shall be treated as a State *not a Party*⁹⁸ to the present Convention with respect to trade in the species concerned’.

⁹⁷See S. Charnovitz, ‘Free Trade, Fair Trade, Green Trade: Defogging the Debate’, in (1994) 27 *Cornell International Law Journal*, at 495, quoted by J. Hemmings, cit., at 105.

⁹⁸ *Emphasis added.*

From the last sentence of the rule just recalled it clearly derives the power of the Contracting Parties not to be bound by CITES in granting protection to certain species, notwithstanding their conservation *status* may cause international concern⁹⁹.

Another shortcoming of the CITES is given by its incapacity of exercising a major role in the conservation of rapidly depleting fish stocks¹⁰⁰. In this regard, its functioning could serve the objectives of UNCLOS provisions on the sustainable use of marine living resources¹⁰¹. However, the path of applications for the inclusion of commercially exploited aquatic species is not always easy as shown by the opposition of some Contracting Parties in occasion of

⁹⁹ For example, Saudi Arabia made reservations on fourteen species of falconiformes listed in Appendix I. Iceland, Japan and Norway made reservations on a number of whale species, like the Antarctic minke whale (*balaenoptera bonaerensis*) – in relation to which IUNC data are missing – and the sperm whale (*physeter macrocephalus*), classified as ‘vulnerable’ to the risk of extinction. Reservations can be made also in relation to Appendix III species. For instance, Italy, together with other 22 European countries, made reservations on inscription of the mountain weasel (*mustela altaica*), the yellow-bellied weasel (*mustela kathiah*), and the Siberian weasel (*mustela sibirica*). It also expressed reservation on, various subspecies of red fox (*vulpes vulpes griffithi*, *vulpes vulpes montana*, *vulpes vulpes pusilla*) and a subspecies of stoat (*mustela erminea ferghanae*). According to the IUNC Red List, all these species are classified as ‘least concern’ or ‘not threatened’. The whole list of species in each Appendix that are object of reservations is available at: http://www.cites.org/eng/app/reserve_intro.php.

¹⁰⁰For all, see D.M. Ong, cit., at 522-529 and J. Hemmings, cit. at 105-106; Hemmings, in particular, criticizes CITES for failing in protecting forests. The Convention, however, was not designed to grant habitat protection.

¹⁰¹ See D. Vice, ‘Implementation of Biodiversity Treaties: Monitoring, Fact Finding, and Dispute Resolution, in (1997) 29(4) *New York University Journal of International Law and Politics*, at 596-639.

the amendment proposals concerning the listing in Appendix I of the great white shark (*Carcharodon carcharias*)¹⁰² or the southern blue-fin tuna (*Thunnus thynnus*)¹⁰³.

The organizational structure of the CITES resembles that of any other MEA, as it is featured by the presence of a Secretariat (article 12), the COP (article 9), a Standing Committee, with monitoring, implementation and enforcement-related tasks, and other specialized committees. In particular, the Animal Committee and the Plant Committee were created by CITES COP decision in 1987 as subsidiary organs entrusted for giving scientific advice on trade of the species listed in the Appendices to the CITES.

¹⁰² CITES COP 11, proposal 11.48 ‘to include *Carcharodon carcharias* (Great White Shark) on Appendix I of the Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES)’ submitted by Australia and the United States. Available at: <http://www.cites.org/eng/cop/11/prop/48.pdf>. The proposal was rejected, among others, by Japan, a country with a flourishing market of shark products (e.g. shark fin). At COP 13, Australia and Madagascar managed to get this species listed in Annex II, albeit an additional ‘zero export quota’, formally put forward by the proponent, was finally rejected. In this regard, China considered that the specie ‘should be retained on Appendix III until such times as the status of wild populations can be clarified, the role of international trade in that status determined, and possible adverse effects of listing on Appendix II are resolved’, See COP 13, Inf. 11, available at: <http://www.cites.org/common/cop/13/inf/E13i-11.pdf>.

¹⁰³ See CITES COP 15, proposal 19, ‘to include Atlantic Bluefin Tuna (*Thunnus thynnus* (Linnaeus, 1758)) on Appendix I of CITES in accordance with Article II 1 of the Convention’. Available at: <http://www.cites.org/eng/cop/15/prop/E-15-Prop-19.pdf>. The ban to the commercial fishing of this species was submitted by Monaco and followed by a EU proposal (to postpone such ban to May 2011). Eventually, both were defeated after the vote, see Press release of 18 March 2010, available at: http://www.cites.org/eng/news/pr/2010/20100318_tuna.shtml.

1.6. International Tribunals and Biodiversity-related Disputes: how international judges contribute to the biodiversity conservation?

International courts have increasingly been asked to settle disputes concerning the protection of the environment. In the exercise of their judicial power they have contributed to the codification of customary rules of general international law that are also relevant in the field of IEL¹⁰⁴. The latter, in turn, has been featured by the gradual emergence of principles (e.g. the precautionary principle), the major role accorded to procedural obligations (e.g. environmental impact assessment) and, extensively, by the emphasis put by all the subjects interested in the protection of nature on the overarching but highly undetermined concept of *sustainable development*¹⁰⁵. Most of these emerging

¹⁰⁴ See extensively T. Stephens, *International Courts and Environmental Protection*, Cambridge, 2009; A. Viñuales, 'The Contribution of the International Court of Justice to the Development of International Environmental Law: a Contemporary assessment', in (2009) 32 (1) *Fordham International Law Journal*, at 232-258; P. Sands 'Who Governs a Sustainable World? The Role of International Courts and Tribunals', in J. C. Briden, T.E. Downing (eds.), *Managing the Earth: The Linacre Lectures 2001*, Oxford, 2002.

¹⁰⁵ Emphasis added. See UNGA Resolution A/RES/42/427, of 20 March 1987, on *Our Common Future*, Report of the World Commission on Environment and Development, available at: <http://www.un-documents.net/ocf-02.htm#I>. The report defines *sustainable development* as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. According to Judge Weeramantry, the principle enjoys 'normative value', see *Gabcikovo/Nagymaros Project (Hungary v Slovakia)*, Judgment of 25

principles, procedures and concepts finds its codification into a galaxy of declaratory documents as well as into most multilateral environmental agreements (MEAs) negotiated in the wake of world conferences on the environment promoted by the United Nations, like the 1972 Stockholm Conference on the Human Environment and the 1992 Rio de Janeiro Conference of Environment and Development (UNCED)¹⁰⁶. Conferences of the Parties (COPs) stand at the centre of autonomous systems of governance created by each MEA and through their collective decision-making process they are capable of enhancing the understanding and/or furthering the specificity of the poorly defined commitments enshrined in MEAs which, as earlier underlined, are often the outcome of laborious negotiations between States with diverging perspectives on global environmental problems¹⁰⁷. International judicial bodies, maintaining their prerogatives, could play a role similar to the one presently exercised by the COPs, every time they provide

September 1997, Separate Opinion of Vice-President Weeramantry, ICJ Reports (1997) at 88. For a commentary on the legal status of sustainable development, see P. Sands, 'International Courts and the Application of the Concept of "Sustainable Development"' (1999), in *Max Planck UNYB*, at 389-405; S.N. Palassis, 'Beyond the Global Summits: Reflecting on the Environmental Principles of Sustainable Development', in (2011) 22(1) *Colorado Journal of International Environmental Law & Policy*, at 42-76.

¹⁰⁶ See P. Galizzi, 'From Stockholm to New York, via Rio and Johannesburg: Has the Environment Lost its Way on the Global Agenda?', in (2005) 29 (5) *Fordham International Law Journal*, at 952-1008.

¹⁰⁷ This is the case of the CBD. Diverging perspectives on global environmental (and developmental) problems have always featured the international negotiating process; their coexistence is accepted and accommodated through the CBDRs principle (*above* note 34).

interpretation to the content of treaty provisions (in this case, interpretation takes place through diplomatic, political or technical channels). However, as eminently highlighted by the doctrine:

‘the legislative body has presented the international judiciary with a set of rules and principles that can be rather vague. Called upon to interpret vague norms, an international court faces a situation of real difficulty when asked to apply the law to the particular facts of a case’¹⁰⁸.

An attempt will be made here to see how and to which extent international courts have pronounced themselves on disputes which had an element of biodiversity loss (or harm to biodiversity) as their core issue, and to which extent they have specified the nature of treaty norms on biodiversity conservation.

The attention will be firstly devoted to the review of a number of significant cases discussed by the International Court of Justice (ICJ), the International Tribunal for the Law of the Sea (ITLOS) and by various arbitral tribunals. Secondly, the outcome of these cases will be assessed in the light of some strategies that are deemed to be of relevance for ensuring the substantial protection of the environment, in general, and the conservation and sustainable

¹⁰⁸ See P. Sands, ‘Litigating Environmental Disputes: Courts, Tribunals and the Progressive Development of International Environmental Law’, at 3. Paper presented at the OECD VII Global Forum on International Investment, 27-28 March 2008. Available at: www.oecd.org/investment/gfi-7.

use of biodiversity, in particular. The overall goal will be to ascertain whether and to what extent international judges have contributed (or are likely to contribute in the future) to the affirmation of the duty of States to conserve and sustainably use those living natural resources that form an integral part of the world ecosystems and if, by doing so, they adopted an approach capable of reconciling the tension between the obligation to conserve global biodiversity with the prerogatives of sovereignty. An ancillary goal will be to see if and to what extent international tribunals have ‘interiorized’ an approach that duly considers the transversal dimension of biodiversity management in a world that is featured by a growing number of interdependencies.

1.6.1. Biodiversity-related Case Law of International Courts and Tribunals

The International Court of Justice recognized that the environment is not an abstraction¹⁰⁹ and that the protection of the

¹⁰⁹ *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 8 Jul 1996, *ICJ Reports* (1996), at 226; *Gabcikovo-Nagymaros case (Slovakia v. Hungary)*, Judgment, 25 Sept. 1997, *ICJ Reports* (1997) at 7.

environment constitutes an ‘essential interest’¹¹⁰ of the community of States. Amongst others, the Court also acknowledged the customary nature of a principle commonly referred to as ‘no harm rule’ or *sic utere tuo ut alienum non laedas* principle (or ‘no harm rule’)¹¹¹. According to this principle, States shall refrain from undertaking or permitting activities under their jurisdiction or control that are likely to cause trans-boundary harm in the territory of other States or in the areas beyond national jurisdiction. Due to its reiteration by international tribunals and due to its considerable record of incorporation into international legal instruments, it was described as the ‘most basic principle of customary international law’¹¹². Contrary to what happened in relation to the ‘no harm’

¹¹⁰ Judgment of 25 Sept. 1997, (*above* note) at para. 41. According to the ICJ, however, the protection of the environment may amount to an essential interest that can be invoked to terminate a treaty (or to breach international obligations) only if the State can demonstrate that the threats to which the environment is exposed have an imminent character.

¹¹¹ *Legality of the Threat or Use of Nuclear Weapons*, (*above* note 109), paras. 29-30.

¹¹² See J. Brunnée, ‘The Responsibility of States for Environmental Harm in a Multinational Context – Problems and Trends, in (1993) 34(3) *Les Cahiers de Droit*, 34(3), at 831. It is generally considered that the earliest formulation of this principle can be found in the award of the often cited case of the Trail Smelter. See *Trail Smelter Arbitration (USA v. Canada)* (1938/1941) 3 *RIAA* 1905. For a commentary, see R. Miller, ‘Trail Smelter Arbitration’, in (2011) *Max Planck Encyclopaedia of Public International Law* (at <http://www.mpepil.com/>). The principle, constantly premised on the sovereignty over natural resources, was subsequently reformulated, encompassing the respect of the UN Charter, and its scope was broadened as to apply to the areas beyond State jurisdiction, e.g. see United Nations Conference on the Human Development, Stockholm Declaration, (*above* note 23), Principle 21; UNGA Resolution A/RES/29/3281, of 21 Dec. 1974, Charter of Economic Rights and Duties of States, art. 30; UNGA Resolution A/RES/37/7, of 28 Oct. 1982, containing the World Charter for

rule, the Court has not fully explored yet the international law implications of the State interest to protect the environment.

Such an interest co-exists and competes with the pursuit of other legitimate interests, such as those that derive from economic growth, social development and poverty eradication (in the North as well as in the South of the world). In our view, it may be retained that the conservation of biodiversity (as 'the variability of living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part', including also the 'diversity within species, between species and of ecosystems')¹¹³, can be considered as a specific part of the (more general) interest in environmental protection (and as such it may correspond to a particular and legitimate State interest). International judges might contribute to the definition of such an interest or offer their contribution in defining, refining and reasserting the material content of international obligations on biodiversity conservation (even by interpreting and extending, in a functionalistic manner, the scope of treaty norms on biodiversity conservation in the light of State

Nature, (*above* note 28), Principles 21-22; United Nations Convention on the Law of the Sea (*above* note 42), article 194. United Nations Conference on Environment and Development, Rio Declaration, (*above* note 32) Principle 2. Part of the doctrine has observed, however, that State practice reveals an inconsistency between what is portrayed as a customary rule, on the one hand, and its effective implementation, on the other hand. See F. Munari, L. Schiano Di Pepe, *cit.*, at 41.

¹¹³ See CBD, art. 2 on the definition of biodiversity as referred to *infra* § 1.1. And *infra* § 2.1.

practice¹¹⁴). Available to this purpose are some cases currently pending in the docket of the ICJ.

Before turning to them, however, it is useful to go back to some disputes (mainly of historical character) either on the utilization of shared natural resources or on the management of common property resources like the disputes over straddling fish stocks, which are typical example of dynamic resources whose conservation, in certain cases and in relation to especially endangered species, may legitimately generate a ‘common concern’¹¹⁵.

¹¹⁴ A contribution of this kind should be encouraged since as of 21 Feb. 2012, 193 States agreed to become Parties of the CBD. Academics and civil society should demand States to give full effect to the almost universal ratification of the CBD according to which biodiversity conservation shall constitute ‘a common concern of humankind’ (Preamble).

¹¹⁵ The concept of ‘common concern’ has been expressed for the first time in the African Convention on the Conservation of Nature and Natural Resources, signed at Algiers (Algeria) on 15 Sept. 1968, in force of 16 June 1969, in (1976) *United Nation Treaty Series*, Vol. 1001, at 3. In the Preamble, Parties to the Convention have recognized that ‘soil, water, flora and faunal resources are a capital of vital importance to mankind’. The UN General Assembly later reprised the concept in relation to climate change, affirming that it was ‘a common concern of mankind, since climate is an essential condition which sustains life on Earth, see UNGA resolution A/RES/43/53 of 6 Dec. 1988. For comments, see *ex multis*, see J. Murillo, ‘Common Concern of Humankind and its Implications in International Environmental Law, in (2008) 5 *Macquarie Journal of International and Comparative Environmental Law*, at133-147; M. Bowman, ‘Environmental Protection and the Concept of Common Concern of Mankind’, in M. Fitzmaurice, D.M. Ong, P. Merkouris, *Research Handbook on International Environmental Law*, Cheltenham, 2010, at 493.

*1.6.2. Disputes on the management of living natural resources.
A brief account on the salient features of the jurisprudence on the
management of marine living resources*

The marine environment constitutes the major repository of world biodiversity and it is constantly exposed to the pressures generated by a series of anthropogenic activities (e.g. pollution from multiple sources and the unsustainable exploitation of fisheries). The judgments that will be analyzed below dealt mainly with the exploitation and the conservation of ocean resources and they were delivered in order to solve disputes arising from diverging interpretations of the limits to the jurisdiction of littoral States over fisheries and marine wildlife in the adjacent waters, as well as from conflicting interests determined by the unfettered exploitation of straddling and high seas fisheries. These judgments, together with those that were delivered in relations to disputes triggered by episodes of transboundary marine pollution, have fostered the development of marine environmental law. The contribution they made in this field is twofold. On a conceptual level, they attempted to redefine the notion itself of marine fish stocks, something that gradually shifted from being perceived as inexhaustible resources (or *res communis*) towards something that is being increasingly recognized as scarce resources, hence

susceptible of depletion. On the normative level, instead, these judgments have partially fostered the emergence of legal norms and the creation of institutions entrusted with the task of dealing with the crisis of global fisheries and of preserving the integrity of the marine environment (even though these two objectives are still far from being achieved)¹¹⁶.

Disputes on the unsustainable exploitation of marine living organisms have been historically determined by the conflict between the interests of flag States, which defended a laissez-faire regime for navigation and fishing in the oceans, and those of coastal States which were traditionally more concerned with the management of fisheries in their adjacent waters. The potential for such conflicts, however, has decreased as a consequence of the entry into force of the UN Convention on the Law of the Sea (UNCLOS)¹¹⁷. With the introduction of the Exclusive Economic Zone (EEZ)¹¹⁸ institute, corresponding to an area extended over the sea up to 200 nautical miles from the baselines from which the breadth of the territorial sea is measured¹¹⁹, coastal States have been given the primary responsibility on fisheries that are found

¹¹⁶ See R. Barnes, 'Fisheries and Marine Biodiversity', in M. Fitzmaurice, D.M. Ong, P. Merkouris (eds), *Research Handbook of International Environmental Law*, Cheltenham, 2010, at 542.

¹¹⁷ UNCLOS, (*above* note 42).

¹¹⁸ *Ibidem*, Part V, articles 55 to 75.

¹¹⁹ *Ibid*, art. 57.

therein¹²⁰. Furthermore, apart from the introduction of the EEZ, the UNCLOS regulates all the relations between States on the basis of a system that clearly allocates their respective rights and their responsibilities for the conservation and management of living natural resources¹²¹.

The number of international disputes involving a natural resources element is remarkable. The first recorded case dates back to 1883 with the *Bering Sea Fur Seals*¹²² affair, which concerned indiscriminate pelagic sealing for Alaskan fur seal, an activity that today would either be sanctioned or would receive strong public condemnation. The United States and Great Britain, as opponents, decided to resort to an arbitral tribunal in order to settle their dispute on the slaughtering of seal populations by British-flagged vessels in the waters around Prilibov Islands, a small archipelago ceased by Russia to the United States. The American initiative consisted in arresting a British vessel in order to put an end on the

¹²⁰ *Ib.* Art. 56.1 (b) (iii). Coastal states have the primary responsibility to protect the marine environment of the EEZ. They are required, *inter alia*, to cooperate also for the conservation of marine migratory species listed in UNCLOS Annex I (art. 64).

¹²¹ *Ib.* articles 61-63 on the conservation and management of living resources. However, the balance reached by the UNCLOS between the competing interest of coastal states, on one hand, and water-distant fishing states, on the other, is somehow undermined by the emergence of possible disputes on two main grey areas: the limits of coastal state jurisdiction to protect and conserve adjacent fisheries and the necessary features of effective regimes for the high seas conservation.

¹²² *Bering Sea Fur Seals (United States v. Great Britain)*, Award of 15 Aug. 1893, in (2007) *UNRIIAA* Vol. XXVIII, at. 263-276. Available also at http://untreaty.un.org/cod/riiaa/cases/vol_XXVIII/263-276.pdf.

excessive exploitation of seals. This decision, however, was not prompted by any consideration of environmental ethics or by the importance attached by the US Government value that fur seal populations *per se* could have, as this did not emerge from US pleadings. Moreover, the US requested and obtained by the tribunal a judicial solution requiring the Parties to set a joint regulatory regime finalized to sustainable sealing in the Bering Sea. Such a scheme, however, was intrinsically limited by the impossibility of imposing binding rules to be enforced against third States (e.g. Russia and Japan) with the effect of regulating their right to pelagic sealing in the concerned area. Such circumstance, it goes without saying, was inherent to the recourse to arbitration as a means of settling bilateral disputes (only the litigant States, in fact, were to be bound by the judicial solution) and showed, probably for the first time in relation to a case with environmental implications, that international litigation fails in considering the interests of third Parties, in general, and, in particular, the interest of conserving natural resources (or other elements of the physical environment) shared by a plurality of States. In particular, the award established that: ‘the United States has not any right of protection or property in the fur seals frequenting the islands of the US in the Bering Sea, when such seals are found outside the three-mile limit’¹²³. This limited approach, together with the absence of obligations of any

¹²³ *Ibidem*, at 269.

for third States (either coastal or water-distant States operating in the Bering Sea) was an implicit acknowledgment of the existence of a marine space – the high seas – where sealing activities could be carried out *de facto* and *de jure* in a discretionary and unregulated manner¹²⁴. Such an award contained an early formulation of the ‘common-property’ doctrine¹²⁵ but ultimately provided a solution that fell short of preventing fur seals population to reach the brink of extinction (only at a later stage the need for common conservation measures was recognized).

Whereas the *Bering Sea Fur Seals* case involved the rights and duties of coastal States for the conservation of living resources in areas beyond national jurisdiction, the *North Atlantic Coast Fisheries*¹²⁶ case involved a dispute over the rights and duties of States within domestic waters. In particular, the case concerned questions on the interpretation of boundary treaties and, again, saw the United States and Great Britain as opponents. The *fait incriminé* here was the seizure of a US-flagged vessel in the waters

¹²⁴ See Award, para. 2. The US and Great Britain decided to forbid their citizens to ‘kill, capture or pursue, in any manner whatever’, during the breeding season the fur seals ‘on the high sea, in the part of the Pacific Ocean, inclusive of the Behring sea, which is situated to the North of the 35th degree of North latitude, and eastward of the 180th degree of longitude from Greenwich’. The award is silent on the imposition of a ban of this kind on third party nationals.

¹²⁵ In relation to the management of natural resources that are found beyond national jurisdiction, as in the case of the high seas and the living resources therein.

¹²⁶ *North Atlantic Coast Fisheries (Great Britain v. United States)*, Award of 7 Sept. 1910, reprinted in (2006) *UNRIIAA* Vol. XI, pp. 167-266. Available also at: http://untreaty.un.org/cod/riaa/cases/vol_XI/167-226.pdf.

of Newfoundland. Such a coercive act, committed pursuant to a newly passed law, restricted the right of access to fisheries by foreign vessels within British domestic waters. In this occasion a tribunal instituted by the Permanent Court of Arbitration (PCA) decided affirming that, not only was Britain entitled to guarantee the protection of the fish stocks within its territorial waters, but it went further affirming that it was obliged to do so in the comprehensive exercise of its authority. In this occasion, the PCA emphasized the primary responsibility that coastal States have in protecting the marine environment. The recognition of this responsibility, however, was not premised by the acknowledgment of the *per se* value of the resources but – on the contrary – it was premised on the passive capacity of the fisheries to meet human consumptional needs and, more generally, the economic needs of coastal States.

During the early 1970s, the so-called ‘Cod Wars’ took place again in the North Atlantic region and were ‘fought’ by Iceland against other fishing States. The *casus belli* at the root of the *Icelandic Fisheries Jurisdiction* cases¹²⁷ was the progressive and unilateral extension of the limits of the Icelandic Exclusive Fishing Zone (EFZ), a measure that Iceland took with the view to ensure the survival and the commercial expansion of its fishing industry.

¹²⁷ *Fisheries Jurisdiction Case (United Kingdom v. Iceland)*, Judgment (Merits) of 25 July 1974, in (1994) *ICJ Reports*, at 3; and *Fisheries Jurisdiction Case (Germany v. Iceland)*, Judgment (Merits) of 25 July 1974, in (1974) *ICJ Reports*, at 421.

The United Kingdom and Germany filed in proceedings at the ICJ in 1972, interrogating the Court about the lawfulness of the Icelandic decision (the establishment of a 50 nautical miles EFZ in the adjacent high seas). Two *interim* orders were initially delivered by the ICJ that, in 1974, handed down a judgment on the merits during a very delicate phase for the development of the law of the sea and IEL¹²⁸. The reasoning of the Court was criticized for being highly unsatisfactory, as it was unable to keep the pace with the normative developments that were being undertaken in other venues. The ICJ, indeed, affirmed that coastal States could claim the extension of a 12 nautical miles EFZ and that such claim was compatible with customary international law. Moreover, the decision at hand was also accompanied by the elaboration of the doctrine of ‘preferential rights’, aimed at reconciling the competing economic interests of coastal and distant-water States by recognizing that the former could enjoy preferential fishing rights in a manner that overall had to be compatible with the needs of conservation of fish stocks, that is, in a manner that does not ultimately affect the rights of third States¹²⁹. The limits of this doctrine, once again, were inherent to its conceptual premise. For the judges, indeed, ‘conservation’ meant preserving the possibility

¹²⁸ The judgments were delivered during the first session of the Third UN Conference on the Law of the Sea and two years after that Stockholm Declaration on the Human Environment that had acknowledged the need to conserve and protect marine species and ecosystems.

¹²⁹ *Icelandic Fisheries*, at 25, (para. 56).

of reaching the maximum sustainable yield from the exploitation of fisheries. In other words, they did not refer, in any appreciable manner, to the conservation of marine living resources as part of the duty to preserve the marine ecosystem as a whole. The limits of this approach were somehow mitigated by the appeal for negotiation in order to favor an equitable and balanced exploitation of fisheries in the high seas. However, given that the UNCLOS was adopted a few years later, by virtue of the subsequent entry into force of codified norms (especially those relating to the Exclusive Economic Zone) most parts of the judgment lost their relevance.

A second 'war' between fishing States culminated in the more recent *Estai*¹³⁰ case. Essentially determined by overfishing of turbot in the North-West Atlantic, the course of actions that led to the application of Spain to the ICJ against Canada resembles that of the *Bering Sea Fur Seals* case. Canada, in fact, seized the 'Estai', a Spanish-flagged vessel on the high seas, pursuant to its *Coastal Fisheries Protection Act* of 1994. To justify its conduct Canada invoked the necessity to arrest the Spanish fisherman and claimed that the protection of a national interest was at stake, as the halibut straddling stocks were threatened with extinction, as established under its 1994 legislation aimed at halting their depletion. Contrary to what happened with the dispute over pelagic sealing, this time, the Court did not settle the dispute on the merits, due to an

¹³⁰ *Fisheries Jurisdiction (Spain v. Canada)*, Jurisdiction of the Court, Judgment of 4 Dec. 1998, in (1998) *ICJ Reports*, at 432.

agreement that in the meantime had been found by the litigant States through parallel negotiations, thus missing the opportunity to clarify the role that coastal State should have in the conservation of marine wildlife in their adjacent waters.

Amongst the disputes on the conservation of marine living resources, the *Southern Bluefin Tuna*¹³¹ dispute must also be recalled. This case concerned the first dispute on the conservation of marine biodiversity to be submitted to the mandatory judicial system established under the UNCLOS. The case resulted from the breakdown in the cooperation under the 1993 Convention for the conservation of the Southern Bluefin Tuna¹³², which prescribed the creation of a Commission for the Conservation of the Southern Bluefin Tuna (CCSBT)¹³³, a body entrusted with the task of: i) determining the total allowable catch of Bluefin tuna (in the light of scientific evidence) and ii) allocating the total catch among the Contracting Parties of the Convention.

¹³¹ *Southern Bluefin Tuna Arbitration*, in (2000) 39 *International Legal Materials*, at 1359, reprinted in K. Lee (ed.), *International Environmental Law in International Tribunals*, Vol.5 *International Environmental Law Reports*, Cambridge, 2010.

¹³² Convention for the conservation of southern blue-fin tuna, Canberra (Australia), 10 May 1993, in force 20 May 1994, (1994) 1819 *United Nations Treaty Series*, at 360.

¹³³ *Ibidem*, art. 8, para. 3, lett. a): the Commission shall decide upon a total allowable catch and its allocation among the Parties unless the Commission decides upon other appropriate measures on the basis of the report and recommendations of the Scientific Committee referred to in paragraph 2 (c) and (d) of Article 9.

Japan (one of the Contracting Parties) had proposed the commencement of a joint experimental fishing programme with the aim of assessing the recovery of the stock, but this proposal was firmly rejected by Australia and New Zealand. This rejection prompted the commencement of a Japanese unilateral pilot program that foresaw the allocation of fishing quotas above the levels that had been set by the Commission. As the pilot program started, Australia and New Zealand instituted proceedings before an arbitral tribunal (under annex VII of the UNCLOS), claiming that Japan had violated UNCLOS articles 117 and 118, respectively, on the duty of a State to adopt, with respect of its nationals, measures for the conservation of the living resources in the high seas and to engage in cooperation for the conservation and the management of marine living resources. In its award, the arbitral tribunal affirmed that ‘the conservation of the living resources of the sea is an element in the protection of the marine environment’¹³⁴ and, recognizing both the scientific uncertainty on the best measures to conserve the blue-fin tuna populations and the sheerness of their depletion, ordered Japan to halt its program as well as to adopt provisional measures with a view to preserve the State rights and avoid further deterioration of the fish stocks. This order was generally considered remarkable because it stood away from the approach previously used to be taken by judicial bodies

¹³⁴ ITLOS Order of 27 Aug. 1999, *Southern Bluefin* (Japan v. Australia), in (1999) 38 *International Legal Materials* 1624, (para. 77).

that had been addressed with the request to rule upon similar disputes concerning the management of fisheries. Even if the tribunal did not define it, some scholars have suggested that it applied the precautionary principle to the case at hand¹³⁵.

Another recent case submitted to an arbitral tribunal under annex VII of the UNCLOS¹³⁶ regarded a dispute between Barbados and Trinidad and Tobago¹³⁷. Unlike the previous case, the award to this dispute had no environmental connotation but it is meaningful because, once again, the rights and duties of coastal States in their adjacent waters (as in the *North Atlantic Coast Fisheries* case referred to above) were analyzed. In 1990 the two Caribbean States concluded a Fishing Agreement on whose basis Barbadians could lawfully fish the flying-fish (a migratory species that moves to and from the waters of both countries) according to their traditional fishing methods in the waters off Tobago¹³⁸. Although the

¹³⁵ On this point, see F. Munari, L. Schiano Di Pepe, at 46 and, similarly, A. Boyle, 'The Environmental Jurisprudence of the International Tribunal for the Law of the Seas', in (2007) 22(3) *The International Journal of Marine and Coastal Law*, at 373. For a formulation of the precautionary principle, see Rio Declaration (*above* note 32), Principle 15.

¹³⁶ According to the provision under UNCLOS article 287, paragraph 1, at the act of ratification Contracting Parties to the Convention shall choose how to settle their dispute. The setting up of an arbitral tribunal under Annex VII is one of the available options for the compulsory settlement of disputes, together with the resort to the ITLOS, the ICJ and to special tribunals constituted pursuant to UNCLOS Annex VIII.

¹³⁷ *Barbados v. Republic of Trinidad and Tobago*, Award of the PCA Arbitrary Tribunal, of 11 Apr. 2006. The award is available at: <http://www.pca-cpa.org/upload/files/Final%20Award.pdf>.

¹³⁸ Fishing Agreement between the Government of the Republic of Trinidad and Tobago and the Government of Barbados, Port of Spain (Trinidad and Tobago),

agreement had entered into force, Barbadians were still being accused of illicit fishing and consequently arrested (this was also facilitated, at some point, by the fact that the agreement had a limited temporal scope and the Parties could not find an accord on its renewal). In response to what happened, Barbados requested, *inter alia*, to review the fishing maritime delimitation lines between the two States in order to accommodate its traditional fishing of the flying-fish. In 2006 the tribunal, while affirming that the international maritime boundary between the two island States had to be respected, also claimed that:

‘Trinidad and Tobago and Barbados are under a duty to agree upon the measures necessary to co-ordinate and ensure the conservation and development of flying fish stocks, and to negotiate in good faith and conclude an agreement that will accord fisher folk of Barbados access to fisheries within the Exclusive Economic Zone of Trinidad and Tobago, subject to the limitations and conditions of that agreement and to the right and duty of Trinidad and Tobago to conserve and manage the living resources of waters within its jurisdiction’¹³⁹.

of 23 Nov. 1990, immediately in force. The Bilateral Agreement is available at: <http://www.ecolex.org/server2.php/libcat/docs/TRE/Bilateral/Other/bar2101.pdf>.

¹³⁹ *Ibidem*, at 115, para. 358.

This award contains two significant elements in line with the obligation under article 62, paragraphs 2 and 4 of the UNCLOS. Paragraph 2 concerns the access by third States to the living resources found in the EEZ of the coastal State, whereas the paragraph 4 concerns the management of these resources by the coastal State with jurisdiction upon them. Moreover, it is worth noticing that the reference made not only to the conservation but also to the ‘development’ of flying-fish stocks indicates that, according to the tribunal, environmental variables such as those inherent to the life-cycle of flying-fish stocks, should be taken into account by two States engaged in a cooperative effort with the objective of managing their shared resources.

From all these judicial decisions, it emerges that international judges have experienced many difficulties in acknowledging the cross-cutting nature of environmental issues that generate disputes among States. There was, for example, some resistance in going beyond the community of interest theory as conceived in the context of bilateral relations (e.g. between countries sharing the a common river basin)¹⁴⁰ and consequently applying it to

¹⁴⁰ For a definition of the ‘community of interest theory’, refer to the *Territorial Jurisdiction of the International Commission of the River Oder Case*, Judgment of 10 Sep. 1929, in *Permanent Court of International Justice*, Series A, No. 23, Series C, No. 17 (II). At 27: «When consideration is given to the manner in which States have regarded the concrete situations arising out of the fact that a single waterway traverses or separates the territory of more than one State, and the possibility of fulfilling the requirements of justice and the considerations of utility which this fact places in relief, it is at once seen that a solution of the

biodiversity conservation and management. It has also proved difficult to find adequate judicial solutions that addressed the dynamic character of species and ecosystems. It has been difficult, in particular with regards to the disputes on the exploitation and conservation of living marine resources, to detect a straightforward shift in the approach adopted by arbitrators and the ITLOS, since no judgment or award has provided clear legal solutions in order to overcome the dichotomy between the conception of fish stocks in consumptive terms and that of fish stocks as a part of biodiversity worth of particular conservation measures. The decrease in the quantity of fishes in the oceans at incredible rates is being reported by a variety of authoritative sources but it seems that this pressure has not exerted appreciable effects on State practice. In light of this, international courts have not found themselves in a comfortable position when they have attempted to address and define the content of international norms on the conservation of marine biodiversity.

problem has been sought not in the idea of a right of passage in favour of upstream States, but in that of a community of interest of riparian States. This community of interest in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian States in the use of the whole course of the river and the exclusion of any preferential privilege of any riparian State in relation to others». Also *Lake Lanoux (Spain v. France)*, arbitral award of 16 Nov. 1957, in (1957) 12 *RIAA*, at 281 and *vo-Nagymaros (Slovakia v. Hungary)*, Judgment, (at para 85) «the Court considers that Czechoslovakia, by unilaterally assuming control of a shared resource (...) *deprived* Hungary of its right to an equal and reasonable share of the natural resources of the Danube» (*emphasis added*).

1.6.3. Environmental Disputes with a specific element of transnational damage to biodiversity. A brief account on the salient features of some cases pending at the ICJ

International tribunals have enunciated the community of interest theory, according to which a natural resource shared by two or more States shall be regarded as a common property, subjected to the equitable use by all interested States. This theory seems to be based on a static view of nature, which does not necessarily take into account i) the dynamic essence of global environmental transformations (e.g. those induced by climate change), ii) the dynamism of natural living resources (e.g. transnational movements of highly migratory species and of the fragile character of species and ecosystems that can be found solely into the global commons) and iii) the effects of transnational pollution on global transformations affecting the non-static components of the biologic world. On these are issues, international judges, in all likelihood, will have to decide in the future and the cases currently pending at the ICJ, outlined below, offer an occasion to the Court to elaborate, *inter alia*, on the tension between the principle of sovereignty and the international obligations on the conservation and management of biodiversity.

The first case with a specific element of transnational damage to biodiversity was commenced in 2008, when Ecuador instituted proceedings against Colombia before the International Court of Justice in what is known as *Aerial Herbicides* case, still pending in front of the Court. It concerns allegedly unlawful actions undertaken by Colombia from 2000 to 2007, supposed to have harmed Ecuadorian biodiversity in a significant manner. In an attempt to eradicate poppy and coca cultivations that have been nurturing the illicit traffic of drugs, the Colombian government ordered the aerial spraying of herbicides across wide portions of the Colombian territory, including the regions on the border with Ecuador. According to the Ecuadorian application¹⁴¹, the herbicides released in the atmosphere contained some substances that affected the health of the local communities and hit the ecology of the natural environment. In particular, the applicant referred to the use of glyphosate, a substance considered desirable for its low level of toxicity but as the latest scientific studies have proven, actually dangerous to human and animal health. Besides describing the effects on the environment that aerial herbicides released by Colombian aircrafts, the Ecuadorian application framed the background of the allegedly unlawful acts and described the environmental characteristics that feature the region bordering with Colombia in the North-East of the country. Spotted by the presence

¹⁴¹ *Aerial Herbicide Spraying (Ecuador v. Colombia)*, Application to the ICJ, 31 March 2008, available at: <http://www.icj-cij.org/docket/files/138/14470.pdf>.

of small communities and inhabited by indigenous people (i.e. the Awà people), the region is said to possess ‘unique characteristics’, (having by a coastal area on the West, the Andes in the centre and the Amazonian jungle on the East)¹⁴². This landscape variety is common in Ecuador, a country that, as recalled in the application to the ICJ:

‘is one of the 17 countries in the world designated by the World Conservation Monitoring Centre of the United Nations Environment Programme as “megadiverse”. Although it covers only 0.17 per cent of the Earth’s area, Ecuador possesses a disproportionately large share of the world’s biodiversity. In fact, Ecuador has the world’s highest biological diversity per area unit; i.e., on average, there are more species per square kilometer in Ecuador than anywhere else in the world’¹⁴³.

This case gives the ICJ the chance to elaborate on a number of issues of international law. The Court, however, could just reassert the customary obligation not to cause transboundary harm (the *sic utere tuo aliaenum non laedas* principle, commonly referred to as

¹⁴² *Ibidem*, par.24 at 16.

¹⁴³ *Ibid.*, para. 25 at 18. Besides Ecuador, the list of megadiverse countries includes the United States of America, Mexico, Colombia, Peru, Venezuela, Brazil, Democratic Republic of Congo, South Africa, Madagascar, India, Malaysia, Indonesia, Philippines, Papua New Guinea, China, and Australia. See R.A. Mittermeier, P.R. Gil, C.G. Mittermeier (eds.), *Megadiversity: Earth’s Biologically Wealthiest Nations*. Conservation International, Monterrey, 1997.

the ‘no harm’ rule) or, conversely, it could go beyond that by exploring other fields of international law, since the case at hand poses questions involving the rights of indigenous people and, more relevantly to the end of this research, on the *status* of biodiversity conservation under international law: does the protection of biodiversity amount to a mere interest of the international community or does it correspond to a precise obligation under international law rules? Furthermore, shall States pay particular attention and refrain from taking certain conducts not to cause harm to the environment of biodiversity-rich countries?

It is unlikely, though, that the ICJ will enter the merits posed by these or other questions if one considers the cautiousness previously shown at delivering the advisory opinion on the *Legality of the Threat or Use Nuclear Weapons*¹⁴⁴ or the judgment on the *Gabcikovo-Nagymaros* case¹⁴⁵ and, more recently, in the occasion of the *Pulp Mills* case.¹⁴⁶ The litigants in the latter case were Argentina and Uruguay, the latter being accused by the former of having breached the 1975 Statute on the utilization of the River

¹⁴⁴ See *above* note 109.

¹⁴⁵ See *above* note 110. As pointed out by the doctrine, in this case the ICJ refrained from affirming sustainable development as a principle of international law and it rather used it as a meta-principle, that is, as a ‘legal concept exercising a kind of «interstitial normativity», pushing and pulling the boundaries of true primary norms threatening to overlap and conflict with each other’. See A. Lowe, ‘Sustainable Development and Unsustainable Arguments’ in A. Boyle, P. Freestone, *International Law and Sustainable Development: Past Achievements and Future Challenges*, Oxford, 1999, at 31.

¹⁴⁶ *Pulp Mills (Argentina v. Uruguay)*, Judgment, 20 April 2010, *ICJ Reports* (2010), at 60.

Uruguay¹⁴⁷, a stream of water which superficially marks the natural boundary between the two States. Argentina has been successful on the procedural aspects of this dispute, which concerned the construction of two pulp mills on the River Uruguay (showing that Uruguay failed in utilizing the mechanisms for consultation and cooperation established under the 1975 Statute), but the Court found that there was insufficient evidence to support the Argentinean allegations on the substantial environmental harm caused by the construction and utilization of the pulp mills¹⁴⁸. For this reason the judgment received a lot of criticism and was seen as a missed opportunity, primarily by Judge Al-Khasawneh and Judge Simma, who expressed their disappointment in a joint separate opinion¹⁴⁹.

Other two environmental cases are currently pending at the ICJ, the case concerning *Certain Activities carried out by Nicaragua in the Border Area* (Costa Rica v. Nicaragua)¹⁵⁰, instituted in November 2010 and the *Whaling in the Antarctic* (Australia v.

¹⁴⁷ Statute of the River Uruguay, Salto (Uruguay), 26 Feb. 1975, in force 18 Sep. 1976, (1982) 1295 *United Nations Treaty Series*, at 340 ff.

¹⁴⁸ See *Pulp Mills (Argentina v. Uruguay)*, Judgment, paras. 190-219.

¹⁴⁹ See the Joint Dissenting Opinion of Judges Al-Khasawneh and Simma, at 9, (paragraph 26): '[...] respect for procedural obligations assumes considerable importance and comes to the forefront as being an essential indicator of whether, in a concrete case, substantive obligations were or were not breached'.

¹⁵⁰ *Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Application to the ICJ, of 10 Nov. 2010, available at: <http://www.icj-cij.org/docket/files/150/16279.pdf>.

Japan), instituted in June 2010¹⁵¹. In the former, the ICJ already released an order whereas in the latter, litigants are at the stage of filing initial pleadings. In both cases, the ICJ will have to consider questions involving the conservation of natural living resources and ecosystem management, together with the alleged violations of international agreements that are of relevance for the regulation of those matters.

More precisely, Costa Rica instituted proceedings in order to denounce some illegal military activities (e.g. the deployment of armed forces and the establishment of military camps) carried out by Nicaragua on the Costa Rican territory in breach of the of ‘the core founding principles’ of the UN (i.e. the respect of the territorial integrity of a State, on the one hand, and the prohibition of the threat and the use of force as sanctioned under article 2, paragraph 4, of the UN Charter, on the other hand). In addition, Costa Rica pointed to some dredging and canalization activities carried out by Nicaragua on the San Juan River which might also have caused damages to Costa Rican protected rainforests and wetlands, with particular intensity in the Colorado River basin, an area that is characterized by the presence of wetlands and other fragile ecosystems. Accordingly, Costa Rica has requested the Court to affirm that Nicaragua has, *inter alia*, breached certain obligations under the 1971 Ramsar Convention on Wetlands of

¹⁵¹ *Whaling in the Antarctic (Australia v. Japan)*, Application to the ICJ, of 1 June 2010, available at: <http://www.icj-cij.org/docket/files/148/15953.pdf>.

International Importance and Waterfowl Habitats¹⁵². The ICJ was also asked to determine the entity of the reparation that should be satisfied by Nicaragua for the effects of its conduct. In its request for the issuance of provisional measures, Costa Rica asked the Court to order:

‘(1) the immediate and unconditional withdrawal of all Nicaraguan troops from the unlawfully invaded and occupied Costa Rican territories; (2) the immediate cessation of the construction of a canal across Costa Rican territory; (3) the immediate cessation of the felling of trees, removal of vegetation and soil from Costa Rican territory, including its wetlands and forests(...); (6) that Nicaragua shall refrain from any other action which might prejudice the rights of Costa Rica, or which may aggravate or extend the dispute before the Court’¹⁵³.

Subsequently the Court issued an order that recognized the nature of the dispute as territorial and determined by the interference with Costa Rican sovereignty whose territory the alleged unlawful activities had taken place. It invited the Parties to refrain from sending there any civilian or military personnel until the Court would reach a judgment on the merits of the dispute or,

¹⁵² *Infra* § 1.5.1.

¹⁵³ See, Application to the ICJ (*above* note 150), at 3-4

alternatively, unless the Parties would agree on a equitable solution to the dispute on their own.¹⁵⁴

The Court order went on by reminding the Parties that the Ramsar Convention has put them under the obligation to consult each other for its implementation and to endeavor in coordinating their initiatives ‘especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties¹⁵⁵’. In the light of this, the ICJ considered that, since the disputed territory is located in the *Humedal Caribe Noreste* (a Costa Rican wetland of international importance under the Ramsar Convention) and since until the delivery of the judgment on the merits Costa Rica must avoid that ‘irreparable prejudice’ is committed to the portion of the *humedal* that falls under its jurisdiction without doubts¹⁵⁶, the Court invited

¹⁵⁴ IJC Order of 8 March 2011, at 19 (paragraph 77).

¹⁵⁵ Article 5 of the Ramsar Convention (*infra* § 1.5.1.) regulates the inter-State cooperation required for the management of transnational wetlands and, in particular, mandates that: ‘the Contracting Parties shall consult with each other about implementing obligations arising from this Convention especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties’. In relation to inter-State disputes on the transboundary management of wetlands, it was observed that: “the presence of an informal committee in which all relevant stakeholders are represented has been crucial in the decision making process with regard to the management of the Ramsar sites”, see J. Verschuuren, ‘The Case of Transboundary Wetlands Under the Ramsar Convention: Keep the Lawyers Out!’, in (2009) 19 *Colorado Journal of International Environmental Law & Policy*, at 127.

¹⁵⁶ To this end, paragraph 80 of the order also affirms that Costa Rica ‘must be able to dispatch civilian personnel charged with the protection of the

Costa Rica to consult the Ramsar Secretariat on the actions to be taken, as well as Nicaragua (giving it prior notice on the actions to be taken) in the pursuit of a 'common solution'. The approach here adopted by the ICJ is clear in two respects.

Firstly, by requiring the Parties not to undertake actions that may aggravate the dispute, which is inherently territorial, the Court aimed at crystallizing the situation to a certain stage, thus avoiding the appearance of further elements that may complicate its decision on territorial sovereignty over the area interested by Nicaraguan activities. Secondly, the order to consult the Ramsar Secretariat and to endeavor in cooperating with Nicaragua so as to solve the issue reasserted the validity of the obligation established under article 5 of the Ramsar Convention. As regards nature conservation, this approach suggests that on the merits the ICJ may reaffirm that States shall comply, in good faith, with the international obligations they decide to accept through the ratification of conservation treaties¹⁵⁷, like the Ramsar Convention in the case at hand. In all likelihood, however, even if in this case the existence of a protected area will be one of the main factors guiding the reasoning of the judges, they could refrain from affirming the existence of a general

environment to the said territory (...) but only in so far as it is necessary to ensure that no such prejudice be caused'.

¹⁵⁷ See Convention on the Law of the Treaties, Vienna (Austria), of 23 May 1969; in force (1969) *UNTS*, vol. 1155, at 331 (article 26). Amongst many, see M. E. Villinger, *Commentary on the 1969 Vienna Convention on the Law of Treaties*, The Hague, 2009.

duty to preserve the ecosystems. Indeed, the Court had already dismissed the ‘interest of the ecosystem’, for instance, when it had been requested to decide on disputes of boundary limitation such as the *Gulf of Maine*¹⁵⁸ and the *Kasili/Sedudu Island*¹⁵⁹ cases. In the latter case, it must however be noticed that, judge Weramaantry, who elsewhere emphasized the importance of environmental conservation as the fundamental premise for sustainable development, suggested that:

‘if there is a natural reserve which, in the interest of the ecosystem and of biological diversity cannot be divided without lasting damage, this is a factor that the Court can no less ignore than a sacred site or archaeological preserve which must be maintained in its integrity if it is to be preserved. There is more than one way in which equitable considerations can be given effect in such situation. One is that the Court should consider itself empowered to make a slight deviation from the strict geometric path in the boundary treaty, (...). Another is to constitute, in the larger interest of both parties and indeed in the world community, a

¹⁵⁸ *Delimitation of the Maritime Boundaries in the Gulf of Main Area (United States v. Canada)*, Judgment of 12 Oct. 1984, *ICJ Reports* (1984), at 345.

¹⁵⁹ *KasikililSedudu Island (Botswana v. Namibia)*, Judgement of 13 Dec. 1999, in, *ICJ Report* (1999), at 1045.

joint regime over the area so that neither party is deprived of its use'¹⁶⁰.

In the *Whaling in the Antarctic* case, Australia condemned Japan's continuative implementation of its Whale Research Programme under Special Permit in the Antarctic, also referred to as JARPA II, and asked the ICJ to issue provisional measures for the ceasing of such programme.¹⁶¹ In its application to the ICJ, Australia claimed that by implementing this unilateral whaling programme, the Japanese conduct was in breach of three MEAs, namely, the 1946 International Convention for the Regulation of Whaling (ICRW)¹⁶², the 1992 CBD¹⁶³ and the 1973 Convention on the International Trade of Endangered Species of Wild Fauna and Flora (CITES)¹⁶⁴.

¹⁶⁰ *Ibidem*, Dissenting Separate Opinion of Vice-President Weeramantry, at 1184 (paras. 91-92).

¹⁶¹ See Application to the ICJ, Press Release N. 2010/16 of 1 June 2010. For a commentary, see T. Anton, 'Dispute Concerning Japan's JARPA II Program of "Scientific Whaling" (Australia v. Japan)', (2010) 2 *ASIL Insight*. Available at: <http://www.asil.org/insights100708.cfm>.

¹⁶² International Convention for the Regulation of Whaling, Washington (United States), of 2 Dec. 1946, in force 4 Mar. 1953, in (1953) *UNTS* Vol.161, at 172. For a comment on its provisions, *ex multis*, see D. Vice, *cit.*, at 596 ff. In the dispute at hand, Australia pointed in particular to the alleged breaches of the following obligations: par. 10 (e) of the Schedule to the ICRW to observe in good faith the zero catch limit in relation to the killing of whales for commercial purposes; and par.7 (b) requiring Parties to act in good faith refraining from undertaking commercial whaling of humpback and fin whales in the Southern Ocean Sanctuary.

¹⁶³ See *infra* § Chapter 2.

¹⁶⁴ See *infra* § 1.5.4.

In relation to these three very recent ICJ cases, none of which has reached a judicial solution yet, it is interesting to underline the positive role that the Court may exercise in two respects. Firstly, the ICJ may strengthen the legal force of existing multilateral environmental regimes on nature conservation by reaffirming or specifying the content of their procedural rules, thus confirming their legal force and the impact that they have on the relations between States with regards to biodiversity conservation and management, as the order released in the *Certain Activities carried out by Nicaragua in the Border Area* seems to suggest. Secondly, with reference to the *Aerial Herbicides* case, giving that it involves a textbook example of transboundary harm, the ICJ may contribute in a definitive way to the codification of the ‘no harm’ rule as a customary rule of international law conjugating it with biodiversity conservation, given Ecuador specificities. This would confer also customary *status* to the obligation enshrined in article 3 of the CBD that, as it will be seen later, concerns the duty to refrain from causing transnational environmental harm¹⁶⁵.

¹⁶⁵ The provision under article 3 of the CBD is widely commented afterwards. Mostly, *infra* § 2.1.

1.6.4. Alternative approaches to the adjudication of international disputes on the conservation of biodiversity

Most of the cases described above proved to be a very complex exercise for international tribunals. In some occasion they delivered judgments or decisions that were not deemed satisfactory or stopped well before finding a solution to the depletion of living natural resources due to the fact that international tribunals were not able to go further than inviting the litigants to cooperate with each other and to respect their own sovereign rights and interests. The approach often adopted by international courts is exemplified by the ‘monadic’¹⁶⁶ stance taken by the ICJ in the *Pulp Mills* case, concerning the management of the River Uruguay where, despite having recognized the existence of a ‘functional link’ between procedural and substantial obligations¹⁶⁷, the Court was ultimately unable to ascertain ‘the inextricability of substance and procedure’¹⁶⁸, thus rejecting any of the alleged breaches of the substantial obligations on the prevention of pollution and conservation of living natural resources by Uruguay, as claimed by Argentina.

¹⁶⁶See A. Langshaw, ‘Giving Substance to Form: Moving towards Integrated Governance Model of Transboundary Environmental Impact Assessment’, in (2012) 81 *Nordic Journal of International Law*, at 37.

¹⁶⁷ See *Pulp Mills* case, (*above* note 146), para.77.

¹⁶⁸ See. A. Langshaw (*above* note 166), cit., at 37.

With reference to the outcome of the international disputes outlined above¹⁶⁹, we aim here at identifying possible new strategies that might help tribunals in addressing environmental problems when required to do so and that might also be useful to States whenever involved in environmental disputes in the future¹⁷⁰. First of all, with a view of giving a more concrete dimension to the functional link between procedural and substantial obligations on the protection of the environment and on the conservation of natural (living) resources, when formulating their reasoning international judges should try to take into consideration the most relevant policy guidelines authoritatively provided by international organizations that are competent on environmental matters, in particular, in the case of the ICJ, those elaborated by the United Nations Environment Programme (UNEP) as well as the resolutions and recommendations adopted by the General Assembly, whenever their contribution reflects international custom (and whenever decisions on certain environmental matters are adopted by *consensus*)¹⁷¹. This would be significant as it would

¹⁶⁹ *Infra* § 1.6.3.

¹⁷⁰ For other proposals, see, e.g. D.T. Avgerinopoulou, 'The Role of International Judiciary in the Settlement of Environmental Disputes and Alternative Proposals for Strengthening International Environmental Adjudication'. Conference paper presented at Global Environmental Governance: the Post-Johannesburg Agenda, Yale Centre for Environmental Law and Policy, New Haven, 23-25 Oct. 2003. (<http://www.yale.edu/gegdialogue/docs/dialogue/oct03/papers/Avgerinopoulou.pdf>).

¹⁷¹ See. ICJ *Statute*, article 38, paragraph 1, letter b: 'The Court, whose function is to decide in accordance with international law such disputes as are submitted

demonstrate that the Court, which should aim at creating synergies with the other UN bodies, can operate in such a manner that is not irrespective of the legal and policy developments taking place within the UN system and, as a consequence, it would improve the legitimacy of the specialized bodies. The ‘Draft Principles of Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonious Utilization of Natural Resources Shared by two or more States’ were adopted by the UNEP Governing Council in 1978 are an example in this respect¹⁷². The content of such document which was elaborated to assist States in achieving a ‘harmonious exploitation’ of shared natural resources, as plainly stated back then, did ‘not reflect already existing rules of general international law’¹⁷³. However, in the light of the latest development in IEL (and since the Draft Principles were adopted by *consensus*), the document could be employed in assessing how States implement their obligations concerning specific situations, including those where hazardous but lawful activities are likely to pose a threat to biodiversity. In a similar vein, the ICJ could also assess biodiversity loss cases in the light of the codification work undertaken by the Commission of International Law with specific regard to State responsibility for

to it, shall apply: international custom, as evidence of a general practice accepted as law’.

¹⁷² UNEP Governing Council GC.6/CRP.2, of 19 May 1978, in (1978) *International Legal Materials*, at 1094.

¹⁷³ *Ibidem*, at 1098.

unlawful acts and to the prevention of transboundary harm, given that the customary nature of the due diligence principle has been widely recognized¹⁷⁴.

Furthermore, we are of the view that the most appreciable outcome of a more structured reliance on the legal and policy developments fostered in the framework of international organizations as well as the reliance on the data collected by scientific and technical bodies instituted on the basis of universal and regional arrangements (when permitted by the circumstances of the disputes) could help in deciding on the substantial aspects of transnational environmental disputes and would have a positive effect on the way international tribunals and their work are perceived both by scholars and by the world public opinion. The magnitude of the questions posed by transnational environmental problems, such as those related to the overexploitation of fisheries and biodiversity loss, can no longer be overlooked and international tribunals should, to the greater extent possible, interiorize the views expressed by competent organizations rather than applying a strict legal methodology focused on the allocation of States rights. The

¹⁷⁴ Commission of International Law, (2001) ‘Responsibility of States for Internationally Wrongful Acts’, in (2001) *Yearbook ILC*, 2001, Vol. II (Part Two), at 32-143.

Commission of International Law, (2001) ‘Prevention of Transboundary Harm from Hazardous Activities’ (available at <http://untreaty.un.org/ilc/texts/>). As both instruments conjugate the duty of due diligence without applying it to specific circumstances, they could serve international judges as benchmark for assessing State behaviour allegedly breaching procedural treaty obligations.

pressing nature of such environmental problems should allow courts to adopt highly precautionary approaches¹⁷⁵. In other words, we argue that, bilateral disputes with an element of environmental transboundary harm should, to the greatest possible extent, be settled paying due consideration to the global or regional dimension of the kind of environmental problems that they contextually have contributed to exacerbate.

In the second place, always with the objective of alleviating the drawbacks of international environmental litigation, we suggest that international tribunals should incentivize the indirect participation of international organizations, MEAs technical bodies, secretariats and environmental NGOs that might possess extra information on the specific disputes that they have to settle. For instance, the ICJ could rely more on article 34, paragraph 2 of its Statute which establishes that

‘the Court, subject to and in conformity with its Rules, may request of public international organizations information relevant to cases before it, and shall receive

¹⁷⁵ According to FAO, 52% of the 600 marine fish stocks monitored by the organization are fully exploited, 17% are overexploited, 7% are depleted and, most significantly, only 1% is recovering from depletion (meaning that catches are again increasing after having been depleted). On the CITES/FAO relationship, see M. Young, ‘Protecting Endangered Marine Species: Collaboration between the Food and Agriculture Organization and the CITES Regime’, in (2010)11 *Melbourne Journal of International Law*, at 441 ff. Data source: <http://www.fao.org/newsroom/common/ecg/1000505/en/stocks.pdf>.

such information presented by such organizations on their own initiative’.

This provision could also prove useful in order to solve transnational environmental disputes and could help in serving the interests of civil society groups unable to participate in international litigation but anyhow the first to experience the negative substantial effects of transnational environmental disputes (as for the farmers in the State of Washington that watched the damage suffered by their crops for the fumes coming from Canada in the late nineteenth century and today for the indigenous and local communities of North-eastern Ecuador in relation to the effects of herbicide spraying above their lands)¹⁷⁶.

Another possible strategy that might help international tribunals to better fulfill their role would consist in giving effects to all the mechanisms available under their Statutes and Rules of procedure. The revitalization of the Environmental Chamber of the ICJ is one example of the direction that should be taken in this regard: instituted in 1993 in accordance with article 26, paragraph 1 of the ICJ Statute and composed by seven judges, it has never heard a case and was subsequently not renewed¹⁷⁷. Its disappearance may

¹⁷⁶ See *above* note 112, referring to the Trail Smelter arbitral award and the *sic utere tuo ut alienum non laedas* principle.

¹⁷⁷ See ICJ Press Release 2006/6 of 16 February 2006 (The Judges of the International Court of Justice elect the members of the Chamber of Summary

be due to the difficulty faced by litigant States in agreeing on the purely environmental character of a dispute. This, however, could be overcome by appointing, as judges, legal professionals with recognized competence in the field of environmental law and relieving from hearing other cases. Assuming that an International Environmental Organization (IEO) to counterbalance the WTO will not be created in the foreseeable future, thus presuming that the interests to enhance free international trade will prevail within the international community at least at institutional level, this solution would stand halfway between nothing and the creation of World Court for the Environment, a project that was debated on and whose desirability was however questioned¹⁷⁸.

In any case, a more reasonable solution seems to be the one indicated by Judges Simma and Al-Khasawneh in their joint dissenting opinion in relation to the *Pulp Mills* judgment. Precisely, they have argued that ‘traditional methods of evaluating evidence are deficient in assessing the relevance of (...) complex, technical and scientific facts’¹⁷⁹ like those that are often inherent to international disputes on environmental matters. For this reason,

Procedure and of various Committees of the Court), in which no mention is made of the Environmental Chamber.

¹⁷⁸ See, e.g., F. Biermann, ‘The Case for a World Environment Organization’, in (2000) *Environment* 42(9), at 22-31; A. Postiglione, ‘An International Court for the Environment?’, in (1993) 23 *Journal of Environmental Policy and Law*, at 73.

¹⁷⁹ See the joint dissenting opinion of Judges Al-Khasawneh and Simma, para. 3, at 2. In this respect, also S. Rosenne, *The Law and Practice of the International Court of Justice 1920-2005*, Leiden, 2006, at 239-242.

they have urged the Court to avail itself of the expertise of independent professionals capable of interpreting complex scientific and technical evidence, as provided for by article 50 of the ICJ Statute, hence departing from the stringent application of traditional legal techniques when circumstances so require¹⁸⁰. Finally, one last path to be pursued by litigant States that decide to institute proceeding in front of an *ad hoc* arbitral tribunal under the PCA may be to rely on the ‘Optional Rules for Disputes Relating to Natural Resources and/or the Environment’ whenever disputes with a pre-eminent transnational environmental character arise¹⁸¹. These rules, in fact, were developed to ‘reflect the particular characteristics of disputes having a natural resources, conservation, or environmental protection ‘component’ and provide the possibility ‘multiparty involvement’ in the solution of such disputes¹⁸².

¹⁸⁰ *Ibidem* (Joint Dissenting Opinion), at 3 (paragraph 8). ICJ Statute, under article 50, establishes that: ‘The Court may, at any time, entrust any individual, body, bureau, commission, or other organization that it may select, with the task of carrying out an enquiry or giving an expert opinion’.

¹⁸¹ See Permanent Court of Arbitration, ‘Optional Rules for Disputes Relating to Natural Resources and/or the Environment’, (available at: [http://www.pca-cpa.org/upload/files/ENVIRONMENTAL\(3\).pdf](http://www.pca-cpa.org/upload/files/ENVIRONMENTAL(3).pdf)).

¹⁸² *Ibidem*, at 183-184. These Rules specifically laid down a procedure on the multiparty appointment of arbitrators.

1.6.5. The absence of any judicial application of international norms on the conservation of biodiversity

Is it possible to derive the existence of a general obligation to protect or to preserve biodiversity from the case law examined above? The answer seems to be negative. Although international tribunals have certified the existence of a general interest in the protection of the global environment, with reference to natural resources that are found within or beyond juridical boundaries, they have never delivered judgments or awards acknowledging the existence of a general obligation to protect biodiversity and to preserve ecosystems as a common concern of the community of States.

The lack of jurisprudence in this sense is probably due to two major considerations. First, within State jurisdiction, decisions on the conservation and exploitation of biodiversity for the fulfillment of developmental and socio-economic needs (primarily to satisfy the pressure posed by internal patterns of consumption) are mainly referable as the independent exercise of State sovereignty, as in relation to the conservation and exploitation of the non-living natural resources. Secondly, in relation the global commons and areas beyond national jurisdiction, in spite of the recent multiplication of initiatives that, on variable scales, can be viewed

as material forms of cooperation aimed at preserving the natural resources found therein and at avoiding overexploitation as well as the emergence of exclusive positions that could be detrimental to each State inalienable right to access to and use natural resources, international cooperation has not reached appreciable proportions yet.

The difficulties proved by international courts are then exacerbated by the fact international norms on biodiversity conservation are rather vague. Similarly MEAs containing incidental provisions on biodiversity conservation and sustainable use, as well as those specifically devoted to wildlife protection, do privilege non traditional approaches for compliance based on the pressure exercised by the community of the Contracting Parties toward a non-complying State, rather than judicial mechanisms to settle disputes that may arise in case of non-compliance¹⁸³.

All this finally leads us to retain that international adjudication might not be the most effective means to guarantee the adoptions of outcomes ensuring that environmental protection is achieved on the substantial level. International tribunals, however, might find corrective means to improve their abilities in ruling upon disputes with an element of transnational environmental harm as well as their understanding of the global dimension of certain environmental problems that are pressing and featured by

¹⁸³ See P. Sands, *Transnational Environmental Law. Lesson in Global Change*, London, 1999, at 43-54; A. Boyle, P. Birnie, cit., at 345.

dimensions that can no longer be disregarded. International tribunals should be part of a process that aims at defining a ‘post-Westphalian conception of governance’, at least in the field of the environment.¹⁸⁴ In doing so, maintaining unaltered their ability to perform judicial functions, international tribunals should find legal solutions capable of effectively reconciling the objective of substantial protection of the global environment (an *unicum* that is irrespective of political boundaries) with the prerogatives of sovereignty in relation to those global environmental problems (e.g. biodiversity loss, depletion of fisheries and global warming) that are currently been tackled by States in a cooperative form¹⁸⁵.

¹⁸⁴ See C. Sampford, *Environmental Governance for Biodiversity*, in (2002) 5 *Environmental Science & Policy*, at 79.

¹⁸⁵ See generally F.X. Perrez, *Cooperative Sovereignty: From Independence to Interdependence in the Structure of International Environmental Law*, The Hague, 2000.

CHAPTER 2

The United Nations Convention on biological diversity and the implementation of the goal of biodiversity conservation

2.1. The UN Convention on biological diversity: defining the scope of the CBD, its general objectives and principles

The United Nations Convention on Biodiversity was adopted in Nairobi (Kenya) on 22 May 1992 and opened for signature at the UNCED. The CBD is the key agreement whose implementation is addressed in relation both to the international law instruments that have been described in the preceding Chapter (i.e. biodiversity-related MEAs) and the EU legislation on nature conservation, which will be analysed in Chapter 3¹⁸⁶. The

¹⁸⁶ On the CBD, see *above* note 1. IEL literature is ever-growing and rich of distinguished doctrinal contributions on the Convention. Amongst many, R. Adams, 'Missing the 2010 Biodiversity Target: a Wake-Up Call for the Convention on Biodiversity?', in (2010)21, *Colorado Journal of International Environmental Law and Policy*, at 123 ff, A. Boyle, 'The Convention on Biological Diversity', in P. Campiglio et al. (eds.) *The Environment After Rio* (The Hague, 1996),

text of the CBD seeks to overcome the tension between the principle of territorial sovereignty on essential biological resources, on one hand, and the generalized interest for their conservation on the other, by balancing environmental protection with economic development¹⁸⁷. It also provides a flexible and modern framework in which developed and developing countries concerns and capabilities can be equally accommodated¹⁸⁸. Nowadays,

at 111 ff; F. Burnhenne-Guilmin, S. Casey-Lefkowitz, 'The Convention on Biological Diversity: A Hard Won Global Achievement', in (1992) 3 *Yearbook of International Environmental Law*, at 43-59; S. Bradgon, 'National Sovereignty and Global Environmental Responsibility: Can the Tension Be Reconciled for the Conservation of Biological Diversity?', in (1992) 33(2) *Harvard International Law Journal*, at 381 ff; M. Chandler, 'The Convention on Biological Diversity: Selected Issues of Interest to the International Lawyer', in (1993) *Colorado Journal of International Environmental Law and Policy*, at 141 ff; L.A. Kimbal, 'The Convention on Biodiversity: How to Make it Work?' in (1995) 28 *Vanderbilt Journal of International Law*, at 736 ff; A. Yusuf, 'International Law and Sustainable Development: The Convention on Biological Diversity' in *African Yearbook of International Law*, at 109-137.

¹⁸⁷ See M. Gestri, cit., 54. according to whom, the CBD shall be considered as an accomplished example of how the sustainable development principle can be elaborated at conventional level. In a similar vein, S. Johnston, 'The Convention on Biological Diversity: The Next Phase', in (1997) 6 *Review of Environmental Community & International Environmental Law*, at 219, where the CBD is viewed as a departure from previous biodiversity-related MEAs giving a 'blanket preference' to conservation rather than conservation and sustainable use of natural resources. In our understanding, however, this might not be the case of the Ramsar Convention and its prevision of 'wise utilization' of wetlands.

¹⁸⁸ See D. McGraw, 'The CBD: Key Characteristics and Implications for Development', in (2002) 11 *Review of European Community & International Environmental Law*, at 17.

the CBD is the most widely ratified MEA, counting on the participation of 193 Contracting Parties¹⁸⁹, and its objectives enshrined in its article 1 are the conservation of global biodiversity and the sustainable utilization of its elements, as well as the fair and equitable sharing of the benefits arising out of the utilization of genetic resources¹⁹⁰.

¹⁸⁹ For the status of ratification/acceptance of the CBD, consult <http://www.cbd.int/convention/parties/list/>. The only relevant exception that we can presently record is given by the missed ratification of the US (one of the 17 ‘mega-diverse’ countries). From the *travaux préparatoires* it emerges that the US mostly opposed three provisions of the draft CBD, namely art. 15 (on ‘access to biological resources’), art. 16 (on ‘technology transfer’), and art. 19 (‘on handling of biotechnology and benefit sharing’). On the point, see V.M. Marroquín-Merino, ‘Wildlife Utilization: A New International Mechanism for the Protection of Biological Diversity’, in (1995) *Law and Policy in International Business*, at 325. However, it must be recalled, US representatives take part in COP activities as observers and the US follows certain legal and policy developments that are deemed of domestic significance. For instance, the US have included provisions that are supportive to CBD implementation in a number of bilateral free trade agreements (BFTAs). E.g. see art. 18.11, of the US-Peru Trade Promotion Agreement (available at www.ustr.gov/trade-agreements), affirming, *inter alia*, that ‘The Parties recognize the importance of the conservation and sustainable use of biological diversity and their role in achieving sustainable development’ (paragraph 1) and ‘accordingly, the Parties remain committed to promoting and encouraging the conservation and sustainable use of biological diversity and all its components and levels, including plants, animals, and habitat’ (paragraph 2). Text of the BFTA available at <http://www.ustr.gov> (Office of the US Trade Representative, website).

¹⁹⁰ Even though the CBD is not a conservation convention *strictu sensu* (see A. Boyle (1994), *cit.*, at 115 and A. Yusuf, *cit.*, at 113), our attention will be primarily focused on the provisions of the CBD that focus on conservation-related issues.

As anticipated in the previous Chapter the object of legal protection under the CBD is constituted by biodiversity as such, that is defined by article 2 as:

the variability among living organisms from all sources, including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

From this definition it emerges how the CBD aims at offering protection to all forms of diversity in life and, consequently, how it can influence the management of natural resources¹⁹¹.

The legal *status* to be assigned to biological resources was debated during the negotiations and, while the concept of ‘common heritage of humankind’ was initially considered, it was eventually dismissed for its implications in terms of ‘common ownership’ of resources that are mainly found within jurisdictional boundaries. For this reason, it was eventually substituted by the concept of

¹⁹¹ It is commonly held, however, that the scope of the CBD does not include the protection of human life as such.

‘common concern of mankind’¹⁹². The solution crystallized in the CBD, however, is peculiar as it is not exclusively limited to the affirmation of the ‘common concern’ concept (preamble, third indent) as it also reaffirms the sovereign right of every State to exploit its natural resources (preamble, various indents and article 3)¹⁹³. Indeed, article 3 of the CBD restates the sovereign right of each State to exploit its domestic natural resources, combining it with the duty non to cause transboundary harm. The provision establishes what follows:

‘States have, in accordance with the UN Charter and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and policy, and the responsibility to ensure that activities within their jurisdiction or control do not cause

¹⁹² See *above* note 115. By relying upon the concept of ‘common concern’ of humankind in relation to biodiversity (as to any other environmental matter to which this concept may be applied) States have accepted that, on a spatial perspective, the cooperation of all nations is required as to preserve biodiversity and, on a temporal perspective, that both the present and the long term consequences of harm to biodiversity must be addressed as to ensure that the rights of both present and future generations are maintained.

¹⁹³ Two apparently diverging principles of international law coexist within the same convention and here it lays the peculiarity of the CBD.

damage to the environment of other States or of areas beyond the limits of national jurisdiction’.

In this fashion, CBD article 3 thus reaffirms the validity of two of the most important principles of IEL: on one hand, State sovereignty over natural resources, on the other, State duty not to cause transboundary environmental harm. By incorporating the whole text of Principle 21 of the Stockholm Declaration into the CBD, States that participated in the negotiations significantly chose for the first time to give a binding legal character to this principle of IEL¹⁹⁴.

In any event, however, the contribution of the CBD in the fight against biodiversity loss is primarily ‘to remedy

¹⁹⁴ This is true even though some Contracting Parties signed the text of the CBD adding interpretative declaration to art. 3. France, for instance, declared that ‘with reference to art. 3, it interprets that article as a guiding principle to be taken into account in the implementation of the Convention’. Similarly, the United Kingdom affirmed that ‘their understanding that article 3 of the Convention sets out a guiding principle to be taken into account in the implementation of the Convention’. The insertion of this principle into the CBD (with the 1972 Stockholm formula) confirms the existing relationship between customary law and MEAs as well as the ambiguity/generalality of the concept of transnational environmental harm. On this point, see F. Munari, L. Schiano Di Pepe, cit., at 41. For a study on this relationship, see also C. Carr, G. Scott, ‘Multilateral Treaties and the Environment: A Case Study in the Formation of Customary International Law’, in 1999 (27) *Denver Journal of International Law & Policy*, at 313-335. The authors believe the CBD is an “important step in the establishment of customary law on the matter of biological diversity”, cit. at 325.

the legal and institutional weaknesses that contribute to such loss' and such contribution extends well beyond the aforementioned principles.

In fact, on the substantial level, it is aimed at addressing a phenomenon which has been accelerating at unprecedented rates in the past few decades because of the enhancement of human activities (such as land-use and deforestation) and whose underlying causes, however, lie:

‘in the burgeoning human numbers, the way in which the human species has progressively broadened its ecological niche and appropriated ever more of the earth’s biological productivity, the excessive and unsustainable consumption of natural resources, a continuing reduction in the number of traded product from agriculture and fisheries, economic systems that fail to set a proper value on the environment and inappropriate social structures, and weaknesses in legal and institutional systems’¹⁹⁵

Hence, the general goal of the CBD is to halt biodiversity loss. The main difference that exists between the CBD and the biodiversity-related MEAs described in

¹⁹⁵ See World Resources Institute, World Conservation Union, UNEP, *Global Biodiversity Strategy*, 1992, at 12.

Chapter 1 in pursuing such a goal is that while the implementation of the latter is evidently limited to the adoption of lists of protected habitats, species and sites, mainly corresponding to the creation of protected areas at domestic level (or the regulation of international trade in the case of CITES), the implementation of CBD can be realized to a plurality of measures. The CBD, in fact, contemplates the adoption of different measures that, in comprehensive manner, focus on the demand ‘to meet people’s need for biological resources while ensuring their sustainable use’¹⁹⁶. The articles on *in situ* and *ex situ* conservation of biodiversity as well as those on the management of alien species (that will be referred to below in this Chapter), confirm the CBD as a MEA whose implementation can be realized by virtue of a plurality of solutions.

On this background, CBD article 4 sets the jurisdictional scope of the Convention affirming that it applies upon each Contracting Party, in relation to the components of biodiversity located within the limits of its national jurisdiction, as well as to the processes and the activities (regardless of where their effects occur), that are

¹⁹⁶ See A. Yusuf, *cit.*, at 173.

carried out under its jurisdiction or control (i.e. also beyond the limits of national jurisdiction)¹⁹⁷.

Article 22, paragraph 1, is also relevant to the scope of the CBD because it establishes the nature of the relationship between the CBD with other agreements. It mandates, in fact, that the application of the CBD shall not affect the rights and obligations of its Contracting parties stemming from any other existing international agreement. The norm specifies, however, that this shall not be the case when the exercise of rights and obligations set under other agreements ‘would cause serious damage or a threat to biological diversity’. The difficulty here lies in determining what can be considered a damage or threat to biodiversity. Environmental NGOs, governments of developing States and civil society groups at varying latitudes may, for instance, consider the patenting of life forms allowed under the TRIPs agreement as a threat to biological diversity (and consequently retain such practice contrary to the provisions of the CBD), while industrialized countries and biotechnology MNEs may

¹⁹⁷ CBD COPs never referred to the content of the obligation under art. 4. Nevertheless it was reaffirmed that the CBD does not apply to human genetic resources. See CBD COP Decision II/11, on ‘Access to genetic resources’ where the Contracting Parties reaffirmed that ‘human genetic resources are not included within the framework of the Convention’ (paragraph 2).

consider such practice as a potential source of profit and development.

Things are instead different and much more straightforward as for the relationship between the CBD and the UNCLOS, since article 22, paragraph 2 of the former call its Contracting parties to respect the marine environment –evidently comprising also marine biodiversity – having regard to the rights and obligations consolidated under the law of the sea¹⁹⁸.

2.2. The UN Convention on biological diversity: main features of its system of governance

The CBD can be viewed as an ‘umbrella agreement’ as its purposes can be served by States through the reliance on agreements with a narrower scope such as those on wildlife conservation seen in the previous chapter. This relationship has been formalized also by the conclusion of various *memoranda* of understanding between the CBD Secretariat and its counterparts under other conventions.

¹⁹⁸ The wording of the CBD refers to the Law of the Sea, intended as the branch of international customary law norms related to the sea; when the CBD was negotiated, in fact, the UNCLOS (*above* note 42) had not come into force yet. See remarks of Yusuf, *cit.*, at 116.

The institutionalization of such linkages is said to have greatly improved State cooperation in the field of biodiversity protection and sustainable use, mostly because the cooperation amongst conventional bodies is unfolded at technical level. On the other hand, however, this has just partially succeeded in eliminating the problem of the ‘fragmentation’ of international instruments on biodiversity management.

Before turning to these governance-related issues, it is fundamental to see how the CBD is structured, starting from those articles establishing the organs through which the Convention operates.

2.2.1. The Conference of the Parties

CBD article 23 concerns the Conference of the Parties (COP). This is the main organ around which the entire system of governance is structured and is mainly entrusted to review the implementation of the Convention¹⁹⁹.

¹⁹⁹ So far eleven COPs have been convened. The two latest meetings (COP 10 and COP 11) have been held, respectively, in Nagoya (Japan) in Oct. 2010 and in Hyderabad (India) in Oct. 2012. This research has considered COP practice related to biodiversity conservation developed until COP10 (included).

The norm at hand required UNEP Executive Director to convene the first COP within one year from the entry into force of the Convention and established that COPs were to be convened at regular intervals, on the basis of a decision in this regard that had to be taken by the Contracting Parties during their first meeting. Extraordinary meetings, under the CBD, are also contemplated as the text establishes the conditions for their convening (article 23, paragraph 2). An extraordinary meeting, for instance, gathered when the Contracting Parties decided to proceed with the adoption of the Cartagena Protocol on bio-safety²⁰⁰. In such cases, there may be an initiative of the Conference itself or, alternatively, a request from any Contracting party which, within six months from its communication by the Secretariat, must be supported by at least one third of the Parties in order to be accepted.

The *modus operandi* of the COP is *consensus*-based (paragraph 3). Indeed, decision on its rules of procedures, financial and budgetary matters and any subsidiary body are to be taken by *consensus*²⁰¹. As to its core

²⁰⁰ See CBD EX-COP1, Decision EM-I/3 on the ‘Adoption of the Cartagena Protocol and *interim* arrangements’ of 29 Jan. 2000.

²⁰¹ *Consensus* is the general rule for COP decision-making although in some cases a two-third majority vote is admitted in substitution (this cases are regulated under CBD articles 29 and 30 on, respectively, the ‘Amendments to the Convention or Protocol’ and the ‘Adoption and amendment of Annexes’).

responsibilities, the COP is entrusted to carry out a series of activities that are fundamental for the functioning of the whole Convention (paragraph 4); amongst these, the COP must establish the modalities for the transmission of national reports on the implementation of the Convention by Contracting Parties under article 26, consider the information provided by these reports as well as those submitted by subsidiary bodies that are or may be created and entrusted with providing scientific, technical and technological advice on biological diversity. The COP can also adopt or recommend, either by *consensus* or, when consensus fails, by a two-third majority vote, the adoption of protocols, amendments and annexes to the CBD according to articles 28, 29 and 30 and ultimately ‘undertake any additional action that may be required for the achievement of the purposes of the Convention in the light of experience gained in its operation’.

The task carried out by the COP are no matter of secrecy and, as in the case of most MEAs, non contracting Parties and governmental agencies and environmental NGOs may attend COP meetings under an observer *status* unless one third of the Parties objects to their participation (paragraph 5).

2.2.2. *The Secretariat*

According to article 24, paragraph 1, the functions of the Secretariat are to organize and service COPs (a), perform the functions that it may receive by any protocol (b), prepare a report on the execution of its functions under the CBD to be presented at the COP, coordinate with other international bodies with which to enter administrative or contractual arrangements that may facilitate its functioning (d). Paragraph 2 requires the COP to choose the Secretariat ‘from amongst existing competent international organizations’. Once the COP has come to a choice, the selected person is formally appointed by the UNEP²⁰².

2.2.3. *The Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA)*

²⁰² See CBD COP, Decision I/4 on ‘Rules of procedures for the Conference of the Parties’, at para. 1. Beside this, COP 1 also requested the Executive Secretary to coordinate with other international organizations willing to enter into collaborative relationships (see CBD COP, Decision I/5 on ‘Support to the Secretariat by international organizations’, at paras. 1 and 2). COP 2 accepted the offer of the Government of Canada to base the Secretariat in the city of Montreal (CBD COP Decision II/19, para. 2).

CBD article 25 regulates the activities of the Subsidiary Body on Scientific, Technical and Technological Advice (hereinafter SBSTTA). The core duty of the SBTTA consists in providing the COP and its subsidiary bodies with ‘timely’ scientific, technical and technological advice ‘relating to the implementation of the Convention’. More specifically, the SBSTTA main task is to provide scientific and technical assessment to the status of biodiversity, prepare scientific and technical assessment of the effects of types of measures taken in accordance to CBD provisions, identify innovative, efficient and cutting-edge know-how and technologies related to the conservation and sustainable use of biodiversity as well as the means of promoting the development and transfer of such technologies and, finally, provide advice on scientific programmes and R&D international cooperation in the field of biodiversity (paragraph 2)²⁰³.

2.2.4. Overview on additional subsidiary bodies

²⁰³ The SBSTTA *modus operandi* has been repeatedly revised. The meetings of the body take place every year so that there will be two SBSTTA meetings between each COP ordinary meeting (CBD COP Decision V/20 on ‘Operation of the Convention’, Part III, para. 17). The SBSTTA is also allowed to establish *ad hoc* technical expert groups (*per* CBD COP, Decision V/20, Part III, para. 21).

The modest institutional structure of the CBD has grown steadily in time as a number of other subsidiary bodies were created. The new additional bodies that have enriched the CBD system of governance proved to be fundamental in pushing forward legal and policy developments that have been consequently approved by the COPs.

Amongst these additional bodies, the first to be created in 1998 was the Working Group on Article 8(j)²⁰⁴. The goal of this forum is to address a plurality of issues related to the protection of traditional knowledge of indigenous people and local communities whose contribution has been and still is fundamental for the conservation and sustainable use of biodiversity.

Then, the Working Group on Access and Benefit Sharing (ABS) was convened for the first time in 2000, pursuant to COP decision V/26. The ABS Working Group conducted the negotiations of both the 2002 Bonn Guidelines on ‘Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising Out of Their

²⁰⁴ See CBD COP Decision V/26 on ‘Access to Genetic Resources’, also in Doc UNEP/CBD/COP/5/23 (2000), para. 11.

Utilization' (Bonn Guidelines)²⁰⁵, as well as the 2010 Nagoya Protocol (relating to the same matter)²⁰⁶, the latter being welcomed as one of the main outcomes, if not the most important one of CBD COP 10²⁰⁷.

The Working Group on Review and Implementation of the Convention (WGRI)²⁰⁸ was called upon in 2004 to monitor, assess and review the implementation of the CBD and, in particular, the information submitted to the COPs through the National Biodiversity Strategies and Action Plans (NBSAPs) transmitted by Contracting Parties in accordance with CBD article 26. Always in 2004, the Working Group on Protected Areas was created in order to provide guidance on the implementation of the so-called 'Programme of Work on Protected Areas'²⁰⁹.

²⁰⁵ See 'Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising Out of Their Utilization', annexed to CBD COP Decision VI/24 on 'Access and Benefit Sharing as Related to Genetic Resources'. Also in Doc. UNEP/CBD/COP/6/20 (2002).

²⁰⁶ See *infra* § 2.6.

²⁰⁷ See E. Morgera, E. Tsoumani, 'Yesterday, Today, and Tomorrow: Looking Afresh at the Convention on Biological Diversity', in *University of Edinburgh School of Law Working Paper Series N° 2011/21*, at 2. Available at: <http://ssrn.com/abstract=1914378>, reprinted in (2011) 21 *Yearbook of International Environmental Law*.

²⁰⁸ See CBD COP, Decision VII/30 on the 'Strategic Plan: Future Evaluation and Progress'. Also in Doc. CBD/UNEP/CBD/COP/7/21 (2004).

²⁰⁹ See *infra* § 2.7.3.

The proliferation of additional CBD institutions has been proven to be very important also because it was coupled by the proliferation of thematic and crosscutting programmes of work, guidelines and principles that allow the Contracting Parties to continuously refine the provisions of the Convention, hence, specifying their content. The CBD, in fact, is currently supplemented by seven thematic work programmes, five programmes of work that constitute the main instruments which Contracting parties can rely on for implementing the Convention and realize its three goals.²¹⁰

²¹⁰ The CBD COP adopted numerous thematic work programmes. E.g. on: agricultural biodiversity, dry and sub-humid land biodiversity, forest biodiversity, inland waters biodiversity, island biodiversity, marine and coastal biodiversity, mountain biodiversity. The CBD COP endorsed also a number of cross-cutting *programmes of work*, respectively, on: incentive measures, the Global Taxonomy Initiative, protected areas, and traditional knowledge (Article 8(j)). These and other instruments are available at: <http://www.cbd.int/programmes/>.

2.3. The UN Convention on biological diversity: an overview of its general and procedural obligations

2.3.1. General obligations under the CBD

CBD article 6 require Contracting Parties to ‘develop national strategies, plans or programmes for the conservation and sustainable use of biodiversity’ or adapt existing strategies, plans or programmes to achieve the same end, thus giving application to the measures prescribed by the Convention. The norm also requires Contracting Parties to ‘integrate, as far as possible and as appropriate, the conservation [...] and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

Prior to the definition of plans, strategies and programmes on biodiversity conservation and sustainable use and prior to its streamlining into other policy areas, CBD Contracting Parties are required to identify and monitor those elements of biodiversity which they deem important in terms of conservation and sustainable use. In order to give effect to this duty, Contracting Parties shall

pay due regard to the indicative list of categories contained in Annex I to the CBD on ‘identification and monitoring’²¹¹. The biodiversity elements so identified shall be then sampled and monitored through various techniques paying particular attention to those elements requiring urgent conservation measures and to those elements which offer the greatest potential for sustainable use. Lastly, under article 7 Contracting parties shall also identify those:

‘processes and categories of activities which have or are likely to have significant adverse impact on the conservation and sustainable use of biodiversity, and monitor their effects through sampling and other techniques; maintain and organize, by any mechanism data, derived from

²¹¹ According to Annex I, Contracting Parties shall identify and monitor i) *ecosystems* that contain high diversity, large numbers of endemic or threatened species, or wilderness, that are required by migratory species; of social, economic, cultural or scientific importance, that are representative, unique or associated with key evolutionary or other biological processes; ii) *species and communities* which are threatened, that are wild relatives of domesticated or cultivated species, that are of medicinal, agricultural or other economic value, that are of social, scientific or cultural importance or important for research into the conservation and sustainable use of biological diversity, such as indicator species; iii) *described genomes and genes* of social, scientific or economic importance.

and monitoring activities pursuant to subparagraphs a), b) and c)'

On this last obligation, Yusuf noted that:

'it is not clear how governments will fulfil this obligation without pointing a finger at their own economic, social and fiscal policies. Indeed these policies [...] rank amongst the primary and secondary causes of biodiversity loss. The increasing encroachment on habitats and their destruction in order to make place for commercial agriculture, factories, dams and mines and the adoption of environmentally insensitive technologies which lead to the replacement of diversity with homogeneity in forestry, agriculture, fisheries and animal husbandry are examples of the processes and activities referred to in article 7(c).

In fact, it may not always be an easy task to ensure the protection of nature and the development engendered by those sectors or activities that are at the heart of Contracting Parties' national economies.

2.3.2. Procedural obligations under the CBD

The main procedural duty fixed by the CBD is included under article 17, concerning the exchange of information amongst the Contracting Parties. In this regard, the latter are supposed to ‘facilitate’ the exchange of information ‘from all publicly available sources’ on the conservation and sustainable use of biodiversity. The aim of exchanging information is to circulate knowledge and best practices which may be particularly useful to developing countries in fulfilling their obligations under the Convention. Paragraph 2 lists the kinds of information that should be relevantly disseminated as the ‘results of technical, scientific and socioeconomic research’ and the information on ‘training and surveying programmes, specialized knowledge, indigenous and traditional knowledge’ *per se* or in connection with biotechnologies²¹².

²¹² CBD article 17, para. 2, refers also to the faculty of repatriating the information thus provided but it is not clear how ‘repatriation’ can actually take place and not used once it has circulated. CBD COP practice, however, does not help in shedding light on this particular point.

2.4. The UN Convention on biological diversity: overview of its substantial obligations

2.4.1. Obligations in the field of conservation and sustainable use of biodiversity

CBD article 8 and article 9 constitute the only two norms on conservation of biodiversity that were agreed upon and consequently inserted in the conventional text. They outline the rights and obligations of Contracting Parties in relation to conservation activities. Article 8, in particular, regards *in situ* conservation of biodiversity which is defined by article 2 as

‘the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties’.

We are dealing here with a very complex provision, requiring Contracting Parties to undertake an articulated

and multifaceted series of behaviours which is described in the preamble of the CBD as a ‘fundamental requirement’. For these reasons, article 8 can reasonably be described as the ‘heart’ of the Convention in the field of conservation²¹³. Consequently, its content deserves a detailed analysis, which will be carried out below with the view to assess its implementation at national level in the practice of some States at a later stage of this research.

As anticipated, article 8 set out a plurality of basic rules that Contracting Parties are obliged to implement in their territories. In this context, paragraphs a) to c) of article 8 are dedicated to the theme of ‘protected areas’²¹⁴. According to the provisions contained therein, Contracting Parties are under the primary obligation to establish a system of protected areas or areas were ‘special measures’ need to be taken in order to conserve biological diversity. Contracting Parties must also develop guidelines for the selection of protected areas, as well as for their establishment and management. Furthermore, the CBD

²¹³ See M. Gestri, cit., at 60. The doctrine suggests also that the insertion of a provision such article 8 on *in situ* conservation amounts to an explicit the acceptance of international legal obligations (rights) in favour of species other than humanity, see F. Munari, L. Schiano Di Pepe, cit. at. 150.

²¹⁴ According to the definition under CBD article 2, the notion of ‘protected area’ describes ‘a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives’.

generally requires its Contracting Parties to manage biological resources important for the conservation of biodiversity regardless of whether they fall within or outside protected areas, with a view to ensuring their conservation and sustainable use. Paragraph d) of CBD article 8, again, deals with element of the natural world which are *per se* worth of international legal protection: habitats and ecosystems. In this respect, the Convention requires its Contracting Parties to make efforts in order to protect ecosystems and natural habitats for the maintenance of viable populations of species in the natural surroundings. In the context of species and habitat protection, paragraph e) of CBD article 8, put Contracting States under the general obligation of promoting the environmentally sound and sustainable development of those areas that are adjacent to protected areas – the so-called ‘buffer zones’ – with a view to furthering their protection.

CBD article 8, paragraph f), in turn, deals with rehabilitation and restoration of degraded ecosystems and the recovery of threatened species. CBD article 8, paragraph g), deals with ‘biosafety’ (an issue that, as we shall see, has been further regulated by the Cartagena Protocol) in the context of biodiversity conservation. The

norm at hand calls the Contracting Parties to establish (or maintain) adequate means (of legislative, administrative and technical nature) in order to regulate, manage and control the risks associated with the use and release of living modified organisms (hereinafter LMOs) resulting from biotechnology likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity (taking into account the risks to human health). Another norm of 'biosecurity' can be found under CBD article 8, paragraph h). Specifically, the provision (it must be said, falling short of introducing a general prohibition) it urges the Contracting Parties to prevent the introduction of those alien species which may constitute a threat to ecosystems, habitats or species. By the same token, the provision urges the Parties to control these species and make any possible effort for their eradication. In the context of biosecurity, account must be given also of CBD article 8, paragraph l), as it (broadly) requires Contracting Parties to put in place measures with a view to regulate and manage those process and activities, referred to under article 7, which may determine a significant adverse effect on biological diversity.

The provisions under CBD article 8 that have just been referred to were conceived to find application mainly in

conjunction with protected areas (this is valid, above all, for paragraph from a) to e)). However, the article deals with issues that have far more reaching implications which, as we shall see later, have been partially regulated through the adoption of binding instruments (i.e. the Nagoya Protocol). Paragraph j), of CBD article 8 emerges, in this regard, because of its implications in the fields of intellectual property and human rights, as it requires the Contracting Parties of the Convention, to respect, preserve and maintain the knowledge, the innovations and the practices of indigenous people and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and, accordingly, puts them under the obligation, on the one hand, to promote their wider application – with the approval and involvement of the holders of such knowledge, innovations and practices – and, on the other hand, to encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovation and practices.

At the signature of the CBD, France complained about the missed adoption of ‘Global Lists’ (to be annexed to the Convention) where Contracting Parties would have

inscribed either protected areas or protected species²¹⁵. However, as suggested by various scholars²¹⁶, the fact that article 8 requires States to conserve and sustainably use those resources that are important for biodiversity has to be interpreted as having a general application with respect to all the resources resting within their territories. This provision not only puts into perspective the claim brought by France, but also demonstrates, in the end, that a departure from the previous international agreements concluded in the field of wildlife and nature conservation, all featured, as we saw, by the provision of lists and by limited/sectorial approaches to conservation, has occurred with the adoption of the CBD.

CBD article 9 regulates then the so-called *ex situ* conservation that, according to the definition contained in CBD article 2, amounts to the ‘conservation of components of biological diversity outside of their natural habitats’. Pursuant to this provision, Contracting Parties are required to complement the measures adopted for *in situ* conservation by a) adopting domestic measures of *ex situ* conservation, b) establishing and maintaining facilities for such type of conservation and plant, animal, micro-

²¹⁵ See UNEP, ‘Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity. Nairobi Final Act’ of 22 May 1992, at. 17.

²¹⁶ E.g. see M. Gestri, *cit.*, at 61.

organism research, c) adopting measures for the recovery and rehabilitation of threatened species and for their appropriate reintroduction into their natural habitats, d) regulating and managing collection of biological resources in order not to threaten *in situ* population of species and, finally, e) cooperating for the establishment and maintenance of *ex situ* facilities in developing countries. Given the prominence attributed by the CBD to *in situ* conservation measures, as emerging from the Preamble (recitals 10 and 11) as well as from the *chapeau* to article 8, *ex situ* conservation measures (e.g. the creation of aquaria, zoological parks, botanic gardens and genes banks) occupy an ancillary position in the overall structure of the Convention.

However, beside conservation, the sustainable use of biodiversity constitutes a second substantial requirement of the CBD. As established under article 2, ‘sustainable use’ is defined as:

‘the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations’.

The above definition is the clearest example of how the drafters of the Convention intended to reconcile environmental protection and economic growth in order to realize sustainable development. The principle of sustainable use is embedded in a variety of CBD provisions but it found an accomplished expression in article 10 which, first of all, requires Contracting Parties to integrate consideration of the conservation and sustainable use of biological resources into national decision-making (subparagraph a).

Then, Contracting parties shall adopt measures concerning the use of biological resources conceived in order to avoid or minimize any adverse impacts on biological diversity (subparagraph b); furthermore they are called to protect and encourage customary use of biological resources in accordance with traditional cultural practices compatible with conservation or sustainable use requirements (subparagraph c) and, accordingly, to support local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced (subparagraph d). Finally, Contracting Parties are required to foster the cooperation between their governmental authorities and the private

sector with the view of developing methods for sustainable use of biodiversity.

The obligations under CBD article 10 have been further supplemented by the ‘Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity’, elaborated in 2004 by the CBD Secretariat upon request of the Contracting Parties to the Convention²¹⁷. The goal of the Addis Ababa Principles and Guidelines, whose core part is constituted by fourteen operational and interdependent principles, is to ‘provide a framework for assisting Governments, indigenous and local communities, resource managers, the private sector and other stakeholders, about how to ensure that their uses of biological diversity will not lead to its long-term decline’²¹⁸. Based on the precautionary and ecosystem approaches and aimed at facilitating the involvement of a plurality of stakeholders to the management of biodiversity, as robustly highlighted, they can particularly be regarded as an example of how ‘the normative activity

²¹⁷ CBD Secretariat, ‘Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity’ Montreal, 2004. Document available at: <https://www.cbd.int/doc/publications/addis-gdl-en.pdf>.

²¹⁸ *Ibidem*, see ‘Introduction’. In general, such Principles and Guidelines invite States to provide for procedural guarantees in order to allow the participation of communities and interested groups in decision-making on the sustainable use of biodiversity as well as to legally recognize and preserve the sustainable practices of local communities and indigenous people.

of the CBD COP' can have 'far-reaching implications for the protection of the rights of indigenous people and local communities'²¹⁹.

The obligations under CBD article 10, but also the one under CBD article 8 (j), concerning the preservation and maintenance of knowledge, innovations and practices of indigenous people and local communities, should also be read in conjunction with those under CBD article 14, relating to environmental impact assessment (EIA)²²⁰. What was decided during the negotiations concerns mainly domestic procedures because article 10, paragraph 1, obligates Contracting parties to carry out EIA procedures guaranteeing that proposed projects likely to have significant adverse effects on biological diversity are carefully implemented and their negative effects are avoided or reduced to a minimum. Furthermore, where circumstances so require, Contracting parties shall strive

²¹⁹ See E. Morgera, 'No Need to Reinvent the Wheel for a Human Rights-Based Approach to Tackling Climate Change: The Contribution of International Biodiversity Law', in *University of Edinburgh School of Law Research Paper Series* N° 2012/5, at 13. For a focus on how these Principles may be translated into national legislative measure that foster conservation by resorting to the ecosystem approach and involving local stakeholders, see E. Morgera, *Wildlife law and the empowerment of the poor*, FAO Legislative Study N° 103, at 141-184.

²²⁰ For a general comment on the EIA procedure, see A. Gillespie, 'Environmental Impact Assessments in International Law', in (2008) *17 Review of European Community & International Environmental Law*, at 221-233.

to allow for public participation in the decision-making process regarding the aforementioned kind of project (subparagraph a). The primarily domestic character of environmental assessment procedures under the CBD is further reaffirmed by subparagraph b), requiring Contracting Parties to ensure that the environmental consequences of their programmes and policies that are likely to have significant adverse impacts on biological diversity are duly taken into account. Reference here is made to ‘programmes and policies’ and this leads us to see in this case an obligation, although broadly worded, to carry out strategic environmental assessment (SEA) procedures that properly consider also potential effects to biodiversity. If article 14 falls short of obliging Contracting parties to perform IEA or SEA procedures in transboundary contexts, however, it requires them (and here lies the transnational aspect of environmental assessment) to:

‘promote, on the basis of reciprocity, notification, exchange of information and consultation on activities under their jurisdiction or control which are likely to significantly affect adversely the biological diversity of other States or areas beyond the limits of national jurisdiction, by

encouraging the conclusion of bilateral, regional or multilateral arrangements, as appropriate’

In the light of the above, it is possible to affirm that the CBD, unlike other international agreements, has an innovative character as it does not mandates its Contracting Parties to perform transboundary EIA or SEA when projects, programmes and policies make them necessary; instead, it rather put them under the general obligation to perform such procedures in every case, either in presence of purely domestic or transnational negative effects to biodiversity.²²¹

Environmental impact assessment as foreseen by the Convention, as mentioned above, can be conceptually linked to CBD article 8 (j) because the content of the latter has been further elaborated, specified and complemented by COP adoption of the ‘Akwé: Kon Guidelines for the conduct of cultural, environmental and social impact on sacred sites traditionally occupied by indigenous people on local communities’²²².

²²¹ For a ‘case study’-type of contribution on issues of EIA and biodiversity, see J.R. Walsh, ‘Mayor Infrastructure Project, Biodiversity and the Precautionary Principle: The Case of Yacyretá Dam and Iberá Marshes’, in (2004) 13(1) *Review of European Community & International Environmental Law*, at 61-71.

²²² CBD Secretariat, ‘Akwé: Kon Voluntary Guidelines for the Conduct of Cultural Environmental and Social Impact Assessment

What is essential to highlight about these voluntary guidelines is, first of all, that they are aimed at helping competent Contracting Parties authorities to evaluate the likely impacts of proposed interventions (project, programmes and plans) on the way of life of particularly vulnerable groups, on the enjoyment of their rights and on the maintenance of their well-being. When adopted in the context of wider EIA or SEA proceedings, the Akwé: Kon Guidelines might contribute to the performance of ‘more rounded assessments’, while achieving ‘a multiplicity of goals’ when circumstances so require²²³.

Overall, one interpretative difficulty arises at approaching the content of substantive rules on conservation and sustainable use. This difficulty is given by the way in which obligations are qualified under each single article²²⁴. As already mentioned in Chapter 1, the CBD was the result of laborious negotiation among countries assigning diverging priorities to environmental

regarding Developments Proposed to Take Place on, or which are Likely to Impact on Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous People and Local Communities’, Montreal, 2004. Text of the Voluntary Guidelines is available (<http://www.cbd.int/traditional/guidelines.shtml>). *Akwé:Kon* is a Mohaw term that means «everything in creation» and was chosen to stress the holistic nature of the document. See ‘Introduction’ at 3.

²²³ See E. Morgera, (*above* note 207), at 16.

²²⁴ See, in particular, the wording of CBD articles 5, 6 (b), 7, 8, 9, 10 and 11.

protection, on the one hand, and economic development, on the other. For this reason, the language employed by the drafters relies on expression such as ‘as far as possible’ or ‘in accordance with its particular condition and capabilities’. This is due to the difficulties just underlined but, more significantly, to the general acknowledgment of one idea, which is pivotal to the functioning of the CBD, namely, that different States, equipped with different social and economic conditions, cannot by nature comply with the same environmental standards²²⁵. For these reasons, the CBD, with its loosely defined obligations, has been object of many critics and even its legal force was put into question²²⁶. However, had this general idea not been acknowledged, most probably it would have not been possible to reach the conclusion on any agreement on the protection of biodiversity and, consequently, international cooperation in this field would proceed at a slower pace.

²²⁵ See, generally, C. K. Mensah, (1994), ‘The Role of Developing Countries’, in L. Campiglio et al., (eds.), cit., at 33-53. Another scholar stressed how the conduct of developing countries during the ‘Rio phase’ was of ‘reluctant participation’. See, in this regard, A. Najam, ‘Developing Countries and Global Environmental Governance: From Contestation to Participation to Engagement’, in (2005) 5 *International Environmental Agreements*, at 303-321. In any case, it must be stressed, broadly-defined obligations are a recurring and ordinary feature of most MEAs.

²²⁶ See. D. Bodansky, ‘International Law and the Protection of Biological Diversity’, in (1993) *Vanderbilt Journal of International Law*, at 631-632; M. Kimball, cit., at 765-766. Gestri, instead, mildly speaks of ‘conventional relativism’ in M. Gestri, cit., at. 64.

2.4.2. *Obligations in the field of access to genetic resources*

Ex situ conservation is an activity especially valued in biodiversity-rich countries and in most cases involves the conservation of varieties of seeds and plants in facilities commonly referred to as ‘genes banks’. Access to genes banks has proved fundamental to the biotech sector for research-related purposes. This is why CBD article 9 that has been examined in the previous subparagraph has to be read in connection with CBD article 15, concerning access to genetic resources.

The norm opens with a restatement of the principle of State sovereignty over natural resources. However, if in CBD article 3 this principle was paired with the general principle not to cause transboundary harm, here it is premised, and it is strengthened by the affirmation that national governments are the only legitimate subjects empowered with the authority to consent or refuse access to genetic resources²²⁷. By explicitly recognizing the

²²⁷ CBD article 15, paragraph 1, reads as follows: ‘Recognizing the sovereign rights of States over their natural resources, the authority to determine access to genetic resources rests with the national governments and it is subject to national legislation. This remains so even if the norm, with the mild wording of paragraph 2, only invites

sovereign right of a State to control the access to the genetic resources that are found on its territory, the provision of article 15 consequently acknowledges the bargaining power inherent to each Contracting party when it comes to negotiate the economic value of its own resources. This rationale should theoretically lead Contracting Parties to strive for the conservation and sustainable use of genetic resources found under their jurisdictions²²⁸. To some extent, this tendency has been confirmed by the practice of many ‘mega-diverse’ countries (that have ratified the CBD) that in the past twenty years have been adopting stringent national laws concerning the access to their genetic resources²²⁹. On the other hand, however, given the way in which the

Contracting Parties to ‘endeavour’ to create condition on access ‘for environmentally sound uses’ by other Contracting Parties in order to avoid the imposition of restrictions which may be contrary to the CBD objectives. From the overall analysis of article 15, it clearly emerges that ‘access denial’ is permitted, on condition that it is nor arbitrary, unreasonable or discriminatory by nature. On the affirmation on the principle of sovereignty over genetic resources vis-à-vis genetic resources as common heritage of mankind’, see S. Vezzani, Normative brevettuali e accesso alle risorse biologiche e genetiche: ripartizione giusta o “biorazzia?’, in N. Boschiero, cit., at 264.

²²⁸ See Hendrickx, Koester, Prip, ‘Convention on Biological Diversity. Access to Genetic Resources: A Legal Analysis’, in (1993) *Environmental Policy and Law*, at 250.

²²⁹ See, e.g., ‘Country Reports’ in E.C. Kamau, G. Winter (eds.), *Genetic Resources, Traditional Knowledge and the Law. Solutions for Access & Benefit Sharing*, London, 2009 and S. Vezzani, cit. (*above* note 227), at 264-265.

international regime on intellectual property rights (IPRs) has evolved in the meantime, allowing for the patentability of natural processes and products bringing on industrial innovation thanks to human intervention, many developing countries are being forced to litigation over patents on own their indigenous plants²³⁰.

Then, according to paragraphs 4 and 5 access to genetic resources, if granted, shall take place under certain specific conditions: first of all, it shall take place under ‘mutually agreed terms’ between the countries involved; secondly, it shall be subject of ‘prior informed consent’ of the country of origin of the genetic resources for which access was requested. When a State providing genetic resources decides to issue its permit of access, it stipulates with its counterpart a specific agreement usually named ‘bio-prospecting contract’. Such contract normally establishes the rights and obligations of the territorial State and of the subject which intends to prospect biological resources and eventually proceed for their industrial and commercial exploitation²³¹.

²³⁰ See, generally, T.W. Dagne, ‘The Application of Intellectual Property Rights to Biodiversity Resources: A Technique for the South Countries to Maintain Control over Biodiversity Resources in Their Territory?’ in (2009) 17(1) *African Journal of International and Comparative Law*, at 150-165.

²³¹ In most cases the subjects interested in bio-prospecting are multi-national enterprises (MNEs) of the biotech sector.

Furthermore, the obligation at hand invites Contracting Parties to encourage the involvement and the cooperation of those developing countries (parties to the CBD) providing genetic resources to the biotechnology sector in the scientific research that they may be carried out or is actually carried out thanks to their own indigenous genetic resources (paragraph 6). Finally, CBD article 15 requires Contracting Parties to adopt legislative, administrative or policy measures finalized to realize a fair and equitable sharing of the results of R&D in the field of biotechnology as well as a fair and equitable sharing – on mutually agreed terms – of the benefits arising from the commercial uses of genetic resources with the country providing such resources (paragraph 7).

2.4.3. Obligations in the field of technology and biotechnology transfer

A further article linked to the issue of biotechnology is CBD article 16 on ‘access and transfer of technology’. The issue of technology access and transfer is generally important for the functioning of the Convention as it

confers a precise and concrete connotation to the CBDR principle, which is conceptually and legally pivotal to the whole conventional text²³². Moreover, the effective realization of the conservation and equitable sharing of the benefits arising from the use of biological resources cannot materialize, as expressly acknowledged by CBD article 1, without the diffusion of relevant technologies.

Technologies eligible for access and transfer must be 'relevant to the conservation and sustainable use' of biodiversity or 'use genetic resources' in a ways that are not damaging the environment (CBD article 16, paragraph 1). When the recipients of said technologies are developing countries, both access and transfer, according to CBD article 16, paragraph 2, shall be authorized 'under fair and most favourable terms' and even on 'concessional and preferential terms' or under the financial mechanism foreseen by CBD articles 20 and 21, when circumstances so require.

The prevision thus phrased may induce to think about technology access and transfer in favour of developing

²³² This consideration is deducible by various provisions of the CBD (and from art. 16, para. 1 in particular). At the same time, the issue of access to biotechnologies has been one of the most controversial themes between industrialized on one side, and developing countries, on the other side. The latter, in fact, favoured the adoption of a text that would have introduced more precise obligations in this field.

countries as an unconditional and unidirectional process. In reality, this is not the case and the text of the remainder of CBD article 16 (last sentence of paragraph 2 and subsequent paragraphs) defines the characteristics of a complex system of interests attaining to the relation between developed and developing countries as it comes to the protection of intellectual property rights²³³ and its relationship with biodiversity.

On one hand, it has been recognized that access and transfer of technologies shall ‘be provided on terms which recognize and are consistent with the adequate and effective protection of intellectual property rights’ of patent holders in accordance with international law²³⁴, on the other hand, Contracting Parties shall:

‘take legislative, administrative or policy measures, as appropriate, with the aim that Contracting Parties, in particular those that are developing countries, which provide genetic resources are provided access to and transfer of technology which makes use of those resources, on

²³³ Such protection, primarily defined by national laws, is strengthened at international level, in the framework of the WTO, by the Agreement on Trade-related Aspects of Intellectual Property Rights (known as TRIPs agreement), of 15 April 1994, in (1994) *International Legal Materials*, at 1197.

²³⁴ See CBD, article 16, paragraph 2, (last sentence).

mutually agreed terms, including technology protected by patents and other intellectual property rights, where necessary, through the provisions of Articles 20 and 21 and in accordance with international law and consistent with paragraphs 4 and 5 below²³⁵

Furthermore, according to CBD article 16, paragraph 4, Contracting Parties shall take legislative, regulatory, and administrative and policy measures designed to induce the private sector to facilitate the access to relevant technologies, as well as their ‘joint development and transfer’ for ‘the benefit of both governmental institutions and the private sector of developing countries’.

Finally, CBD article 16, paragraph 5, requires Contracting Parties to cooperate in order to ensure that the enforcement of intellectual property rights is supportive of – hence ‘do not run contrary to’ – the achievement of the conventional objectives (CBD article 16, paragraph 5).

Affirming how and to which extent CBD article 16 creates actual legal obligations of technology transfer in favour of developing countries from industrialized ones is a complex matter. The whole structure of the norm outlined above appears, at least, to be ambiguous. From

²³⁵ *Ibidem*, article 16, paragraph 3.

CBD article 16, paragraph 1, one can infer that a general *obligo de negotiando* (that is, the duty to negotiate in good faith contractual agreements for technology transfers) was inserted in the conventional text in favour of developing countries. CBD Article 16, paragraph 2, however, stops well before defining what the adjectives ‘concessional’ and ‘preferential’ mean in legal terms. The reference to ‘fair’ terms should imply also the payment of a ‘fair’ compensation of technology providers, whose innovations are protected by a system of intellectual property rights. Then, CBD article 16, paragraph 3, ambiguously refers to access to and transfer of technologies to those countries that are providing genetic resources. According to the provision, access and transfer shall happen under ‘mutually agreed terms’. Again, this specification confirms the necessity of IPRs to be protected, in particularly when these are exclusive assets of private enterprises: in fact, provided that Contracting Parties are under the duty to facilitate access to technologies protected by IPRs through the implementation of regulatory, legislative and policy instrument, they surely cannot deliberately and forcibly transfer technology rights and licences from their legitimate holders for compliance

with CBD obligations in the field of technology transfer to genetic resources-rich developing countries.

Beside negotiating a provision on access and transfer of biotechnology with a narrowly defined scope, States participating to the negotiation of the CDB, decided to insert an article on the ‘technical and scientific cooperation’ encompassing a broad set of activities. According to CBD article 18, paragraph 1, in fact, Contracting Parties shall engage in such cooperation by relying either on national and international institutions. Again, the cooperation between Contracting Parties is to be premised on the special attention accorded to the needs of developing countries and shall be realized through the ‘development and implementation of national policies’ on human resources and institution building aimed at fostering other Parties ‘national capabilities’. Under CBD article 18, cooperation shall be channelled through a ‘clearing-house mechanism’, shall be carried out also in the field of traditional technology and include the training of personnel as well as the exchange of experts (paragraphs 3 and 4).

Finally, last subparagraph of CBD article 18 states that cooperation aimed at enhancing efforts of biodiversity conservation and sustainable use shall also take the form

of joint research programmes and joint ventures (paragraph 5). The nature of joint biotechnological research programme shall ensure the ‘effective participation’ of the Contracting parties, especially developing ones, which provide the genetic resources for such research and, where possible, said activities should be based in the territories of the latter (CBD article 19, paragraphs 1 and 2).

2.4.4. Obligations on the transfer of financial resources to support CBD compliance by developing countries

Provisions on financial assistance are the main application of the principle of common but different responsibilities enshrined into the CBD. The insertion itself of obligations in the field of financial (but also technical) assistance is determined by the circumstance that most of the world’s biological diversity is located in the territory of developing countries. As such, the latter are bound to sustain the major costs deriving from the conservation of biological resources and, due to their generally low developmental rates, they are not always

capable of capitalizing the economic benefits arising from the utilization of such resources.

Provisions on financial assistance are defined, respectively, by CBD articles 20 and 21. While the former outlines general legal obligations in the subject matter, the latter is devoted to defining the institutional mechanism for the management of the financial aspects related to the functioning of the Convention. Under article 20, second paragraph:

‘the developed country Parties shall provide new and additional financial resources to enable developing country Party to meet the agreed full incremental costs to them of implementing measures which fulfil the obligation of this Convention and to benefit from its provision’.

In the first place, the aim of the above obligation is to allow developing countries to cover the additional costs determined by compliance to the CBD and, in particular, by the fulfilment of their obligations in relation to the conservation of biodiversity²³⁶. In the second place, such

²³⁶ The claim for the coverage of the ‘additional costs’ of compliance – corollary to the CBDs principle – was object of a heated debate during the UNCED. The undertaking of these costs by industrialized countries is an application of ‘equity canons’, see F. Munari, L.

obligation allows also for the effective application of other CBD rules in the ‘South’ of the world, in particular those on benefit sharing.

The general obligation of financial transfer in favour of developing country Parties, however, is not free from limitations. In fact, various kinds of ‘incremental costs’ associated with CBD compliance have been identified by the COP – hence a series of cost that can be covered through international cooperation has been established – and, in any circumstance, article 20, paragraph 2, continues affirming that such costs are to be ‘agreed between a developing country Party and the institutional structure referred to in Article 21’ – hence limiting room for unilateral reception of free funds from industrialized country Parties .

Moreover, even if the general obligation of financial assistance somehow encounters some limitations, CBD article 20, paragraph 4, reaffirms and strengthens the general obligation, by establishing a causal link between the availability of financial assistance and the consequent ability of developing country Parties to comply with the CBD. The norm reads as follows:

Schiano Di Pepe, at 47 as opposed to, e.g. T.B. Kohona, ‘UNCED – the Transfer of Financial Resources to Developing Countries’, in (1992) *Review of European Community & International Environmental Law*, at 307-313.

‘the extent to which developing country Parties will effectively implement their commitments under this Convention will depend on the effective implementation by developed countries Parties of their commitments under this Convention related to financial resources and transfer of technologies and will take fully into account the fact that economic and social development and eradication of poverty are the first and overriding priorities of developing country Parties’.

The article just recalled has been interpreted by IEL scholars in two different ways. According to some, CBD article 20, paragraph 4, makes developing country Parties’ implementation of their obligations in the field of conservation and sustainable use legally conditional upon the compliance, by industrialized country Parties, of their respective obligations in the field of technology and financial assistance²³⁷. Conversely, others retain the provision here discussed simply as a mere statement of fact, namely that the realization of the duties of developing country Parties as to the conservation and the sustainable use of biodiversity cannot effectively take place without the

²³⁷See S. Casey-Lefkowitz, cit., at 56.

assistance from industrialized country Parties.²³⁸ A third, interpretation that stays halfway between the previous two stresses that developing countries' policies in the field of biodiversity would embrace 'international biodiversity policies' inasmuch they receive funding under the CBD for this purpose²³⁹. Amongst the interpretations just proposed, we believe the second is slightly preferable because asserting the existence of an absolute dependence of developing country Parties on the assistance provided by developed country Parties would imply recognizing the right of developing countries to enjoy in full liberty the utilization of those resources that fall within the scope of the CBD until the provision of an effective assistance on the part of developed countries actually materialize. If such interpretation prevailed within the CBD COP, it would undermine the legal value of the principles of conservation and sustainable use that would be negatively affected, ultimately running contrary to the achievement of the three conventional objectives.

As for the institutional structure through which financial assistance is channelled, States negotiating the CBD agreed upon relying on an already existing structure, namely, the

²³⁸ See S. Chandler, *cit.*, at 173-174 (textual interpretation).

²³⁹ See P. Birnie, A. Boyle, C. Redgwell, *cit.*, at 633-634.

Global Environmental Facility (GEF)²⁴⁰ Better said, the GEF was identified the interim financial mechanism of the Convention under its article 39 but then it was confirmed by the first CBD COP, held in Nassau (Bahamas) in 1994, for the management of the financial mechanism under the Convention.²⁴¹

According to CBD article 21, the GEF operates under the guidance of the COP, that is ultimately responsible for the definition of eligibility criteria for biodiversity-related project, thus for deciding how assistance is channelled towards developing country Parties. Moreover, the GEF is required to function into a ‘democratic and transparent system of governance’²⁴².

²⁴⁰ The institution of a ‘global environmental facility’ was firstly envisaged by the *Brundtland* Commission and in 1989 was jointly proposed by France and German to the Board of Governors of the World Bank and approved in 1990. The GEF was initially started for a 3-year pilot phase (see Executive Directors Council, resolution n.91-5) later followed by the conclusion of operational agreements between the WB and other agencies entrusted for the management of the GEF, namely, UNDP and UNEP. Said agreements are available in *International Legal Materials*, at 1735. The instrument, restructured in 1994, is internationally used to serve the purposes of the MEAs dealing with global environmental issues like climate change, biodiversity loss, the pollution of seas and oceans and the depletion of the ozone layer.

²⁴¹ CBD COP, Decision I/2, on ‘Financial Resources and Mechanism’.

²⁴² For an in-depth policy analysis of the GEF, notably, see L.D. Mee, H.T. Dublin, A.A. Eberhard, ‘Evaluating the Global Environment Facility: A good will gesture or a serious attempt to deliver global benefits?’, in (2008) 18 *Global Environmental Change*, at 800-810.

2.5. The Cartagena Protocol on biosafety

The CBD defined biotechnologies as ‘any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use’ (CBD article 2, third sentence). Notwithstanding this definition has certainly an historical relevance, being the first definition of this kind to appear into an international legally binding instrument, it has rapidly shown its inadequacy because ultimately it encompasses, on the one hand, traditional human activities consisting of more or less intrusive forms of utilitarian intervention on living organisms or natural cycles and, on the other hand, also the cutting-edge products of modern industrial genetic technologies²⁴³.

²⁴³ Ahead, was Agenda 21 (on *Environmentally Sound Management of Biotechnology*), stating, at paragraph 16.1, that: ‘Biotechnology is the integration of the new techniques emerging from modern biotechnology with the well-established approaches of traditional biotechnology. Biotechnology, an emerging knowledge intensive field, is a set of enabling techniques for bringing about specific man-made changes in deoxyribonucleic acid (DNA), or genetic material, in plants, animal and microbial systems, leading to useful products and technologies’. The original inadequacy of the CBD is noted also at doctrinal level, see N. Boschiero, ‘Le biotecnologie tra etica e principi generali del diritto internazionale ed europeo’ in id. *Biotetica e biotecnologie nel diritto internazionale e comunitario. Questioni generali e tutela della proprietà intellettuale*, Torino, 2006, p. 6-7.

With the view to adjust this inadequacy, in accordance with CDB article 19, paragraph 3, which empowers the Contracting Parties to adopt further Protocols, at COP 2, convened in Jakarta (Indonesia) in 1995, it was decided to entrust an open-ended *ad hoc* Working Group with the task of drafting a protocol to address the issues of biosafety.

In particular, the task of the working group was to define the procedures that are indispensable for guaranteeing an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms (hereinafter LMOs) resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biodiversity, taking also into account the risks to human health, as specifically focusing on transboundary movements.

In 1999, after four years of tense negotiations a thick compromise was reached on every issue, from the scope of the Protocol, to its relations with other international agreements, from the type of LMOs concerned to the information that is required from the States wishing to export LMOs. Having concluded its task, the Working Group submitted a draft text to the first extraordinary meeting of the CBD COP (Ex-COP), which took place in

Cartagena (Colombia). One year later, when Ex-COP was resumed in order to refine the proposed text, the Protocol was finally adopted²⁴⁴. Prior to its enter into force, the Ex-COP established the Intergovernmental Committee for the Cartagena Protocol (ICCP), designed to undertake the preparatory work for the decisions that were to be taken at the first meeting of the COP serving as the Meeting of the Parties of the Protocol (COP/MOP).

In order to ensure an adequate level of environmental and human health protection in the field of transboundary transfer, handling and use of LMOs (article 1), the Protocol introduces an ‘advanced informed agreement’

²⁴⁴ Cartagena Protocol on Biosafety, adopted in Montreal (Canada) of 29 Jan. 2000, in force 11 Sept. 2003, in (2000) *United Nations Treaty Series*, vol. 2226, p. 208. For the text of the Protocol, also CBD EXCOP 1 Decision EM/13 on Adoption of the Cartagena Protocol and Interim arrangements, UNEP/CBD/ExCOP/1/3 (20 Feb. 2000). For a comprehensive description of the Protocol’s provisions, see R. Pavoni, *Assessing and Managing Biotechnology Risk under the Cartagena Protocol on Biosafety*, in (2000) *Italian Yearbook of International Law*, at 122 ff, R. Pavoni, *Biotechnologie e biodiversità nel diritto internazionale e comunitario*, Milano, 2004, at 244 ff. It has been observed that the Protocol signed a ‘negotial victory’ for the EU and most developing countries (willing to introduce a higher level of protection unlike, e.g. the United States), see A. Tanzi, *Biotechnologie a ambiente: tendenze evolutive nel diritto internazionale contemporaneo* in Boschiero N. (eds.), cit. at 167. Others, see it as an accomplished articulation of the precautionary approach, as F. Munari, L. Schiano Di Pepe, cit., at 52-53. Within the North American literature, instead, many point to the possible abuse of the precautionary provisions of the Protocol, e.g. K. Buechle, ‘The Great, Global Promise of Genetically Modified Organisms: Overcoming Fear, Misconceptions, and the Cartagena Protocol on Biosafety’, in (2002) *Indiana Journal of Global Legal Studies*, at 323.

procedure, which finds its rationale in the precautionary approach (which is recalled in the Preamble and which constitute the rationale of articles from 8 to 11 of the Protocol).

Article 8 of Cartagena Protocol obliges Contracting Parties willing to export LMOs to notify in advance some information to the country of import (another Contracting Party). Once this information has been received by the importing State (under the obligation to notify the receipt under article 9), this is conferred the faculty either to accept or to refuse the import request and, contextually, to make it conditional upon the respect of further requirements which must be evaluated in the light of a risk assessment procedure (article 10 and 11).

It is clear that this mechanism may result in restrictions to international trade in LMOs but such restrictions are tolerated by many States and justified in consideration of the widespread interest in reaching an adequate level of biosafety on a global scale.

Within the framework of the technical and financial assistance established under the CBD, the Cartagena Protocol (article 20, paragraph 1) establishes a Biosafety Clearing House (BCH) with the goal of pursuing the facilitation of the exchange of scientific, technical,

environmental and legal information on LMOs transboundary movements, as well as the assistance to Contracting Parties in the implementation of the Protocol, taking into account the special needs of developing country Parties. Finally, it deserves to be highlighted that the BCH is the exclusive channel through which Contracting Parties are authorized under the Protocol to provide the information that is required for the realization of the ‘advance informed agreement procedure’.

An interesting feature of the Protocol is the prevision of compliance mechanism procedures which, as established by the ‘enabling provision’ under its article 34, were to be agreed upon by Contracting Parties during the first COP/MOP²⁴⁵. Such procedures offer an alternative to the traditional mechanism of dispute settlement provided for by CBD article 27 and referenced by article 32 of the Protocol (non judicial means as negotiation, mediation and good offices, on the one hand, and judicial means as arbitration or submission to the ICJ). Therefore,

²⁴⁵ On Protocol’s article 34 as an ‘enabling provision’ see C. Ragni, ‘Procedures and Mechanisms for Compliance under the 2000 Cartagena Protocol on Biosafety to the 1992 Convention on Biological Diversity’ in T. Treves et al. (eds.), *Non Compliance Procedures and Mechanisms and the Effectiveness of International Environmental Agreements*, The Hague, 2009, at 103; R. Mackenzie, F. Burnhenne-Guilmin, A.G. La Viña and J. Werksman (eds.), *An Explanatory Guide to the Cartagena Protocol on Biosafety. IUNC Environmental Policy and Law Paper*, Gland, 2003.

Contracting Parties may chose them, instead of the ‘classical’ means of dispute settlement whenever in need to solve a dispute on the interpretation and the implementation of the provisions enshrined by the Protocol. At the first COP/MOP held in Kuala Lumpur (Indonesia) in February 2004, Contracting Parties adopted Decision BS-I/7 that established an *ad hoc* Compliance Committee, a subsidiary body which is entrusted with the tasks of assisting Contracting States in implementing the Protocol’s provisions, identifying specific cases of non-compliance as well as the root causes of non-compliance episodes that may be denounced through the COP and taking measures (i.e. make recommendations) in order to help the Parties experiencing compliance difficulties²⁴⁶. During its first meeting the Committee adopted by

²⁴⁶See Decision BS-I/7 on Establishment of Procedures and Mechanisms on Compliance under the Cartagena Protocol on Biosafety. Also in Doc. UNEP/CBD/BS/COP-MOP/1/15 of 27 Feb. 2004, Annex I, at 98. The Committee consists of fifteen members chosen by the Contracting Parties to the Protocol and elected for a period of four years by the COP/MOP on equitable geographical representation of the five regional UN groups. These individuals must be selected among persons with a recognized competence in the field of biosafety or other relevant matters and serve objectively in a personal capacity. The Committee meets twice a year and it decides on a case-by-case basis whether to hold or not its meetings in an open or closed session. If an open session is convened, observers are authorized to participate to the meetings. However, from its 4th meeting the Committee agreed to conduct, as a general practice, its meetings in open session.

consensus its Rules of Procedure (consequently received and approved by the COP/MOP). At its fourth meeting held in Montreal in 2007, the Committee assessed general issues of compliance on the basis of the information made available by Contracting Parties as they submitted their first national reports, four years after the entry into force of the Protocol. The Compliance Committee operates under the exclusive guidance of the COP/MOP which can transmit relevant information on compliance matters and, ultimately, can decide upon measures to be adopted with the view of promoting compliance and addressing cases of non-compliance according to the Committee's recommendations²⁴⁷.

²⁴⁷ Compliance Committee, Decision BS-I/7, (Annex, Section 3). The Committee performs its general tasks in relation to the promotion of compliance. It can also address individual cases of non compliance. In particular, the Committee is required to: a) identify the specific circumstances and possible causes of individual cases of non-compliance referred to it; b) consider information submitted to it regarding matters relating to compliance and cases of non-compliance; c) provide advice and/or assistance, as appropriate, to the concerned Party, on matters relating to compliance with a view to assisting it to comply with its obligations under the Protocol; d) review general issues of compliance under the Protocol taking into account what emerges from the analysis of national reports periodically submitted by the Parties as well as on the basis of the information channelled through the BCH; e) take appropriate measures and issue recommendations to the COP/MOP when confronted with non-compliance findings; f) carry out any other functions decided in the COP/MOP venue.

2.6. The Nagoya Protocol on access to genetic resources

The Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization was adopted in Nagoya (Japan) in 2010, at the conclusion of CBD COP 10. The Protocol (hereinafter referred to as ‘Nagoya Protocol or NP’) is commonly regarded as the most important outcome of that meeting²⁴⁸. Its entry into force will make of little or no use the 2002 Bonn Guidelines, previously adopted by the

²⁴⁸ Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, Nagoya (Japan) of 29 Oct. 2010, open for signature on 2 Feb. 2011 until 1 Feb. 2012, will enter into force after the 50th ratification, as established under its article 33. See CBD COP 10, Decision X/1 on ‘Access to genetic resources and the fair and equitable sharing of benefits arising from their utilization’. The Decision on the adoption of the Protocol is also available at: <http://www.cbd.int/decision/cop/?id=12267>. For A notable comments, see E. Morgera, E. Tsioumani, ‘Access and Benefit Sharing: The Nagoya Protocol’, in (2010) 40 *Environmental Policy and the Law*, at 289 ff; E.C. Kamau, B. Fedder, G. Winter, ‘The Nagoya Protocol on Access to Genetic Resources and Benefit Sharing: What Is New and What Are the Implications For Providers and Users Countries and The Scientific Community’, in (2010) 3(6) *Law, Environment and Development Journal*, at 246, and M. Buck, C. Hamilton, ‘The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity’, in (2011) 20(1) *Review of European Community & International Environmental Law*, at 47 ff.

CBD COP by *consensus*²⁴⁹. The NP was concluded in order to ‘operationalize’ the third objective of the CBD, concerning access and benefit sharing (ABS)²⁵⁰. In particular, the Protocol complements the provisions of the CBD contained, respectively, under article 15 and article 8(j)²⁵¹. The obligations of the Nagoya Protocol, in fact, concern both the issues of access and benefit sharing (hereinafter ABS) and those related to the traditional knowledge (hereinafter TK) of indigenous people and local communities who can be regarded as the true ‘guardians’ of biodiversity, even though they seldom gain from the utilization by others of the resources they conserved, used and sustainably managed through the ages²⁵². The objective of the NP, enshrined by its article 1, consists in the

²⁴⁹ See *above* note 207. The Bonn Guidelines are a *soft law* instrument through which CBD COP has tried to stimulate the Contracting Parties on the adoption of national legislation on ABS.

²⁵⁰ See. E. Morgera, E. Tsioumani (*above* note 219), *cit.*, at 12, where, in particular, they suggestively describe the NP as an ‘example of the creative nature of the CBD regime’ that will give rise to ‘new implementation challenges’.

²⁵¹ The NP applies to genetic resources within the scope of CBD article 15, to traditional knowledge related to genetic resources and, finally, to the benefits arising from the use of those resources. See Nagoya Protocol, article 3.

²⁵² On this point, it has been noted that: ‘Eli Lilly’s extraction of the rosy-periwinkle plant based on traditional knowledge from Madagascar and commercialisation of the resultant drug totalling US\$ 100 million with no returns to the local people’. In this regard, see S.

‘fair and equitable sharing of the benefits arising from the utilization of genetic resources, including appropriate access to genetic resources and by appropriate transfer of relevant technologies, *taking into account all rights over those resources and technologies*, and by appropriate funding, *thereby contributing to the conservation of biological diversity and the sustainable use of its components*’²⁵³

From the reading of the above provision two meaningful considerations emerge. First of all, the intention of the negotiating States was to give equal footing to the rights of technology holders (commonly industrialized countries and countries with emerging economies) and those of resources providers (commonly developing and least developed countries). In the second place, we deem important to underline the comprehensive and systematic approach that is apparent from the last sentence of the article, which ties the attainment of the

Alikhan, *Socio-economic Benefits of Intellectual Property Protection in Developing Countries*, Geneva, 2000, at 83.

²⁵³ *Emphasis added.*

ABS goal to those of conservation and sustainable use (in turn, facilitated by effective ABS).²⁵⁴

Equally important is that, unlike the CBD, which deals with traditional knowledge only in relation to *in situ* conservation and sustainable use of biodiversity (CBD article 8(j)), the NP extends its scope (article 3) also to TK associated with the management of genetic resources. The rationale behind this choice is that TK related to genetic resources is often to attract the interest of bio-prospectors who see behind it the potential of certain resources and their properties and, as such, cannot be dealt with separately from ABS.

The Contracting Parties of the Nagoya Protocol are obliged to take requisite legislative, administrative, or policy measures to guarantee that benefits arising from the use of traditional knowledge associated with genetic resources are fairly and equitably shared with the holders of such knowledge on mutually agreed terms, according to article 5, paragraph 1²⁵⁵. The same article, at paragraph 2, makes reference to the ‘established rights’ of indigenous and local communities over their resources. Although the specification serves to reaffirm that the NP does not intend

²⁵⁴ The same emerges from NP article 9 (general clause).

²⁵⁵ The same goes for access to the traditional knowledge associated with genetic resources as provided by Nagoya Protocol under art. 7.

to create additional rights in favour of these groups, it does not appreciably diminish the innovation brought in by this obligation that is an absolute innovation in the realm of international law²⁵⁶.

Protocol's article 6 then defines the rules on access to genetic resources. Such provision constitutes a great departure from the obligations that were previously agreed upon under the Convention. Article 6, in fact, can be regarded as an 'enabling provision', containing the elements that national laws and national policy instruments shall respect in terms of the so-called 'prior informed consent' (commonly referred to as PIC procedure). In this regard, article 6, paragraph 3, specifies, *inter alia*, that national legislative measures shall provide for 'legal certainty'²⁵⁷, for 'information on how to apply for the prior informed consent'²⁵⁸, the provision for the granting of clear, transparent and cost-effective written decisions by competent national authorities²⁵⁹ as well as

²⁵⁶ See E. Morgera, E. Tsioumani (*above* note 207), cit., at 14. It is highlighted that much might depend on how courts will interpret this new obligation in the light of human rights law and international law instruments on indigenous people.

²⁵⁷ See Nagoya Protocol (NP), article 6, paragraph 3, letter a).

²⁵⁸ *Ibidem*, letter c).

²⁵⁹ *Ibid.* Letter d).

for the establishment of ‘clear rules and procedures for requiring and establishing mutually agreed terms’²⁶⁰.

Concerning compliance, the NP obliges its Contracting Parties, to take ‘appropriate, effective and proportionate legislative, administrative or policy measures’ to guarantee that genetic resources and TK are not used within their jurisdiction in breach of the legislation and requirements of the Parties from which they were collected (NP articles 15 and 16). This provision makes compliance with the NP’s requirements dependent on the full implementation of the national legislation of both the country where the resources are originated and that where the resources are actually used.

As for the monitoring on the use of genetic resources at national level, the NP introduced the creation of checkpoints (article 17). Their creation is mandatory for each NP Contracting Parties, although they are free to decide how and where establishing them according to their national circumstances. Under NP article 13, checkpoints will be the designated entities for the release of ‘internationally recognized certificates of compliance’ (they will ensure, to the international level, that resources

²⁶⁰ *Ib.* Letter e).

and TK are accessed in accordance with PIC and mutually agreed terms reached at national level)²⁶¹.

The introduction of innovative ‘right-based’ obligations has made the CBD system of governance the preferred international venue of indigenous people and local communities, (mostly in developing countries they have managed to influence their governments during the negotiation the lead to the conclusion of the Nagoya Protocol). However, much still waits to be seen, as the Nagoya Protocol has not entered into force at the time of writing nor the implementation challenges that it poses have obviously yet occurred.

2.7. The practice of States in the implementation of CDB article 8 (a) to (e)

The implementation of MEAs is normally carried out on two different levels and the CBD is no exception in this regard. Implementation at international level and implementation at national level complement each other

²⁶¹ The information contained in such certificated will be gathered and directed to the ABS clearing house, which will form part of the Clearing house foreseen by the Convention (see CBD art. 18, para. 3).

and constitute the two sides of a same coin. At international level the COP, besides monitoring on CBD compliance by Contracting parties at national level, functions as a community of interest of collective nature as it may take decisions that can either enhance the level of cooperation amongst Contracting parties or further specify their commitments established under the Convention.

It is at national level, however, that CBD commitments materialize and in this process States are free to pursue independently the twofold objective of the Convention relying on the policy, legal and administrative arrangements they prefer.

Given the magnitude of the issues covered by the CBD and the vast number of Contracting parties, first of all our choice will be to analyze the developments achieved in twenty years by the COPs regarding CBD article 8 on *in situ* conservation. Then the focus will shift to State practice at national level on this matter. In consideration of the vast number of Contracting Parties an overarching review of the practice would be out of the scope of this research; however, the practice of a narrow sample of Parties, namely, Italy, Brazil, China and South Africa, will be analysed with the view to see, first of all, how these

States variously comply with CBD and implement its provisions on *in situ* biodiversity conservation and, secondly, whether or not national implementation is carried out having regard to the developments agreed upon by the COP at international level²⁶². Such a study will be ultimately instrumental to the comparison and assessment of the international regime on biodiversity conservation with the legislative framework that is currently complied with by the Member States of the European Union in order to protect and conserve biodiversity in Europe.

2.7.1. COP practice on the field of in situ conservation: an analysis of the relevant decisions

The Conferences of the Parties (COPs) of international environmental agreements (MEAs) can undoubtedly be regarded as the main *fora* that guarantee the functioning of these regimes, as they provide Contracting Parties with the

²⁶² The choice of these countries is entirely personal. Italy, the country of origin of the author, has been picked as the exam of its NBSPA could be of interest when compared to the EU Strategy on Biodiversity (*infra* § 3.2.3.) and also when opposed to the strategic documents adopted by the three newly emerged/emerging powers that have been contextually selected, each from a diverse continent (Asia, Latin America and Africa).

occasion of exchanging views on an infinite number of policy, legal, and institutional arrangements that can be proposed in order to trigger a better implementation of the provisions contained in their underlying agreements.

The range of COP activities has been object of relevant studies which tried to answer to the following questions: why COP activities matter? What kind of sources of international law is produced through COP activities? What are the legal implications of COP activities?²⁶³ And, for our ends – more interestingly – what is the relationship of COP activities and the original international legal obligations of the Contracting Parties to the underlying MEAs?²⁶⁴ We are of the view that, as efficaciously formulated by a scholar of IEL who has conducted an analysis of COP activities drawing a general distinction between ‘consent-based’ (subject to qualified majority

²⁶³ See J. Brunnée, ‘Reweaving the Fabric of International Law? Patterns of Consensus in Environmental Framework Agreements’, in J. Brunnée, *Developments of International Law in Treaty Making*, 2005, at. 101 ff; J. Brunnée, ‘COPing with Consent: Lawmaking Under Multilateral Environmental Agreements’, in (2002) 15, *Leiden Journal of International Law*, at 1 ff; R.R. Churchill, G. Ulfstein, ‘Autonomous Institutional Arrangements in Multilateral Environmental Agreements: A Little-Noticed Phenomenon in International Law’, in (2000) 94 *American Journal of International Law*, at 623.

²⁶⁴ See A. Wiersema, ‘The New International Law-Makers? Conferences of the Parties to Multilateral Environmental Agreements’, in (2009) 31 *Michigan Journal of International Law*, at. 231-287.

votes) and ‘*consensus*-based’ COP activities (collectively adopted with no expressed opposition):

‘*Consensus*-based COP activity results in resolutions and decisions by the parties to the underlying treaty that can influence the substantive obligations of the parties in numerous ways, affect the internal working of the treaty regime and its institutions, and serve efforts to enhance effectiveness of the treaty. [...] this activity does not result in resolutions or decisions that can be divorced from the underlying treaty. These resolutions and decisions are tightly connected with the original treaty and enrich it by thickening the parties’ obligations²⁶⁵.

In other words, we consider that COP decisions and recommendations agreed upon by the entire community of the Contracting Parties of the CBD cannot be regarded as a residual phenomenon. On the contrary, they provide useful insight on the extent to which broadly defined legal obligations are internationally perceived and, at the same time, give further details on what these same obligations entail in practical terms (as it was said somewhere else,

²⁶⁵ *Ibidem*, at 245.

they ‘thicken’ the law). Plus, we embrace the stance of other IEL authors when affirming that

‘the CBD COP’s normative activity is testimony to an intense, evolving and creative interpretation of the convention by the international community’²⁶⁶

On this basis, we will try here to elaborate critical overview of relevant COP decisions in the field of biodiversity conservation, to see if and how they are supportive of the obligations set under CBD article 8. We will start this task from the analysis of the most recent and comprehensive document adopted in order to enhance the implementation of the CBD as a whole, namely, the ‘Strategic Plan for Biodiversity 2011-2020’²⁶⁷.

²⁶⁶ See E. Morgera, E. Tsioumani (*above* note 207), *cit.*, at 12.

²⁶⁷ See CBD COP Decision X/2 on the ‘Strategic Plan for Biodiversity 2011-202’, of 29 Oct. 2010.

*2.7.2. The Strategic Plan for Biodiversity 2011-2020
and the Aichi Biodiversity Targets*

By adopting the Strategy, CBD Contracting Parties wanted to equip the international community with a ‘useful flexible framework that is relevant to all biodiversity-related conventions’. The Strategic Plan, adopted once the persistence of the plague of biodiversity loss had been confirmed by the third Global Biodiversity Outlook issued in 2010²⁶⁸, has been adopted by the COP along with its ‘Aichi Targets’²⁶⁹.

The Strategic Plan is premised on the idea that biodiversity allows ecosystems functioning and, in turn, triggers provisions that are essential for human well-being. The purpose of the Strategic Plan is ‘to promote effective implementation of the Convention through a strategic approach, comprising a shared vision, a mission and strategic goals and targets’.

²⁶⁸ *Ibidem*, (points 3-4). A significant reduction to the current rates of biodiversity loss was deemed essential by the CBD COP (this emerges by the review of many COP decisions and recommendations) also for the achievement of the Millennium Development Goals, including poverty eradication. The 3rd Global Biodiversity Outlook (hereinafter GBO3). Available at: <http://www.cbd.int/gbo3/>.

²⁶⁹ See CBD COP, Decision X/2 (*above* note 267). The ‘Aichi Targets’ are included in the new Strategy and they serve as benchmarks for measuring its progressive implementation.

The Strategy, as other major COP decisions, is also viewed as a mechanism that is supportive for the progress towards the realization of the Millennium Development Goals (MDGs), adopted in 2000 by the UN General Assembly. In particular the Strategy is premised on the idea that the conservation and sustainable use of biodiversity can foster the eradication of poverty²⁷⁰.

According to its vision, the Strategic Plan aims at building a world where, by 2050, mankind would live ‘in harmony with nature’ and biodiversity would be ‘valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people’. The mission of the Strategic Plan, in turn, is to

²⁷⁰ UN GA Resolution A/RES/55/2 of 18 Sept. 2000, on ‘The United Nations Millennium Declaration’. The document is available at: <http://www.un.org/millennium/declaration/ares552e.pdf>. Within the Declaration, subparagraph IV (‘Protecting Our Common Environment’), point 2, (3rd intent) is focused on the implementation of the CBD in Africa. The realization of MDGs was the subject of the ‘Road Map towards the Implementation of the United Nations Millennium Declaration’ (UN Doc. A/56/326 of 6 Sept. 2001) and were later endorsed by the International Conference on Financing for Development (Monterrey, 2001) and by the WSSD (Johannesburg, 2002). Amongst the MDGs, of interest is Goal 7 on ‘environmental sustainability’. For progress on the implementation of MDGs, see <http://www.mdgmonitor.org/>. For a legal comment on biodiversity conservation as a premise for the attainment of MDGs, see C. Lasén Díaz, ‘Biodiversity for Sustainable Development: The CBD’s Contribution to the MDGs’, (2006) 15(1) in *Review of Environmental Community & International Environmental Law*, at 30-38.

‘take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet’s variety of life, and contributing to human well-being, and poverty eradication’.

For achieving a positive outcome, the Strategic Plan prescribes the adoption of what it calls ‘actions at multiple entry points’ which, in turn, are reflected in the strategic goals that follow: i) action to address the underlying causes of biodiversity loss, ii) immediate action to decrease the direct pressures on biodiversity, iii) direct action to safeguard and restore biodiversity and ecosystem services, iv) efforts to ensure the continued provision of ecosystem services and ensure access to these services and v) enhanced support mechanisms for capacity building, the generation, use and sharing of knowledge, the access to the necessary financial and other resources.

Each of the five goals here outlined has been further specified by four technical or policy sub-targets, the so-called ‘Aichi Biodiversity Targets’ which can serve both the attainment of global as well as national and regional

targets to be realized either by 2015 or by 2020, as specified on a case-by-case basis.

The Aichi Targets could not fall short of defining some goals in the field of biodiversity conservation. In this regard, particularly significant is Strategic Goal C, on the improvement of the status of biodiversity by safeguarding ecosystems, species and genetic diversity.

This overall objective can be achieved if CBD Contracting Parties strive for reaching three distinctive conservation targets. First of all, they should ensure that at least 17 per cent of terrestrial and inland water areas, as well as 10 per cent of coastal and marine areas are effectively conserved and equitably managed (Target 11). The global system of protected areas so established or enhanced should comprise ‘ecologically representative’ but also ‘well-connected’ biodiversity hubs. ‘Area-based’ conservation measures are further indicated as effective means of ensuring the achievement of this targets as well as their integration into the wider landscapes and seascapes²⁷¹.

²⁷¹ An ‘Explanatory Guide on Target 11 of the Strategic Plan For Biodiversity’ is available at: <http://www.cbd.int/protected/>. The document reveals, *inter alia*, that for the GEF 5 funding cycle (2010-2014) \$700 million USD are specifically allocated to the conservation and management of protected areas, amounting to 54% of the GEF 5 biodiversity portfolio. See ‘Explanatory Guide’ (*above*), at 25.

Under Target 12, the Contracting Parties of the CBD agreed also to undertake efforts aimed at preventing the extinction of known threatened species and to improve and sustain the conservation of species with a conservation status that is currently in decline by 2020²⁷².

Target 13, then, tackles the important role that agriculture and farming can play for the conservation of biodiversity as it required CBD Contracting Parties to maintain the genetic diversity of cultivated plants, farmed or domesticated animals, their wild relatives and, in general, all socio-economically and culturally valuable species by 2020. Their genetic erosion should be targeted and minimized through the development and adoption of strategies for the safeguard of genetic diversity.

As biodiversity conservation is concerned, also Target 18, pursuant to Strategic Goal E on the ‘enhanced implementation through participatory planning, knowledge management and capacity building’ falls into the picture. In fact, beside sustainable use, it also focuses on conservation. The latter, besides being achieved by the implementation of in situ measures of conservation, can be

²⁷² For the Strategy Plan is conceived as tool that can serve the attainment of objectives established under MEAs other than the CBD, Target 12 could clearly inspire actions from CMS, CITES and other regional/sectorial instruments for the protection of particularly endangered species/habitats.

supported by helping indigenous people and local community to preserve their traditional knowledge, their innovations and their practices that for centuries have been helpful in maintaining and enhancing biodiversity²⁷³.

The Strategic Plan described here in order to highlight the importance that CBD Contracting Parties attach to conservation, in general, and *in situ* conservation measures, in particular, is by no means detached by the structure of the CBD and its functioning.

At COP 10, in fact, it was agreed by consensus that the Plan would ‘be implemented primarily at national or sub-national level, with supporting action at the regional and global levels’. Section V of the Strategic Plan, on ‘Implementation, Monitoring, Review and Evaluation’ foresees domestic measures of implementation that will be financially supported through the mechanism provided for under CBD article 20. In other words, the Strategic Plan will need to be translated into national strategies; these

²⁷³ Target 18 is in line with CBD art. 8(j) on the contribution made by indigenous people in terms of biodiversity sustainable use and management. The sensitiveness of CBD Contracting Parties to the theme of indigenous people is, to a certain extent, visible by the reference to the UN Declaration on the Rights of Indigenous People, recalled at point 4 (UN GA Resolution A/RES/61/295 of 13 Sept. 2007). Articles 24 to 30 of the Declaration relate to land use and the protection of the environment. For an authoritative comment, M. Davies, ‘Indigenous Struggles in Standard Setting: The United Nations Declaration of the Rights of Indigenous People’, in (2008) 9 *Melbourne Journal of International Law*, at 439-471.

will have to be tailor-made according to the individual circumstances of each State (needs, capabilities and priorities). Developing country Parties, in particular, will receive financial aid for its implementation²⁷⁴. But beside national strategies and action plans, the Strategic Plan for Biodiversity 2011-2020 also identifies other tools that can supportively help the attainment of its goals, like the Programmes of Work adopted by COPs and revised on constant basis²⁷⁵.

The Strategic Plan has been criticized for not having included any binding commitment on biodiversity conservation²⁷⁶. However, such observation should be rejected for a number of reasons. Firstly, the Strategic Plan embraces each and every one of the three objectives of the CBD as well as their related thematic areas. Secondly, as a tool that ‘thickens’ the law but refrain from establishing additional and autonomous legal obligations for CBD Contracting Parties, it should be plainly seen as a policy tool, adopted by consensus by the CBD Community of

²⁷⁴ See Strategic Plan, paragraph 14: ‘National biodiversity strategies and action plans are key instruments for translating the Strategic Plan to national circumstances, including through the national targets, and for integrating biodiversity across all sectors of government and society’.

²⁷⁵ List of updated programmes, at: www.cbd.int/programmes.

²⁷⁶ See S. Harrop, ‘Living in Harmony with Nature? Outcomes of the 2010 Nagoya Conference of the Convention on Biological Diversity’, in (2011) *Journal of Environmental Law*, at 122.

Parties, which will help them in implementing the Convention during the next decade. Thirdly, the Strategic Plan is not a substitute of national implementation. CBD compliance at national level shall be ensured through the adoption of measures to be ‘inspired’ by the Strategic Plan but that, at the same time, do not find in the Strategic plan their ultimate definition.

Despite the Strategic Plan for Biodiversity 2011-2020 being a flexible instrument on which Contracting Parties can rely for realizing a better national implementation of the CBD, in our view the most evident shortcoming of such a document is given by a too confident use of quantitative targets²⁷⁷. If one considers the outcome of the previous much heralded 2010 Biodiversity Targets, little faith can be given to the efficacy of such targets. On the long run, this strategy could have the effect of diminishing the legal force of CBD provisions as well as the credibility of CBD policy tools, hence increasing the ‘aspirational’ character of the whole Convention.

²⁷⁷ Others, on the contrary, have underlined that the reliance on quantitative targets, if not too confident, is at least too limited. In this regard, see E. Morgera, E. Tsioumani (*above* note 219), *cit.*, at 21.

2.7.3. COP Decisions on Protected Areas

The CBD has attributed primary importance to the theme of *in situ* conservation of biodiversity, as emerges from the reading of CBD article 8 (a) to (e). Notwithstanding being the foremost method by which *in situ* conservation is realized, namely, the theme of protected areas awaited a long time to be addressed at COP level, probably for lack of interest from the Community of Parties as to receiving further guidance on this matter. As suggested by the doctrine, in fact, this theme ranks amongst ‘the less glamorous subjects of international environmental law’²⁷⁸. It was only at COP 7 that a Programme of Work on Protected Areas was formally adopted by consensus²⁷⁹ *inter alia* with the aim of increasing the awareness of the benefits stemming from protected areas in terms of health, water, fisheries, climate change adaptation and mitigation

²⁷⁸ See A. Gillespie, ‘Obligations, Gaps and Priorities Within the International Regime for Protected Areas’, in (2006) 19 *Georgetown International Environmental Law Review*, at 1. It is also suggested that it should not be so because, unlike more threatening topics, protected areas provide protection to ecosystem and species, they are a tangible (not a mere theoretical construct) and they are foreseen by many MEAs.

²⁷⁹ CBD COP, Decision VII/28, on ‘Protected Areas (Articles 8 (a) to (e)).’

In the preamble of Decision VII/28 (to which the Programme is annexed) COP confirmed the priority of establishing and maintaining systems of protected areas and areas where special measures need to be taken, as well as the necessity to build these systems in respect of CBD article 8. More importantly, it is stated that such arrangements are

‘essential for achieving, in implementing the ecosystem approach, the three objective of the Convention and the Plan of Implementation of the World Summit on Sustainable Development, and to achieve sustainable development and the attainment of the Millennium Development Goals’²⁸⁰.

In the light of this, having registered that only 11 per cent of world’s land surface enjoys a protected *status*, Decision VII/28 also stressed the importance of filling the gaps within the current systems of protected areas, given that they are not always representative of the ecosystems of the Earth nor they adequately guarantee the

²⁸⁰ Linkage to MDGs, the Johannesburg WSSD and poverty eradication is also addressed by the Programme itself. See ‘Programme of Work on Protected Areas’ (Annex to COP Decision VII/28), point 5.

preservation of critical habitat types, biomes and threatened species.

The overall objective of the Programme of Work was to create – by 2010 for terrestrial and by 2012 for marine areas – a network of ‘comprehensive, effectively managed, and ecologically representative national and regional systems of protected areas’. Such goal, however, as reality has shown, has not been reached yet and this missed opportunity/lack of political will has contributed, at least from an institutional or administrative perspective, to make it harder to reduce the current rate of biodiversity loss.

In order to support the implementation and review of this Programme of Work, COP 7, in line with the practice adopted in relation to other programmes, decided to establish an open-ended working group entrusted with the tasks of helping the Parties in implementing and reviewing the Programme²⁸¹. Furthermore, COP 7 expressed its favour to the development of a unique, homogeneous and standardized international classification of protected areas, appreciated the efforts of the IUNC World Commission on Protected Areas and invited UNEP World Conservation

²⁸¹ *Ibidem*, para. 25. Furthermore, the COP decided to assess the Programme at each meeting of the Parties until 2010 (para. 28).

Monitoring Centre to further develop a World Database on Protected Areas²⁸².

The Programmes of Work opens by recognizing the interrelationship that undergo between the three objectives of the CBD, included between *in situ* conservation on the one hand, and the proper maintenance of sufficient natural habitat on the other. It further specifies that

‘protected areas, together with conservation, sustainable use and restoration initiatives in wider land-and seascape are essential components in national and global biodiversity conservation strategies’²⁸³.

The Programme of Work is based on the ecosystem approach which provides a ‘framework within which the relationship of protected areas to the wider landscape and seascape can be understood’, while recognizing that ‘the goods and services flowing from protected areas can be valued’ (point 8). The programme is also premised on the

²⁸² *Ibid*, paras. 31-32.

²⁸³ See ‘Programme of Work on Protected Areas’, point 1. The point in discussion underscores the potential benefits of a sufficiently large, well-planned and well-managed global system of protected areas (e.g. poverty alleviation, job opportunities, livelihood to people living in and around them, resilience to climate change, environmental education, recreation, tourism).

belief that *in situ* conservation depends on the maintenance of sufficient natural habitats (point 1) and that protected areas should be sufficiently large, well-planned and well managed in order to contribute to biodiversity conservation in a meaningful manner (point 2).

With a view of boosting either the adoption of *in situ* conservation measures and the rise of representative protected areas at national, regional and global level, the Programme of Work also stresses the need of adequate funding. In this regard, it states that:

‘Funding for this purpose generally should consist of a mixture of national and international resources and include the whole range of possible funding instruments, such as public funding, debt for nature swaps, private funding, remuneration from services provided by protected areas, and taxes and fees at the national level for the use of ecological services’²⁸⁴.

²⁸⁴ *Ibidem*, point 5. For a typology of public and private legal arrangements on nature conservation, see N. Affolder, ‘Transnational Conservation Contracts’, in (2012) 25 *Leiden Journal of International Law*, at 443-460. Amongst the questions posed by the utilization of market-based and private mechanisms to offset biodiversity loss, one can mention the criticalities inherent to the establishment of a tradeable currency (i.e. reduction units), the difficulties of considering all the variables to be included in the calculations (time and space-

As for the Strategic Plan for Biodiversity 2010-2020, the COP followed in this case the pattern of establishing an overall goal that is further specified by the provision of instrumental goals with a more limited scope. The Programme, featured by eminently policy content, is structured in four interlinked ‘programme elements’ that are in turn elaborated in ‘goals’ that are achievable through the implementation of ‘suggested activities’ on which the Community of the Parties has agreed upon: i) direct actions for planning, selecting, establishing, strengthening, and managing protected area systems and sites, ii) governance, participation, equity and benefit sharing, iii) enabling activities, iv) standards, assessment and monitoring.

At Nagoya COP 10, the theme of protected areas was again on the table²⁸⁵. On that occasion, CBD COP fully embraced the recommendation of the SBTTA that followed an in-depth review of the implementation of the

wise) as well as the ethical dilemma of employing commercial schemes for biodiversity conservation (defined as a ‘common concern of humankind’ under the CBD). See, the reflections of C. Reid, ‘Between Priceless and Worthless: Challenges in Using Market Mechanisms for Conserving Biodiversity’, in (2012) *Transnational Environmental Law*, at 1-17.

²⁸⁵ ‘Programme of Work on Protected Areas’, point 28.

Programme of Work on protected areas²⁸⁶. Whereas in 2004, the COP focused more on the ‘tools’ just listed with a view to expand the global system of protected areas, the review of the programme is featured by an emphasis on how to strengthen implementation at various scales (national²⁸⁷, regional²⁸⁸ and global²⁸⁹) but, more relevantly, by a major attention to cross-cutting and thematic issues, such as sustainable finance, climate change, management effectiveness, invasive alien species management, marine protected areas, inland-water protected areas, restoration of ecosystems and habitats of protected areas and, finally, the need of cost and benefit analysis on protected areas)²⁹⁰.

²⁸⁶ See CBD/SBSTTA, Recommendation XIV/4, on the ‘In-depth-review of the implementation of the programme of work on protected areas’, (followed by the formal adoption of CBD COP 10, Decision X/31, on ‘Protected Areas’).

²⁸⁷ To his end, CBD Parties are invited, among others, to consider standard criteria for the identification of sites of global biodiversity significance (e.g. IUNC Red List of Threatened Species, UNESCO Man and Biosphere processes, etc.), point 1-h).

²⁸⁸ CBD COP, Decision X/31. It recalls regional initiatives such as the Micronesian Challenge, the Caribbean Challenge, the Dinaric Arc Initiatives, the Amazonian Initiative, the Coral Triangle Initiative, the EU Natura 2000 network (*infra* § Chapter 3), the Carpathian Network of Protected Areas and so forth (point 3, note 67).

²⁸⁹ To this end, the Executive Secretary is asked, among others, to continue the cooperation with biodiversity-related MEAs, regional and sub regional agreement as well as with the IUNC World Commission on Protected Areas. (point 7-a).

²⁹⁰ Under CBD COP 10, Decision X/31, these are labelled as ‘issues that need greater attention’. Amongst these issues sustainable finance,

2.7.4. National implementation in the field of in situ conservation: a sample overview on the main initiatives undertaken by Italy, Brazil, China and South Africa

According to CBD article 6, Contracting Parties of the Convention are required to submit their National Biodiversity Strategies and Action Plans (hereinafter NBSAPs) for consideration during regularly occurring COP meetings. These tools are largely retained to be the main instruments, together with national reports, for assessing the implementation of the CBD at national level. At the time of writing, the 91% of Contracting Parties (175 countries) has complied with the requirements of

climate change and marine protected areas stand out as needing the most action: as for ‘sustainable finance’, decision X/31, (at point 9, letter c)) invites the Parties to developing additional methods to distribute financial assistance on the basis of P. ten Brink et al., *TEEB – The Economics of Ecosystems and Biodiversity for National and International Policy-makers. Summary: Responding to the Value of Nature*, 2009 (available at www.teeb.web.org). Parties are required to identify protected areas that are important for biodiversity but that can also function as carbon sequestration sites and increase resilience to climate change (point 13-d). As for marine protected areas (MPAs), Decision X/31 acknowledging ‘the absence of a global process for designation of such areas’ (point 22), encourages Parties (point 21) to cooperate in the wake of the processes commenced by the UN General Assemble (see UN GA Resolution A/RES/59/24 on ‘Oceans and the Law of the Sea’, particularly, para. 72, where the need to establish networks of MPAs on the basis of the ‘best scientific information available’ and ‘consistent with international law’ is reaffirmed.

article 6²⁹¹. The following paragraphs will be therefore devoted to see how Contracting Parties, endowed with different social, economic and environmental assets and problems, comply with articles 6, but most importantly, which strategies, programmes, projects, policy and legal tools they do employ in order to domestically implement CBD article 8 (a) to (e) on the *in situ* conservation of biodiversity.

2.7.4.1. Italy

The latest '*Strategia Nazionale per la Biodiversità*' (Italy's NBSAP) was adopted by the Permanent Conference for the Relationships between the Italian State, its Regions and Autonomous Provinces, convened in October 2010²⁹². The Italian NBSAP opens by recalling

²⁹¹ As of 31 May 2012, Afghanistan, Brunei Darussalam, Haiti, Libyan Arab Jamahiriya, Liechtenstein, Malta, Monaco, Myanmar, Nauru and Tuvalu have their respective NBSAPs under development while Antigua Barbuda, Cyprus, Greece, Iceland, Iraq, San Marino, Somalia and the United Emirates States, there is no recent information about the status of their NBSAPs. Information available at: <http://www.cbd.int/nbsap/>.

²⁹² Received by the CBD Secretariat on October 2011, the Italian National Biodiversity Strategy and Action Plan are available at: <http://www.cbd.int/doc/world/it/it-nbsap-01-it.pdf>.

that Italy took the lead within the framework of the G8 in integrating biodiversity protection into international economic and developmental policies²⁹³. The focus then shifts to the EU framework (within which the Italian initiatives are necessarily inserted)²⁹⁴ and to biodiversity protection as conceived into the Italian constitutional system²⁹⁵.

As for the latter layer, the Italian NBSAP expressly affirms that its implementation depends on the coherence that national and regional operators shall guarantee between the prescriptions contained into regional programmes on biodiversity and by the integration of biodiversity targets into other sectorial environmental

Italy ratified the CBD through the adoption of a Law n. 124 of 14 Feb. 1994, as specified by the Italian NBSAP. For a comment on the protection of biodiversity as conceived by the Italian legal system, refer to F. Dinelli, 'Tutela della biodiversità e protezione della natura', in G. Rossi (ed.) *Diritto dell'ambiente*, Torino, 2008, at 322-343.

²⁹³ In April 2009, Italy hosted a G8 Summit on the Environment, where a special session on the theme of Biodiversity after 2010 took place. In that occasion G8 Ministries of the Environment adopted the Syracuse Charter on Biodiversity, firstly endorsed by Italy and entirely focused on how to streamline biodiversity conservation into national policies of G8 members.

²⁹⁴ *Infra* § 3.

²⁹⁵ Title V of the Italian Constitution attributes to the State an exclusive and absolute legislative competence for the protection of nature and ecosystems (Cost. Art. 117, 2nd intent), while Regions and minor local authorities are attributed with implementation and enforcement competences.

plans and programmes²⁹⁶. According to the Italian policy document, effective implementation will also be dependent on the degree of actual operationalization of the monitoring mechanisms foreseen by the Strategy. Amongst others, the Italian NBSAP, calls for the establishment of an *Osservatorio Nazionale sulla Biodiversità*²⁹⁷. The organism, chaired by the Italian Ministry for the Environment, would be composed by observers and/or representatives from Biodiversity Regional Offices, the ISPRA (the Italian Environmental Authority) and chosen among the management of protected areas.

In line with the CBD Strategic Plan for Biodiversity 2011-2020, the Italian NBSAP will be object of an in depth review by 2015. Biennial reports on the implementation of the NBSAP will also be prepared (the first of which is expected to be issued in 2013).

The Italian NBSAP has set three strategic goals concerning the results to be achieved by 2020. These goals

²⁹⁶ Ministero dell’Ambiente, della Tutela del Territorio e del Mare, ‘*La Strategia Nazionale per la Biodiversità*’, at 7.

²⁹⁷ According to the Italian NBSAP, this organ will provide scientific advice to a Committee for the implementation of the strategy composed of representatives of the more than 500 individuals belonging either to the academia, the scientific community or to NGOs and other groups that contributed in drafting the Strategy in the biennium 2008-2009.

respectively are: 1) the conservation of biodiversity, 2) a sensible reduction of climate change impacts on biodiversity within the Italian territory and, finally, 3) the integration of biodiversity conservation into broader economic and social policies²⁹⁸. However, we will circumscribe the analysis of this document to two of the fifteen work areas indentified, namely ‘species, habitat and landscape’ (work area 1) and ‘protected area’ (work area 2), as the areas toward which the Italian legal and policy initiatives on biodiversity conservation – the first of the goals singled out above – have been mainly channelled.

From the reading of work area 1, on ‘species, habitats and landscape’, it emerges that Italy has a great responsibility in conserving biodiversity as it hosts almost 58 thousands animal species (the highest numbers among EU countries), the 30% of which is endemic. In relation to plant species, the situation does not change in a meaningful manner since it is said that the country hosts the most diversity in flower species of the whole

²⁹⁸ The Italian Strategy for Biodiversity is then structured on three main thematic areas (biodiversity and ecosystem services, biodiversity and climate change and, biodiversity and economic policies). In turn, the analysis of national initiatives is divided in 15 work areas.

Europe²⁹⁹. At the same time, however, work area 1 identified a high number of threats looming on Italian biodiversity. The list of such threats is very extensive, ranging from illegal hunting practices to climate change, from water pollution to the realization of infrastructures (e.g. wind parks, electrical systems or large-scale photovoltaic installations) in the surroundings of sites of extreme value in terms of biodiversity dynamics (e.g. seasonal migrations, reproduction and breeding of threatened species).

In order to tackle these threats, work area 1 formulates, again in line with the CBD key strategic documents, a set of sub-targets to be achieved by 2020. However, instead of just formulating these sub-targets, the Italian document advances also some concrete priority areas on which major efforts ought to be taken.

In this regard Italy decided to try and, consequently, to put into operation a system for monitoring the conservation *status* of habitats and species hosted on its territory by the end of 2012. Furthermore, the Italian Government endorsed the creation of a National Network for Biodiversity and, *inter alia*, the introduction of a ban on lead shots, commonly used by hunters, within the

²⁹⁹ See Italian NBSAP, at 17.

perimeters of Special Protection Areas (SPAs) and wetlands established under the AEWA agreement³⁰⁰.

Work area 2 recognized that recent conceptual and policy developments and new cultural, scientific and political experiences have deeply modified the mission of protected areas all over the world. On the subject of protected areas, Italy adopted Framework Law N° 394 of 1991. According to the Italian NBSAP, nowadays Italy ranks first in Europe for the number of protected areas that have been instituted from 1991 onwards, filling the gap that had previously forced the country to lag behind all other EU countries³⁰¹.

Amongst the criticalities that undermine the functioning of the Italian network of protected areas, the NBSAP significantly indicates the missed recognition of the opportunities and development incentives offered by such areas. It is further stated that this lack of interest is partially due to the diffused behaviour of public administrations, local groups and NGOs, frequently ‘worried’ only with the enforcement of prohibitions linked

³⁰⁰ *Ibidem*, at. 23. On Special Protection Areas (SPAs) see *infra* § 3.3. On Afro-Eurasian Waterbirds Agreement (AEWA), see *infra* § 1.5.3.

³⁰¹ Data updated to 2010 from the 6th *Elenco Ufficiale delle Aree Protette*, counted a total of 871 protected areas covering a surface of 3.163.591 hectares (10,42% of national territory) and 2.853.034 hectares on the sea.

to the conservation of such areas. According to the Italian Biodiversity Strategy, this problem should be overcome by the realization of priority measures as, for instance, giving incentives to national parks and favouring their adoption of the European Charter on Sustainable and Responsible Tourism³⁰².

The major criticality that emerges from the Italian NBSAP, however, is the apparent lack of *ad hoc* domestic financial instruments for biodiversity protection³⁰³. This omission is likely to put into perspective the weight of the Strategy as a viable informative tool. It seems, in fact, that the implementation of the CBD on the Italian soil is not backed by the availability of any domestic financial instrument.

³⁰² See Europark Federation, the ‘European Charter on Sustainable and Responsible Tourism’, available at www.europark.org. The Charter is a policy document endorsed by European ENGOs. It was firstly published by the *Fédération des Parcs naturels régionaux de France* in 1999 and subsequently revised and updated by the Europark Federation in 2007 and 2010.

³⁰³ See Italian NBSAP, at 11.

2.7.4.2. Brazil

Brazil submitted its latest NBSAP in April 2008, well before the publication of the third Global Biodiversity Outlook (GBO3) and the subsequent diffusion of data confirming the failure of the international community to halt the accelerating rate of biodiversity loss. For this reason, unlike the Italian NBSAP, transmitted to the CBD Secretariat in late 2010, the Brazilian one consists of a table³⁰⁴ defining seven national targets for biodiversity in 2010, in line with the global ones that had been previously approved by CBD COP³⁰⁵.

From the table presented by Brazil, it emerges that the country defined its priorities in every focal area of the

³⁰⁴ Brazilian Ministry of the Environment, '*Tabela de Metas Nacionais de Biodiversidade para 2010 e correspondência com as Metas Globais aprovadas pela Conferência das Partes da Convenção sobre Diversidade Biológica*'. The Brazilian NBSAP is available at: <http://www.cbd.int/doc/world/br/br-nbsap-v2-pt.pdf>. The 51 targets here singled out were approved by CONABIO (National Biodiversity Commission) in 2006.

³⁰⁵ In particular, the Brazilian NBSAP is structured on the basis of the indications provided by those CBD COP decisions that were instrumental for the implementation of the *Strategic Plan for Biodiversity 2002-2010* (annexed to COP Decision VI/26), notably, COP 6, Decision VI/9 on the 'Global Strategy for Plant Conservation', COP 7, Decision VII/30 on the 'Strategic Plan: future evaluation of progress' and COP 8, Decision VIII/15, on the 'Framework for monitoring implementation of the achievement of the 2010 target and integration of targets into the thematic programmes of work'.

CBD and, in most cases, it decided to couple aspirational targets with figures and percentages. The second element of the Brazilian NBSAP is devoted to biodiversity conservation (*Componente 2 da PNB – Conservação da biodiversidade*). This second element is constructed by fourteen sub-targets that aimed at realizing four different and inter-linked objectives: 1) promoting the conservation of the biological diversity of ecosystems, habitats and biomes; 2) promoting the conservation of species diversity; 3) promoting the conservation of genetic diversity and 4) maintaining and enhancing the functions of ecosystems services and their life-supporting provisions. In the following subparagraphs, a sample recognition of the most salient aspects of the Brazilian documentation will be carried out with a view of highlighting the peculiarities of the Brazilian efforts in the field conservation.

Under objective 1, Brazil had established sub-target 2.1, according to which by 2010 at least the 30% of the Amazonian territory and the 10% of other biomes, including coastal and marine areas would have been effectively conserved by their inclusion within the *Unidades de Conservação do Sistema Nacional de*

Unidades de Conservação, (Units of the Brazilian National System of Conservation).

Under objective 2, the goal of conserving the totality of Brazilian threatened species stands out as the most ambitious one (sub target 2.5), followed by *ex situ* conservation of the 60% threatened plant species through the creation of collections and the conservation of 10% of plant species threatened by extinction by the implementation of *in situ* measures of recovery and restoration (sub target 2.8).

Objective 3 gathers, then, a series of sub-targets whose realization, if accomplished, would have extremely important implications going well beyond Brazilian national borders. Among these we choose to underline sub target 2.10, on the conservation of at least 70% of the genetic diversity of Brazilian plants either cultivated or used for the extraction of genetic material of socio-economic value, as well as the traditional knowledge of indigenous people and groups associated to those varieties.

Finally, under objective 4, goals were respectively established. On one hand, Brazil aimed at maintaining and enhancing the functions of ecosystems and their life support capacities within the so-called *Áreas Prioritárias para Biodiversidade* (Priority Areas for Biodiversity) (sub

target 2.13). On the other hand, the country committed to increase actions in favour of on farm conservation of agrobiodiversity, with a view of supporting sustainable lifestyles, enhancing food safety and improving the health of local communities and indigenous groups.

The 2008 Brazilian NBSAP does not allow us to discover if and how these and other biodiversity-related objectives were achieved. Some insight, however, is traceable within the Fourth National Report, submitted by Brazil in occasion of COP 10, pursuant to the CBD (article 26)³⁰⁶. The National Report, in fact, contains a section on the progress of the implementation of the Brazilian NBSAP³⁰⁷.

For instance, with regards to protected areas (sub-target 2.1), the National Report states that, albeit Brazil had actually undertaken a plurality of measures, the country did not succeed in achieving its 2010 national target for any of its seven biomes, (even though appreciable

³⁰⁶ Brazil, Ministry of the Environment - Secretariat of Biodiversity and Forests - Office of the National Program for Biodiversity Conservation, 'Fourth National Report to the Convention on Biological Diversity'. The Brazilian document can be consulted at: <http://www.cbd.int/doc/world/br/br-nr-04-en.pdf>.

³⁰⁷ *Ibidem*, Section 2.4, at 112.

progresses were made in three cases, namely the Amazon, the Atlantic Forest and the Cerrado)³⁰⁸.

2.7.4.3. China

A throughout perspective on how a country like China – that nowadays stands amongst the strongest world economic powers – acts for preserving the biodiversity hosted within its boundaries is directly obstructed by the fact that its most recent NBSAP, submitted to the Executive Secretary (pursuant to CBD article 6), has been only drafted in mandarin, therefore reducing the chances for an accurate examination of its content³⁰⁹. As in the case of Brazil, however, some information on the progress of the implementation of the previous Strategic Plan for Biodiversity (2002-2010) can be collected by an analysis of the Fourth Chinese National Report, issued by the Chinese Ministry of the Environment, finalized in

³⁰⁸ *Ibid.*, at 85. The Pampas and the Coastal and Marine Zone were the biomes where less action was taken, each of them having not yet achieved 50% of the target.

³⁰⁹ The second version of the Chinese NBSAP was received on 21st Sept. 2010, shortly before the inauguration of Nagoya COP 10. (See <http://www.cbd.int/reports/search/>).

November 2008 and subsequently transmitted to the CBD in March 2009³¹⁰.

The subject of chapter II of China's Fourth National Report, in fact, describes the 'current' status of the implementation of the Chinese NBSAP, shaped after the previous Strategic Plan for Biodiversity. Here, the Chinese government recalls a wide set of measures 'promulgated' in order to integrate biodiversity conservation into national action plans. Among these, for example, it is mentioned the 11th 'Five-Year Plan for National Economic and Social Development', officially adopted by the National People's Congress (NPC) in 2006, setting targets that either directly or indirectly are likely to influence the conservation of biodiversity in a positive manner (e.g. reducing energy consumption per unit of GDP by about 20% or controlling the tendency of ecological and environmental degradation). Relevant policy instruments, amongst the many cited by the Report, include also the 1994 China Biodiversity Conservation Action Plan and the National Program for Nature Reserves (1996-2010)³¹¹.

³¹⁰ China, Ministry of Environmental Protection, 'China's Fourth National Report on Implementation of the Convention on Biological Diversity', available at: <http://www.cbd.int/doc/world/cn/cn-nr-04-en.pdf>.

³¹¹ Both programmes are linked to the global goals set by the Strategy for Biodiversity (2002-2010). See section 2.2. of the 4th National Report submitted by China.

This latter programme set the target of instituting 1200 protected areas on Chinese soil by 2010, occupying 10% of China's land area³¹².

Section 2.4 of the National Report describes the achievements of the Chinese in conserving biodiversity. Such achievements are premised on the acknowledgment that the country successfully established 'a biodiversity conservation and management system with Chinese characteristics' while maintaining in place a fast economic growth.³¹³ Interestingly however, this section tells little on what is being done to implement the Chinese NBSAP, information that, on the contrary, can be found, in fact, under other sections of the National Report³¹⁴.

In relation to protected areas, for example, it is within section 2.3 that relevant information emerge, revealing that by the end of 2007 the goal on protected areas established under the National Program for Nature Reserves (1996-2010) had already been achieved, with the total number of protected areas amounting to 2,531 units (excluding those created in Hong Kong, Macao and Taiwan) and covering 151.88 million squared metres. It is

³¹² Out of 1200 protected areas, 160/170 are national ones according to the Chinese Ministry of the Environment. See, 4th Report, at 10.

³¹³ *Ibid.*, at 27.

³¹⁴ Specifically, Section 2.3 refers on the 'Main Activities Undertaken to Implement National Biodiversity Strategies and Action Plans'.

claimed by the Report that China instituted 303 national nature reserves, well above the 160/170 originally foreseen, covering a total area of 93.656 million hm², a surface that equals the 15.2% of the national land area (5,2% point of the originally agreed threshold).

2.7.4.4. South Africa

At the moment of writing, CBD COP still awaits the submission of a new NBSPA to be elaborated by South Africa, on the basis of the goals and targets acknowledged at global level in the Strategic Plan for Biodiversity 2011-2020. The reception of the last South African strategic document, in fact, dates back to 2006³¹⁵.

The South African NBSPA of 2006 appears as a comprehensive policy instrument premised on the effective performance of a rigorous spatial assessment of biodiversity in the country. The NBSPA itself is anticipated by a background note on the process that led to

³¹⁵ The CBD Secretariat published the South African NBSPA on 7 Jun. 2006. See, Ministry of Environmental Affairs & Tourism, 'South Africa's National Biodiversity Strategy and Action Plan', Pretoria, 2005. The South African document can be traced here: <http://www.cbd.int/doc/world/za/za-nbsap-01-en.pdf>.

(and came after) its adoption, by an executive summary country study outlining the main features of the South African social, political and economic context as well as its legislative and institutional context. In this framework some information concerning the assessment that has been carried out in relation to the status of South African species was further inserted as well as some information on the outcome of the assessment carried out on the ecosystems that can be found on the territory of South Africa.

The NBSPA mentions, *inter alia*, that 5,4% of land in the country was conserved thanks to the establishment of a network managed by different institutions; notwithstanding this, conservation measures were unevenly implemented leaving significant habitats unprotected³¹⁶. Given the absence of a follow-up process, it is not in our power to determine whether or not the Department of Environmental Affairs & Tourism (DEAT)'s goal of enhancing the network, respectively, up to 8% and 20% of the land area and marine surface has

³¹⁶ *Ibidem*, at 18. Conservation efforts are concentrated on the savannah, thereby leaving some biomes underrepresented in the national conservation network (e.g. grassland and Karoo). It is interesting to note that, unlike the other NBSPAs under consideration, the South African one contains a peculiar indication (albeit illustrative) of some elements of the network comprising also sites listed under the Ramsar and the World Heritage Conventions.

been achieved by 2010³¹⁷. Significantly, among the key points that informed the 2006 South African NBSPA, there was the recognition of the fundamental importance of mainstreaming biodiversity:

‘Conservation of biodiversity in a network of protected areas, while important, is not enough to safeguard biodiversity resources now and in the future. It is essential that biodiversity be mainstreamed throughout the economy. This means that all sectors that impact on biodiversity, especially agriculture and urban planning, need to factor biodiversity considerations into their policies, plans and programmes. Mainstreaming implies that the full value of biodiversity should be recognised, so that activities that conserve biodiversity or use it sustainably should be rewarded economically and/or in other ways, while activities that destroy biodiversity should bear the associated cost’³¹⁸.

³¹⁷ *Ibid.*, 18.

³¹⁸ *Ib.* 26. The issue of mainstreaming has been further developed. See DEAT, ‘South Africa’s Fourth National Report to the Convention on Biological Diversity’, Pretoria, 2009, at. 60-74, available at: <http://www.cbd.int/doc/world/za/za-nr-04-en.pdf>, published by the CBD Secretariat on 24 Apr. 2009.

In the light of this, amongst the 5 strategic objectives (SOs) identified by the South African NBSAP, SO5 is dedicated to in situ conservation ('Conservation Areas').

2.7.4.5. Final remarks on the sample study on NBSAPs

The study sketched on the NBSAPs and other relevant documents submitted to the Executive Secretariat of the CBD by four chosen Contracting Parties has revealed the peculiarities of various techniques that are employed at national level to fulfill the procedural requirements of the CBD. The common trait of each National Strategy is the anchoring to the targets and objective fixed at COP level, though, with different degrees. In this sense, it must be noted that, while the Italian and the Chinese policy instruments appear as 'more declaratory', limiting the room for quantified data, the Brazilian and the South African documents heavily rely on scientific data and figures. Diachronic differences are present, however, as the submission of NBSAPs depends from the capabilities of domestic competent authorities. This determines a situation where Parties (as in the case of Brazil, China and South Africa) still have to adjust their national targets to

the developments that, in the meantime, have occurred at COP level (i.e. the adoption of a Strategic Plan for Biodiversity for the period 2011-2020), thus creating a ‘temporal mismatch’. One factor limiting the potential of these instruments as ‘informative tools’ that the COP may use in order to trigger peer-to-peer reviews and learning processes is given by the total absence of qualitative data. In this sense, it must be underlined, none of the documents that were reviewed contains useful descriptions of the legal mechanisms that, at national level, are in place for preserving biodiversity nor data (either quantitative or qualitative) concerning the enforcement of biodiversity-related legislation by domestic courts.

2.8. Conservation of biodiversity under the CBD: a stringent obligation or a desirable end? Some reflections on the limits to the effectiveness of the Convention

A distinguished international law scholar affirmed in 1996 that the CBD had been formulated in terms of goal-

setting objectives rather than concrete obligations³¹⁹. Others portrayed the CBD as a too ambitious agreement equipped with hardly achievable objectives that fail in keeping into consideration the prevailing and diverging socio-economic situations of its Contracting parties, consequently leaving ‘basic procedural issues linger for several COPs’ and preventing ‘substantive conservation and sustainable use policies’ to see the light³²⁰.

Similar stances have been commonly upheld in the past twenty years also by a conspicuous number of commentators from a wide range of social and environmental sciences³²¹. Furthermore, once the third

³¹⁹ See M. Chandler, cit., at. 141 and C. De Klemm, ‘International Instruments, Processes and Non-indigenous Species Introduction: Is a Protocol Necessary?’ (1996) *Environmental Policy & Law*, at 247 ff. In the same vein, L.D. Guruswamy, ‘The Convention on Biological Diversity: a Polemic’, in L.D. Guruswamy, J.A. McNeely (eds.), *Protection of Global Biodiversity: Converging Strategies*, Durham, 1998, at 351-359.

³²⁰ See C. Wold, ‘The Futility, Utility and Future of the Biodiversity Convention’, in (1998) *Colorado Journal of International Environmental Law and Policy*, at 38. Similarly, A. Hubbard, ‘The Convention on Biological Diversity’s Fifth Anniversary: A General Overview of the Convention: Where It Has Been and Where It Is Going?’, in (1997) *Tulane Environmental Law Journal*, at 445.

³²¹ For contribution from other disciplines (ecology and anthropology), e.g. see S.R. Harrop, D. J. Pritchard, ‘A hard instrument goes soft: The implication of the Convention on Biological Diversity’s current trajectory’, in (2011) *Global Environmental Change*, at 474-480. For a political science research see, e.g., P.G. Le Preste, ‘The CBD at Ten: The Long Road to Effectiveness’, in (2002) *5 Journal of Wildlife Law and Policy*, at 269-285.

Global Biodiversity Outlook (GBO3)³²², issued in the occasion of Nagoya COP 10, certified that the goal of significantly halting the accelerating rate of biodiversity loss by 2010 – chosen as ‘The International Year of Biodiversity’ – had not been achieved by large, another wave of comments on the ineffectiveness of the CBD and on the inconsistency of the measures adopted by its Contracting Parties at national level intensified an already widespread criticism³²³. Among these, it has been wittily suggested that the:

‘lack of implementation and compliance is not a cause of biodiversity loss, but rather an indicator of the lack of *consensus* of States to deal with the root causes and underlying drivers of biodiversity loss, resulting in weak, "unimplementable" MEAs’³²⁴

Overall, it seems that conservation of biodiversity, as the other two objectives of the CBD (sustainable use and

³²² See *above* note 269.

³²³ Among the factors that did not favour the adoption of viable solution to the loss of biodiversity, there is also a lack of the ‘collective failure of the science-policy process’ as underlined by Larigauderie and Mooney in A. Larigauderie, H. A. Mooney, in ‘The International Year of Biodiversity: an opportunity to strengthen the science-policy interface for biodiversity and ecosystem services’, in (2010) 2 *Current Opinion in Environmental Sustainability*, at. 1-2.

³²⁴ See R. Adams, *cit.*, at 163.

equitable sharing of the benefits arising from biological resources) constitute aspirational goals rather than stringent obligations for the Contracting Parties of the CBD. This is due to a set of factors that are going to be described in what follows.

2.8.1. Fragmentation of COP decision-making

Processes and decisions on biodiversity-related issues under the CBD always require Contracting Parties to engage in lengthy discussions and negotiations that take place on the basis of the scientific and technical knowledge provided by the SBSSTA and the findings of other *ad hoc* working groups and committees created in order to enhance the implementation of the CBD.

This, together with the fact that COP meetings are held biennially and the fact the scope of COP activities has been constantly growing (as well as the degree of specification of such normative activities traceable through the analysis of COP decisions), make it almost impossible for the Community of Contracting Parties to concentrate their efforts onto all thematic areas with the

same degree of commitment and systematisation.³²⁵ These factors lead to ‘internal fragmentation’ within the CBD system of governance.

The evolution of COP decisions on ‘protected areas’ that has been traced above can help in exemplifying the case of ‘internal fragmentation’³²⁶. Between the entry into force of the CBD and the adoption of *ad hoc* decisions by the COP on this specific matter twelve years passed (decision VII/28)³²⁷.

However, considering the magnitude of the three main objectives of the CBD such fragmentation seems unavoidable to a certain extent. In any case, more prioritization in agenda setting could allow COPs to produce less ‘dispersed’ output.

³²⁵ See P. Johnston, cit., at 223.

³²⁶ See *infra* § 2.8.1.

³²⁷ This does not mean, however, that the issue of protected areas was not previously addressed. Decision II/8 and II/7, adopted at COP 2 (Jakarta, Indonesia) in 1995 as well as decision III/9, adopted at COP 3 (Buenos Aires, Argentina) in 1997 also concerned protected areas, respectively, as part of a ‘Preliminary consideration of components of biological diversity particularly under threat and action which could be taken under the Convention’, and as an element of the ‘Implementation of Articles 6 and 8 of the Convention’.

2.8.2. *Lack of monitoring mechanism on national-level compliance*

Albeit the institutional proliferation that enriched the CBD system of governance, CBD COP has not yet decided to overcome one of the most fundamental factors limiting the effectiveness of the underlying Convention, namely, the lack of a mechanism to monitor compliance at national level³²⁸.

CBD COP, in fact, does not normally proceed to review all national reports submitted by Contracting Parties and, instead, usually elaborates conclusions on the basis of the reports summarized by the CBD Secretariat. Furthermore, the conclusions of the COP appear to offer a ‘quantitative analysis of legislative developments’ rather than a ‘qualitative analysis’ of the content of national reports³²⁹. If the assessment of national reports was more comprehensive, entering the merits of implementation at the level of each individual State and including a policy examination of the measures adopted as to achieve the three main CBD objectives, the whole Community of

³²⁸ See E. Morgera, E. Tsioumani (*above* note 207), cit., at 5.

³²⁹ *Ibidem*, at 6.

Parties would greatly benefit in terms learning from best practices and winning experiences.

Furthermore, the study on the practice of States when implementing the provisions under CBD article 8, letters a) to e) at national level that has been carried out above (§ 2.8) reveals that data on implementation, inferable from the national reports submitted according to CBD article 26 as well as from the NSBAPs submitted according to CBD article 6, do not provide either any information on the enforcement of the biodiversity-related norms enacted by each national legal system³³⁰. In our view, this factor diminishes transparency as well as the scope of compliance. In turn, the frequent absence of diachronic data (e.g. while the Brazilian NSBPA dates back to 2008, before the 3rd Global Biodiversity Outlook confirmed that the 2010 target would have been missed, the Italian one was released in 2010, thus conforming to the content of the latest Strategic Plan for Biodiversity) is another factor making any attempt of verification even more complex³³¹.

³³⁰ Some might retain that Parties are not required to provide such information under the CBD. However, data on the legal enforcement of nature protection laws (either sensitive, as a core element of national sovereignty, or difficult to collect) could help as an additional indicator of effective compliance with the obligations of the CBD.

³³¹ Complexity may be also given by the unavailability of national reports and NSBAPs in all the official languages of the CBD, as

In relation to reviewing implementation at national level, the work carried out, respectively, by the SBTTA and the WGRI, also appear to have achieved limited results so far. The first has been criticized for playing a too political role, while leaving scientific and technical advice from expert on the background³³², the second, instead, has been focusing its efforts on streamlining CBD processes and initiatives as well as on strengthening the cooperation between the CBD and third parties (e.g. international organization and non-state actors) overlooking implementation concerns.³³³

The Strategic Plan for Biodiversity, analyzed above in this Chapter, contains, however, the commitment of CBD COP to elaborate additional mechanisms to favour a better implementation, overarching both the CBD and the Strategic Plan³³⁴. Even though it is not yet to know if and how the COP will come up with a solution for a more efficient review on national implementation – will the

proven by the latest Chinese NSBAP which is only available in Mandarin).

³³² See P. Johnston, cit., at 225.

³³³ Among the items on the agenda of WGRI-4 (Montreal, 2011), there were, for instance, the ‘Cooperation with other Conventions and International Organizations and Initiatives, and Engagement of Stakeholders’ as well as the discussion of a ‘Multi-Year Plan of Action for South-South Cooperation on Biodiversity for Development’.

³³⁴ See COP Decision X/2, (*above* note 268), paras. 2.4 and 2.5.

COP decide to maintain a focus only on the quantitative aspects of legislative implementation? Will the SBTTA and the WGRI provide more detailed information on scientific and policy aspects of the measures adopted to protect biodiversity at national level? Will they use the results of their assessment to ‘point the finger’ against non-compliant Contracting Parties with a view of favouring global implementation or will they prefer to use softer and indirect approaches? – this provision clearly indicates that the COP is increasingly aware of the shortcomings determined by the way monitoring activities are being carried out within the CBD institutional framework.

2.8.3. Ineffectiveness of the Global Biodiversity

Governance

Another factor that limits the efforts undertaken with the view of conserving biodiversity both at international and national level is the fact that international policy and law-making processes take place in a variety of venues.

This may lead to undesirable episodes of duplication and fragmentation that will have to be corrected in the future.

Apart from the CBD, as seen in Chapter 1, other global biodiversity-related MEAs do exist and are they accompanied by a considerable number of regional agreements and protocols. The relationship of the latter with the CBD is often difficult to define. The administrative organs of the 1979 CMS, the 1973 CITES, and the 1971 Ramsar Convention, have concluded *memoranda* of cooperation and understanding with the CBD Secretariat³³⁵.

The interaction thus established led to the elaboration of a rather considerable web of joint work programmes³³⁶

³³⁵ *Memorandum* of cooperation between the Secretariat of the Convention on Biological Diversity (Nairobi, 1992) and the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979), signed in Bonn (Germany) on 13 Jun. 1996, available at <http://www.cbd.int/doc/agreements/agt-cms-1996-06-13-moc-web-en.pdf>; *memorandum* of cooperation between the Secretariat of the Convention on Biological Diversity (Nairobi, 1992) and the Secretariat of the Convention on the International Trade of Endangered Species (Washington, D.C., 1973), signed in Brisbane (Australia) on 23 Mar. 1996, available at <http://www.cbd.int/doc/agreements/agt-cites-1996-03-23-moc-en.pdf>; CBD, 'Memorandum of understanding between the Secretariat and the Bureau of the Convention on Wetlands of International Importance, Especially as Waterfowl Habitat (Ramsar)', signed in Geneva (Switzerland) on 19 Jan. 1996, also reproduced in Doc. UNEP/CBD/COP3/Inf.38. No *memorandum* is in place yet between the Secretariats of the CBD and WCNH Convention.

³³⁶ The CBD Secretariat instituted joint work programmes with the CMS, CITES and the Ramsar Convention. No joint programme exists

and subsequent actions that in some cases helped Contracting Parties of the various Conventions to better comply with the obligation set therein, avoiding parallel policy-making processes and the duplication of financial assistance³³⁷. At inter-State level, however, no appreciable steps were taken in the direction of ameliorating the international governance of biodiversity. As singled out by various IEL scholars, the system of biodiversity-related MEAs lacks ‘an inherent hierarchy and a typical centre’³³⁸. This remains true notwithstanding the creation of a Biodiversity Liaison Group (BLG)³³⁹, the junction amongst the major biodiversity-related MEAs on the one

between the CBD and the UNESCO Convention. Joint work programmes, not involving the CBD, have also been established between the Secretariats of biodiversity related MEAs. For further information, see <http://www.cbd.int/brc/>.

³³⁷ On the Ramsar/CBD relationship, see N. Davision, D. Coates, ‘The Ramsar Convention and Synergies for Operationalizing the Convention on Biological Diversity’s Ecosystem Approach for Wetland Conservation and Wise Use’, in (2011)14 *Journal of International Wildlife Law & Policy*, at 199-205. It is suggested here that cooperation moved to endorsing work carried out by one Convention for use by the other to the joint elaboration of guidelines (always at Secretariat level).

³³⁸ See A. Jóhansdóttir, I. Cresswell, P. Bridgewater, ‘The Current Framework for International Governance of Biodiversity: Is It Doing More Harm Than Good?’, in (2010)19(2) *Review of Community & International Environmental Law*, at 142, and underscoring the risks associated with the scarcely coordinated implementation of the many biodiversity-related MEAs around the CBD, see N. Matz-Lück, cit., at 448.

³³⁹ See CBD COP, Decision VII/26 on the ‘Cooperation with Other Conventions and International Organizations and Initiatives’.

hand, and the CBD on the other hand. The reasons explaining the causes of fragmented global governance for biodiversity are many. Amongst these, as clearly advanced, States have not actively engaged so far in restructuring the system. Proposals regarding the clustering of biodiversity-related MEAs have been forwarded in different venues, notably also the United Nations Environmental Program (UNEP) invited governments to ‘consider strengthening efforts’ to enhance the synergies between biodiversity-related MEAs³⁴⁰.

Clustering of MEAs implicates the restructuring of international biodiversity law instruments into a coherent and distinctive legal framework that must not be necessarily accompanied by the creation of new institutions, based on the classical model of international organizations³⁴¹. Clustering, in fact, primarily implies the harmonization of already existing structures, facilitating all scientific work, information gathering and processing,

³⁴⁰ UNEP Governing Council, ‘Proceedings of the Governing Council/Ministerial Environment Forum at its Eleventh Special Session on International Environmental Governance: Outcome of the Work of the Consultative Group of Ministers or High-Level Representatives’ (UNEP/GCSS.XI/11 of 3 Mar. 2010), at para. 12.

³⁴¹ See J.E. Alvarez, *International Organizations as Law-makers*, Oxford, 2005, at 320.

and increasing the efficiency of the international biodiversity governance as a whole³⁴².

What is the way ahead then? Bringing all biodiversity-related MEAs under the comprehensive umbrella of the CBD will not be as easy as suggesting it. In fact, CBD article 29, paragraph 3, mandates that ‘Parties shall make every effort to reach agreement on any proposed amendment to this Convention or to any protocol by *consensus*’. Plus, clustering will imply the building of consensus not around a specific theme as it was the case for the Cartagena and Nagoya Protocols, but on the sensitive theme of restructuring already existing international, albeit administrative, arrangements (e.g. the restructuring of the Ramsar, CMS, WNCH and CITES Secretariats). The question here would be entirely procedural, in the sense that clustering will cannot regard the substantial norms enshrined in the aforementioned MEAs, which otherwise would be emptied. One possible solution could be that adopted for broadening the scope for application of the two major agreements on the civil liability for transboundary nuclear damage, namely the Paris Convention of 1960 and the Vienna Convention on 1963. In that case, a Joint Protocol was promoted. A Joint

³⁴² See A. Jóhansdóttir, I. Cresswell, P. Bridgewater, *cit.*, at 147.

Protocol for biodiversity governance would be, however, different. Content-wise, it will have to contain rules thereby which the Parties of the biodiversity-related MEAs would accept to ‘re-label’ them as ‘protocols’ of the CBD (this, in principle, can be envisaged given all the Parties of those MEAs have subsequently ratified the CBD). The hard part, in any event, would be that of redefining, merging and harmonizing the role and the activities of a whole set of Secretariats, advisory bodies and already existing additional organs with the view of increasing the efficiency of the whole system. This would be quite a challenge, even for a field of international law that is generally perceived as consisting of light structures or ‘flexible arrangements’ that differ from those of traditional international organizations³⁴³.

³⁴³ See J.E. Alvarez, *cit.*, at 320-21

CHAPTER 3

The law of the European Union on the conservation of biodiversity

Our survey on biodiversity law shifts now from the international level to the European Union one. Having explored the contours of the major biodiversity-related MEAs and, above all, the obligations established under the CBD as well as the characteristics of the system of governance that is in place in order to foster the conservation (and sustainable use) of global biodiversity, we will attempt, in this section, to investigate on the legislative and policy initiatives currently undertaken by the EU institutions with the view to halt the loss of European biodiversity. Our main objective will be to uncover how the EU, that is a Contracting Party to the CBD and other biodiversity-related Conventions addressed in Chapter 1, comply with the international law obligations that it decided to take on in the field of conservation. In order to pursue this objective it will be necessary to provide an overview on the evolution and the characteristics of the EU competence in the field of environmental protection and, accordingly, on the

development of the EU environmental policy. Such an introductory and preliminary study will allow us to proceed with a critical description of the legal and policy initiatives undertaken by the Union at international level to foster the conservation of biodiversity as a part of its External Action in the environmental sphere as well as the actions that are independently pursued by the EU institutions to legally enforce the biodiversity-related MEAs which, as mixed agreements, has become law of the European Union. In the light of this and of the policy instruments developed by the EU to conserve biodiversity both at international and ‘domestic’ level (i.e. the EU Strategy on biodiversity), the keystone legislative measures on habitats and species preservation that have been adopted so far by the EU will be the subject of a deepened analysis. As we shall see, it is exactly through the implementation and the enforcement of this legislation that the Union, together with its Member States, complies with its obligations under the CBD as it comes to *in situ* biodiversity conservation.

3.1. The genesis of the EU environmental law & policy: a legal analysis. From the provisions of the Treaty of Rome to those in force with the Lisbon Treaty³⁴⁴

³⁴⁴ The literature on the evolution of EU environmental law and policy, as well as the questions that it poses, is ever-expanding. Amongst distinguished scholarly contributions (listed in ascending alphabetical order), refer to D. Benson, A. Jordan, 'A Grand Bargain or an "Incomplete Contract"? European Union Environmental policy after the Lisbon Treaty', in (2008) *European Energy and Environmental Law Review*, at 280-290. P. Fois, 'Il diritto ambientale nell'ordinamento dell'Unione europea', in G. Cordini, P. Fois, S. Marchisio, *Diritto ambientale. Profili internazionali europei e comparati*, Torino, 2005, at 51-94, R. Giuffrida, 'L'evoluzione della politica ambientale e l'importanza dei suoi principi informatori', in R. Giuffrida (ed.), *Diritto europeo dell'ambiente*, Torino, 2012, at 36-45, M. Hedemann-Robinson, *Enforcement of European Union Environmental Law. Legal Issues and Challenges*, London, 2007, A. Kiss, D. Shelton, *Manual of European Environmental Law*, Cambridge, 1997, at 3-31, B. Jack, 'Enforcing Member State Compliance with EU Environmental Law: A Critical Evaluation of the Use of Financial Penalties', in (2011) *Journal of Environmental Law*, at 73-95, J.H. Jans, H.H. Vedder, *European Environmental Law After Lisbon*, Groningen, 2012, at 3-75, A. Jordan, 'Step Change or Stasis? EC Environmental Policy after the Amsterdam Treaty', in A. Jordan (eds.), *Environmental Policy in the European Union*, London, 2002, at 53-62, L. Krämer, Chapter 2 'Community Environmental Policy', in *Focus on European Environmental Law*, London, 1992, at 26-61, L. Krämer, *EC Environmental Law*, London 2007 R. Macrory (ed.), *Principles of European Environmental Law*, Groningen, 2004; F. Munari, L. Schiano Di Pepe, cit. at 69-95, A. Rizzo, 'L'affermazione di una politica ambientale dell'Unione Europea. Dall'Atto Unico Europeo al Trattato di Lisbona', in R. Giuffrida, cit., at 3-35, D. Wilkinson, 'Maastricht and the Environment: The Implications for the EC's Environment Policy of the Treaty on European Union', in A. Jordan (ed.), *Environmental Policy of the European Union*, London, 2002, at 37-52.

The process of European integration was conceived from its outset as an economic and political construction. It firstly dealt with the elimination of the causes that led to the break up of World War II, in order to unleash prosperity in a recovering continent. The fathers of European integration were primarily concerned with the creation of a liberalized internal market where the flows of goods (then also services and individuals) could freely take place, allowed by the progressive elimination of trade barriers.

At the time when the first goals were achieved, that is to say, when the free circulation of goods within the Member States of the European Communities began to materialize, the emergence of generalized concerns about the quality of the environment was yet to come³⁴⁵. The

³⁴⁵ Export customs were definitively abolished on 31 Dec. 1961 whereas import customs were effectively abandoned in July 1968, during the ‘first phase’ of the evolution of European environmental law as described by Jans and Wedder. In this phase, at the incidental reference to the abolition of intra-Community barriers to trade shows, no solid attention was given to the solution of environmental protection issues. According to the authors, the first phase lasted from the entry into force of the ECC Treaty (1 Jan. 1958) to 1972. The second phase would then last from 1972 to the entry into force of the SEA (1 Jul. 1987). See J.H. Jans, H.H. Vedder, cit., at 3-6. On early developments, see also I. Hildebrand, ‘The European Community’s Environmental Policy, 1957 to ‘1992’: From Incidental Measures to an International Regime?’, in A. Jordan (ed.), *Environmental Policy of the European Union*, London, 2002, at 13-36.

absence of such concerns explains why in the Treaty of Rome the protection of the environment did not originally appear neither in relation to the rules on the internal market nor among the objectives of the European Economic Community³⁴⁶. This absence was also justified by the lack of a precise definition for the term “environment” itself³⁴⁷.

3.1.1. European environmental policy's early steps: the quest for definitions, objectives and legal basis

One first attempt to define the notion of “environment” was tried by the European Commission within a 1971 communication, where it is stated that the environment results from:

³⁴⁶ See L. Krämer, *EEC Treaty and Environmental Protection*, London, (1st edition) 1990, at 1, where, again, it is observed that the terms ‘environment’ ‘environmental protection’ and ‘environmental policy’ did not appear. Similarly, D. Shelton, A. Kiss, *cit.*, at 21.

³⁴⁷ Such absence could be the result of the choice not to narrow the scope of a field which constantly must adapt to technologic and scientific progress. On the point, see Rizzo, *cit.*, at. 4.

‘all the elements which, interacting in a complex fashion, shape the world in which we live and move and have our being’.³⁴⁸

Attempts of this kind became more vigorous not after too long, as can be seen with a Declaration of the Council of the European Economic Communities, formulated 1973 in the occasion of the adoption of the First Environmental Action Program. It was then stated that the task of the EEC, namely, promoting the ‘harmonious development of economic activities and a balanced and continued expansion’ (article 2 EEC Treaty) could not be carried out for its sake but, on the contrary, should be finalized also to the fight against pollution as well as to the ‘improvement of the quality of life and the protection of the environment’³⁴⁹. This passage of the Declaration made it possible to interpret extensively the objectives and activities referred to in articles 2 and 3 of the then EEC Treaty. By resorting to this Declaration, the Council made it clear that, even though a true legal basis for the

³⁴⁸ See European Commission, SEC (71)2616 of 22 Jul. 1971, ‘First Communication of the Commission about the Community’s policy on the environment’, at 1.

³⁴⁹ Declaration of the Council of the European Communities and of the representatives of the Governments of the Member States, of 22 Nov. 1973, ‘On the Programme of action of the European Communities on the environment’, in OJ C 112 of 20 Dec. 1973, at. 1-2.

environmental policy of the EEC had still to come to light, environmental protection measures could nonetheless be adopted by the ECC institutions on the assumption of an extensive interpretation of Treaty provisions. The fact that environmental protection amounted to an ‘essential objective’ of the Community (and also to an ‘objective of general interest’ lawfully pursued at ECC level) was subsequently confirmed also in the *ADBHU* case³⁵⁰.

It is plain that the adoption of environmental measures by the Council had been primarily underpinned by the growing environmental awareness at high political level that transpired from the initiatives respectively undertaken by the EEC Council, on the one hand, and the European Council, on the other. Lacking a true legal base for the adoption of environmental legislation, though, the Council had to resort to a combination of different treaty provisions³⁵¹. These latter were essentially article 100

³⁵⁰ ECJ judgment of 7 Feb. 1985 in Case 240/83 (reference for a preliminary ruling made by the Tribunal de Grande Instance de Creteil): *Procureur de la Republique v. Association de Defense des Bruleurs d'Huiles Usagees*. Case 240/83 *ADBHU* [1985] ECR 531, paras. 12-13. For a comment, Krämer, ‘The protection of the environment – a general interest of the E.C.: Case 240/83 – *ADBHU*, in L. Krämer, *European Environmental Law Casebook*, London 1993, at 5-20. In particular, the author suggests that the environment was an ‘implicit objective’ as the ECJ did not clarify how it had reached its conclusions.

³⁵¹ For an account of the measures referable to an ‘environmental policy’ in this phase, see L. Krämer (1990), cit. at 1-28.

EEC (now 115 TFEU) and article 235 EC (now 352 TFEU)³⁵². While the first regulates the Council faculty of issuing directives for the approximation of national laws, regulations and administrative provisions that affect the establishment or functioning of the internal market, the second regulated the faculty of the Council to adopt ‘appropriate measures’ for the achievement of the objectives set out in the Treaties whenever these latter have not singled out the ‘necessary powers’ in order for the EU to take action³⁵³.

The space for relying upon such norms, and thereby develop a properly structured common environmental policy soon became too limited. If article 100 EEC narrowed the scope for the adoption of any potential measure (the risk was to leave out from the decision-

³⁵² This is the case, for instance, of the ‘Birds Directive’ (*infra* § 3.3.1). It must be noticed, however, that the development of EC environmental law was primarily and foremost underpinned by the formation of environmental awareness at political level. It was, in fact, during the 1972 European Council Summit when the goal of economic expansion was firstly linked to the goal of improving life standards and the quality of the environment. The European Council thus asked EC institutions to elaborate the first action program for the environment (EC Bulletin, 1972, N°10).

³⁵³ In both cases, the Council acted unanimously. Nowadays, instead, art. 115 TFEU oblige to follow a special legislative procedure and art. 352 TFEU leave the matter to be decided case by case. While the former article requires consultation with the European Parliament and the Economic and Social Committee, the latter mandates that any legislative proposal shall be drafted by the European Commission and then approved by the EP before adoption.

making process a whole set of environmental protection measures that could not be directly related to the internal market), article 235 EEC could not last long either as the supplementary legal basis of what risked to appear as a ‘ghost’ common policy.³⁵⁴

3.1.2. The Single European Act: a turning point for environmental matters in European decision making

The indeterminateness which had characterized the early evolution of European environmental law ceased to exist thirteen years past the adoption of the first European environmental Program, with Member States agreeing on the 1986 Single European Act (SEA), an amending Treaty which definitely shed light to all questions regarding the

³⁵⁴ This may be true even if the ECJ acknowledge that art. 235 EEC could be legitimately used as either as a supplementary legal basis or even a free standing one. See *ABDHU* case (*above* note 7), where the validity of a directive on waste oils adopted on art. 235 EEC was called into question. A directive that was adopted on the basis of article 235 EEC is, for instance Council Directive 79/409/EEC of 2 Apr.1979 on the conservation of wild birds, in *OJ L* 103, of 25 Apr.1979, pp. 1–18. The “Birds” Directive will be extensively dealt with at *infra*. § 3.4.1

Community competence on environmental protection³⁵⁵. The SEA, in fact, was the first instrument in the history of European integration amending the Treaty of Rome that equipped it with relevant provisions for the enactment of environmental legislation and for the undertaking common policy initiatives in this respect. More precisely, in the field of environmental law, the novelties introduced by the SEA were of utter importance since Member States and EEC institutions agreed to be bound by the norms set in a whole Title concerning the “Environment” (Title VII). More specifically, the legislative action of the Council could finally rest upon a distinctive “environmental” legal basis, which decisively propelled the development of the common environmental policy. Title VII, (inserted in the institutive Treaty as mentioned above) was composed by three norms, namely, articles 130R, 130S and 130T.

Article 130R, paragraph 1, obliged the Community to ‘preserve, protect and improve the quality of the environment’. This duty was finalized to ultimately guarantee the protection of people’s health as well as to ensure a wise and rational use of the natural resources

³⁵⁵ See A. Kiss, D. Shelton, *cit.*, at 22. See also, L. Krämer, Chapter 3, ‘The Single European Act and Environmental Protection’, in L. Krämer (1992), *cit.*, at 62-85.

residing in within the boundaries of the Member States³⁵⁶. Article 130, paragraph 2, instead, introduced a series of principles that were further on meant to guide the development of EC legislation. These principles were maintained and refined through all the rounds of revision that interested the founding Treaties and survive nowadays, as it will be seen later, into the Lisbon Treaty³⁵⁷. The reference goes to the principle of preventive action, the principle of rectification of the damage at source and the ‘polluter pays’ principle³⁵⁸.

Article 130R, paragraph 3, singled out the criteria which were to sustain the drafting and preparation of EEC environmental legislation. Therefore, according to the SEA environmental measures were to be based on the available scientific and technical data, take into account environmental conditions in the various regions of the

³⁵⁶ Although the three goals stands in the text of art. 130R, para.1, such an interpretation is upheld by part of the doctrine, e.g., see A. Rizzo at 10. Others, instead, underline how the third objective (wise and rational use of natural resources) is inspired by certain international acts of soft law like the Stockholm Declaration and the World Charter of Nature (*infra* § 1.3), e.g. see P. Fois, cit., at 61.

³⁵⁷ Part of the doctrine believes that said principles are deprived of any legal binding force. In this vein, see M. Montini, ‘Unione europea e ambiente’, in S. Nespore, A.L. De Cesaris, *Codice dell’ambiente*, Milano, 2003, at 59.

³⁵⁸ Art. 130R, para. 2, contained also a first elaboration of the principle of integration insofar it stated that environmental protection requirements should be taken into account ‘as components of the Community’s other policies’.

Community, be premised on the benefits/costs analysis of action or inaction as well as on the consideration of the economic and social development of the Community as a whole and the balanced development of its regions.

From a procedural point, the SEA established the procedure to be followed for the adoption of environmental legislation. In particular, from 1987 the adoption of environmental norms was expressively made subject to the rule of unanimity, as mandated by article 130S³⁵⁹.

The ‘environmental’ Title of the SEA closed with article 130T, allowing Member State to maintain or introduce ‘more stringent protective measures compatible with this Treaty’. This provision somehow guarantees that environmental protection remains an area featured by the exercise of a shared competence by the EU and its Member States³⁶⁰.

³⁵⁹ With the exception of those matters, nevertheless unanimously agreed upon by The Council, on which decision could be taken by a qualified majority vote, see Art 130S (2nd subparagraph).

³⁶⁰ Now art. 193 TEU. The ECJ delivered a judgment on 21 Jun. 2011 (case C-2/10, *Azienda Agro-Zootecnica Franchini Sar*) which regarded, *inter alia*, the application of the Birds Directive and the Habitat Directive (see § *infra* 3.4.2). The Court concluded that their application does not conflict with more stringent national norm (i.e. forbidding the installation of wind turbines within areas of conservation even without a prior environmental assessment) on condition that principles of non discrimination and proportionality are respected.

Besides the Title on the Environment, the 1987 SEA contemplated other provisions indirectly linked to the area of environmental protection. Specifically, article 100a(3), on the functioning of the internal market, mandated that the Commission, in drafting its proposals concerning health, safety, environmental protection and consumer protection, would aim at the attainment of a high level of protection. Article 100a(4), instead, determined that in spite of the adoption of a harmonization measure by the Council (by a qualified majority), a Member State could nevertheless apply national provisions invoking the reasons listed by EEC article 36 or, alternatively, the protection of the environment or the working environment³⁶¹.

³⁶¹ In this regard, national measures shall be notified to the Commission which is vested with the tasks of verifying that they do not constitute a means of arbitrary discrimination or a disguised restriction on intra-EU trade.

3.1.3. Between small and big changes: the transformation of EU environmental law from the Treaty of Maastricht to the Treaty of Nice

The adoption of the Maastricht Treaty on the European Union (TEU) in 1993 and the reorganization of the EEC treaty have impacted, on different degrees, to the formation of Community environmental law.

As for the EC Treaty, the term ‘environment’ appeared in the fundamental provisions under articles 2 and 3, which set both the objectives and the activities to be respectively pursued and undertaken at Community level. Article 2 specifically referred to the ‘promotion throughout the Community, of a harmonious and balanced development of economic activities’ as well as a ‘sustainable and non-inflationary growth respecting the environment’³⁶². Article 3, letter (k), instead, expressively affirmed, amongst others, that the Community should

³⁶² The choice of the formula ‘sustainable non-inflationary growth’ instead of ‘sustainable development’ a concept that had been internationally embraced during the UNCED Conference of 1992 (see Chapter 1) had been criticized by many. E.g., H.V. Jans, H.H. Vedder, cit., at 7.

fulfil the task of elaborating ‘a policy in the sphere of the environment’,³⁶³.

The first ‘cosmetic’ change that altered the environmental rules originally introduced by the SEA is given by the fact that they have been reorganized under Title XVI (on the ‘Environment’). Substantial changes to the norms at hand, however, are unveiled by the accurate analysis of their content. Firstly, the Maastricht Treaty modified article 130R, paragraph 1, by introducing among the goals of the common environmental policy the international promotion of measures ‘to deal with regional or world-wide environmental problems’³⁶⁴. Secondly, the principle of precaution was embedded to article 130R, paragraph 2, adding to the fundamental principles already mentioned by the SEA,³⁶⁵ along with a reference to the

³⁶³ To this end, as ‘a policy in the sphere of the environment’ cannot necessarily be confined to the adoption of legislative measure but must be accompanied by the implementation of financial action, it must be noted that the Maastricht Treaty required the Council to set up the ‘Cohesion Fund’ by which the Community started its financial contribution to the implementation of strategic project in the environmental field (EC Treaty article 130d).

³⁶⁴ EC Treaty art. 130R, paragraph 1, (4th hyphen). The faculty of cooperating on the international arena with third subjects already recognized (SEA) was to be exercised in the light of this ‘new’ Community objective.

³⁶⁵ The precautionary principle has been derived from the international legal order and, specifically, from Principle 15 of the Rio Declaration (see *infra* § 1.3). The European Commission has clarified that the precautionary principle concerns risk analysis and management and must be applied whenever scientific findings are insufficient,

‘high level of protection’ (to be pursued by the Community in the realization of its common environmental policy)³⁶⁶. In relation to the environmental area, the most relevant change brought by the Maastricht Treaty was, along with the reaffirmation of the qualified majority criterion, the remarkable introduction of the co-decision procedure at article 130S, paragraph 3, for the adoption of the environment action programmes. Therefore, in occasion of their adoption, as provided for by article EC article 189b, the European Parliament could reject (by absolute majority) Council proposals. As underscored by the doctrine, this significantly enhanced the legal and political status of such programmes³⁶⁷.

With the Amsterdam Treaty of 1997 the environmental articles already held in the TEC were object of extensive amendments. Articles from 130R to 130T were then

inconclusive or uncertain, and whenever a preliminary scientific assessments points to the existence of potentially dangerous effects on the environment and/or human, animal and vegetal health that are not compatible with the high level of protection pursued by the EU; in this regard, see European Commission, COM(2000)1 def. of 2 Feb. 2000, ‘Communication on the precautionary principle’.

³⁶⁶ The ‘high level of protection’ must be read as an additional criterion inspiring the environmental action of the EU. Such protection is nonetheless qualified as it shall be realized ‘taking into account the diversity of situations in the various regions of the Community’ (EC Treaty, article 130R, paragraph 2).

³⁶⁷ J.H. Jans, H.H. Vedder, cit., at. 7. The Sixth Environment Action Programme (2002-2012) of 22 July 2002, (in OJ L 242 of 10 Sept. 2002, at. 1) was adopted also with a binding decision of the EP.

inserted into Title XIX and became articles 174, 175 and 176. Instead, the content of EC Treaty article 2 was partially, modified as the reference to ‘sustainable growth’ was replaced with that of sustainable development, though, in connection with ‘economic activities’. More significantly, however, ‘a high level of protection and improvement of the quality of the environment’ joined the already established tasks of the Community. While this novelty definitively attested that economic growth could not be pursued just for the sake of it, above all, it shed light on the constitutional *status* of environmental protection under EC law³⁶⁸. Finally the principle of integration in the field of the environment became a principle of general nature, as the Amsterdam Treaty established that:

‘Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development’.

The major change introduced by the Amsterdam Treaty, however, concerned the decision making process

³⁶⁸ See H.J. Jans, H.H. Vedder, *cit.*, at. 9.

in the environmental field, as the co-decision procedure became the standard procedure to be followed by the EC institution.

The 2001 Treaty of Nice did not bring about any change of material importance at treaty level³⁶⁹. Close to the signature of the Nice Treaty in December 2000, however, the representatives of the Union's three political institutions proclaimed the Charter of Fundamental Rights of the European Union, an instrument subsequently acknowledged by the Lisbon Treaty of 2007 as having the *status* of source of EU law (as it is with the original treaties – now TEU, TFEU and the Euratom Treaty). Whereas the treaty of Nice did not bring forward any substantial modification in the field of environmental protection, the Charter added new and relevant elements. In particular, article 37 of the Charter established as follows:

‘A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development’

³⁶⁹ Visible changes affected only the numeration of the environmental articles of the EC Treaty, which became article 174, 175 and 176.

One can ask him/herself to which extent the above provision does sanction a fundamental right to ‘environmental protection’ or it simply describes a principle, thus offering a tangible example of the distinction drawn between ‘rights’ and ‘principles’ fixed by article 52, paragraph 2, of the Charter itself³⁷⁰.

3.1.4. Current features of the EU environmental policy under the Lisbon Treaty

The Lisbon Treaty of 2007, lastly, introduced new elements that are marking (and will mark) the development of the environmental law and policy of the EU. The new Treaty on the European Union, whose articles now enjoy the same *status* as those contained in

³⁷⁰ See Rizzo, cit., at 20-21. The author holds that article 37 of the Charter, if not intended to establish an individual right, it assumes, however, a “deep political and cultural relevance, becoming an instrument for interpreting other norms and values deriving from the *acquis communautaire*”. Others consider the high level of environmental protection a “primary objective” of as safeguarding the Earth is the requisite for human existence itself and, accordingly, for the physical enjoyment of the fundamental rights established under the Charter, see F. Munari, L. Schiano Di Pepe, cit., at 144.

the Treaty on the Functioning of the European Union³⁷¹, is premised on the acknowledgment that the ‘social and economic development’ of the peoples of the EU shall take place in a context that also favours the realization of other two objectives, namely, sustainable development, on the one hand, and the functioning of the internal market, on the other³⁷².

Apart from the Preamble, the environment is recalled also under Title I of the new TEU, regarding ‘Common provisions’. TEU article 3 paragraph 3, (on the ‘tasks’ assigned to the EU) postulates that the Union shall work ‘for the sustainable development of Europe’ based, *inter alia*, on ‘a high level of protection and improvement of the quality of the environment’³⁷³.

The TFEU contains the most fundamental (less declaratory) provisions for the development of the environmental policy of the Union. In such a context, it

³⁷¹ See article 47 TEU. The Union has a legal personality that is no longer distinguishable from that of the Community. This makes irrelevant the doctrinal debate on the legal personalities of the EU, the delimitation of competences among the European institutions and treaty-making powers. This is even more so in the light of the elimination of the three-pillar structure introduced by the 1992 Maastricht Treaty.

³⁷² See TEU, Preamble, 9th recital. The environmental protection objective, instead, is not mentioned in the Preamble to the TFEU.

³⁷³ This was stipulated referring to the internal market. As it will be seen later (*infra* § 3.2), sustainable development ‘of the Earth’ also appears with regards to the relations that the Union shall have with the rest of the world, at art. 3, para. 5 TEU.

must be noted that problems arising from the determination of attributions to the Community in the environmental area – which used to form part of the bigger problem concerning the determination of attributions to the Community, the Union and their the Member States, do no longer remain after the entry into force of the Lisbon Treaty by which the Community was merged into the Union (thus exercising a unified legal personality). TFEU article 4, in fact, defines the area of shared competence, that is to say, the areas where the Union is competent to adopt decisions along with its Member States (not deprived from their legislative prerogatives until when the Union begins to exercise its own ones). Accordingly, TFEU article 4, paragraph 2, letter e) mandates that the competence of the Union concurs with that of its Member States in the field of environmental protection³⁷⁴.

The exercise of shared competence by the Union, as made clear by the Treaties, is aimed at *contributing* to the protection of the environment and is not, evidently, meant

³⁷⁴ Other areas of *shared competence* are: internal market, social policy for the aspects defined in the TFEU, economic, social and territorial cohesion, agriculture and fisheries excluding the conservation of marine biological resources, consumer protection, transport, trans-European networks, energy, area of freedom, security and justice, common safety concerns in public health matters for the aspects regulated by the TFEU.

to substitute in any way individual and local actions by Member States. The parallel exercise of such competences is also guaranteed by application of principle of subsidiarity to the legislative activity at EU level³⁷⁵. Said principle, established at article 3, paragraph 5 of the TUE, along with the principle of proportionality (article 5, paragraph 4, TEU)³⁷⁶, plays a role of paramount importance in that it balances the intervention of the EU (consisting in the adoption of environmental measures) to the initiatives which are best undertaken at national or even at internal level³⁷⁷.

The principle of integration, which postulates that all other policies formulated by the EU must be shaped with due regard to the requirements of environmental

³⁷⁵ SEA already contained a reference to this principle at art. 130R, para 4, underscoring that “the Community shall take action relating to the environment to the extent to which the objectives referred to in paragraph I can be attained better at Community level than at the level of the individual Member States. Without prejudice to certain measures of a Community nature, the Member States shall finance and implement the other measures”. Some speak of this provision as ‘anticipatory’ to the subsidiarity principle. E.g. P. Fois, cit., at 70.

³⁷⁶ It postulates that the action of the EU shall not exceed what is necessary to achieve the objectives established under the Treaties.

³⁷⁷ In particular, EU legislative proposals are tested against this principle as to determinate whether a certain measure (to deal with a certain matter) can be best adopted at EU or at the level of Member States. Protocol 2 to the TEU (which relates to the principles of subsidiarity and proportionality) assigned this task to the national parliaments of Member States.

protection, has been kept as a general principle of EU law by the Lisbon Treaty at TFEU article 11³⁷⁸.

From the decision-making point of view, the Treaty of Lisbon has relabelled the framework of the available options. On the one side, reference goes to the ‘ordinary legislative procedure’ (regulated by TFEU articles 289 and 294 and formerly known as ‘co-decision’ procedure) and, on the other side, to the special legislative procedure (provided by used in limited cases)³⁷⁹. Article 192 TFEU is the norm usually employed by the EU legislator as legal basis for the adoption of acts concerning environmental protection. Paragraph 1 of the provision at hand stipulates that:

³⁷⁸ A plurality of integration principles (on sex equality, employment and social integration, non-discrimination, and consumer protection) were inserted under the Lisbon Treaty amongst the ‘provisions having general application’ (TFEU articles 7 to 13).

³⁷⁹ According to TFEU article 192, paragraph 2, the special legislative procedure is derogative, occurs without prejudice to TFEU art. 114 and provides that the Council decides unanimously after consulting the Economic and Social Committee and the Committee of Regions for the adoption of: a) provision of primarily fiscal nature, b) measures affecting town and country planning, the quantitative management of water resources or affecting, directly or indirectly, the availability of those resources, land use (waste management excluded), and c) measures significantly affecting a Member State’s choice between different energy sources and the general structure of its energy supply. Lastly, the provision reserve the right of the Council to decide (by unanimity) for the adoption of legislation on the aforementioned matters by the resorting to the ordinary legislative procedure.

‘The European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee and the Committee of the Regions, shall decide what action is to be taken by the Union in order to achieve the objectives referred to in article 191’

Overall, this testifies that the Treaty of Lisbon has enhanced, again, the powers of the European Parliament for the adoption of decisions in the area of the environment; in fact, the reference made by article 192 TFEU to the ordinary legislative procedure implies the application of the procedure *ex* article 294 TFEU to decision-making process concerning environmental matters and, in particular, to any decision-making process deemed necessary in order to achieve the objectives laid down at TFEU article 191³⁸⁰.

As for the objectives to be achieved through EU action, the Lisbon Treaty, of course does not depart from those which the Community has already aspired to in the preceding decades. In this sense, TFEU article 191, paragraph 1, maintains the goals of preserving, protecting

³⁸⁰ The Treaty of Lisbon also confirmed the ordinary legislative procedures for the environment action programmes ‘setting out priorities and objectives to be attained’.

and improving the quality of the environment, protecting the health of the people living in the EU³⁸¹ and ensuring a wise and rational use of the natural resources. Besides this, also the fourth objective introduced by the Maastricht Treaty was confirmed and enriched with a reference to climate change (as example of an area where the EU contributes in terms of normative creation)³⁸².

Under TFEU article 191, paragraph 2, gathers the already noted principles guiding the exercise of the EU environmental policy: precaution, preventive action, rectification of the damage at source, and the ‘polluter pays’ principle’. TFEU article 191, paragraph 3, again, restates the criteria (or ‘policy aspects’) for the assessment of legislative proposals in the field of the environment (availability of scientific and technical data; environmental conditions in the various regions of the EU; cost/benefit analysis of action/inaction; overall socio-economic development of the EU and balanced development of its regions).

³⁸¹ Protection of people’s health had been reaffirmed by the ECJ as one objective legitimating action by the EU in the environmental area. ECJ judgment of 29 Mar. 1990, Case 62/88 (*Chernobyl*).

³⁸² Commentators note how this reference is primarily political. See J.H. Jans, H.H. Vedder, cit., at 12 and D. Benson, A. Jourdan, cit., at 284.

3.2. Biodiversity law and policy of the European Union on the global scenario

The European Union can be reasonably considered amongst the major contributors in the shaping of international biodiversity law. This process has been made possible by the participation of the EU to a growing number of biodiversity-related MEAs both of regional and international character.

Through its participation into the CBD regime as a fully entitled Contracting Party, the EU has been enabled, on the one hand, to foster the development of international norms (i.e. treaty obligations with legal force as well as exhortative norms of conduct) on biodiversity conservation and, on the other hand, it has entered a venue where, on a material level, the organization channels its financial and technical assistance in favour of third States (i.e. developing biodiversity-rich countries)³⁸³.

³⁸³ See § *infra* 2.7.1 and 2.7.3 (focusing, specifically on the COP activities regarding the conservation of biodiversity). The influence that the EU exerts in terms of norm creation within the CBD framework appears, for instance, in the provisions of the Cartagena Protocol on LMOs (and partially also by those of the Nagoya Protocol), permeated by a legal understanding of the ‘precautionary approach’ that may be found also in EU environmental legislation.

Before turning the analysis on the features of EU compliance to the international norms on conservation of biodiversity (in general) and the norms concerning *in situ* conservation (in particular), in the light of the considerations that were just made, it is therefore useful to have a detailed look on the development of the EU external relations in the field of environmental protection.

3.2.1. The development of EU external relations in the environmental sphere

The EU and its Member States have been contributing significantly to the development of international environmental law by submitting their proposals *vis a vis* global environmental problems whenever the international community as a whole reaches a consensus on the necessity to act in collective terms³⁸⁴. The possibility for

³⁸⁴ On the point, see G. Marín Durán, *Environmental Integration in the EU's External Relations. Beyond Multilateral Dimensions*, Oxford, 2012, at 6, J. Vogler, 'The External Environmental Policy of the European Union', in O. Stokke and Ø. Thommessen (eds.), (2003) *Yearbook of International Co-operation on Environment and Development 2003/2004*, at 65-71, K. Inglis, 'EU environmental law and its green footprints in the world', in Dashwood A., Maresceau M., (eds) *Law and Practice of the EU External Relations*, Cambridge,

the EU to exert a proactive role on the international environmental arena, has been originally enabled by SEA article 130R, paragraph 5, which gave to the then EEC a legal basis for developing the cooperation with third countries and competent international organizations in the field of the environment by stating the following:

‘Within their respective spheres of competence, the Community and the Member States shall co-operate with third countries and with the relevant international organizations. The arrangements for Community co-operation may be the subject of agreements between the Community and the third parties concerned, which shall be negotiated and concluded in accordance with Article 228. The previous paragraph shall be without prejudice to Member States’ competence to negotiate in international bodies and to conclude international agreements’³⁸⁵.

2008, at 429-464, E. Morgera (ed.) *The External Environmental Policy of the European Union: EU and International Perspectives*, Cambridge, 2012.

³⁸⁵ Before the adoption of the SEA, the EEC drew the competence to conclude international environmental agreements from the implied powers doctrine elaborated by the ECJ. Said doctrine mandated that the EEC institution could exercise external competence in the areas where it had already implemented internal measures (case C-22/70 *ERTA* [1971] ECR 273), or when, notwithstanding the absence of internal measures, the exercise of an external competence was necessary for the achievement of its objectives (Joined cases 3, 4 and 6/76 *Kramer* [1976] ECR 1279). Today this doctrine is irrelevant.

The Maastricht Treaty kept unaltered the power of the Community to undertake external actions on environmental matters³⁸⁶, although it significantly emphasized the contribution that the EC could make in developing international norms for the regulations of environmental matters by inserting a fourth objective under Article 130 R, paragraph 1, namely, ‘promoting measures at international level to deal with regional or world-wide environmental problems’³⁸⁷.

Under the Lisbon Treaty the external dimension of the EU environmental policy has been consolidated, as article 191, paragraph 4 TFEU does not depart from what was previously established. This means that under the Lisbon Treaty, the power of the Union to take on binding international obligations for the regulations of its relationship with third Parties, aimed at the solution or alleviation of global environmental problems, has been

³⁸⁶ However, as noted above, the Maastricht Treaty further enhanced the scope for EC external initiatives regarding environmental matters by switching to the principle of qualified majority, leaving behind unanimity for the adoption of Council decisions regarding the ratification of MEAs by the EC (EC Treaty article 300, paragraph 2).

³⁸⁷ Some do not consider this element of great significance since the Community used to participate in the promotion of such measures even before the Maastricht Treaty and view it as a legalistic adjustment to a pre-existing situation. E.g. L. Krämer (1995), *cit.*, at 49.

confirmed. Consequently, the EU has also been re-attributed the power to play an active role on the international environmental arena (i.e. by formulating its proposals in order to solve or alleviate the above mentioned global environmental threats; by providing material assistance to third Parties within cooperative frameworks).

The power of the EU to act on the international environmental arena is always employed in a way that is compliant with the principle of shared or mixed competence, given that the Treaties have identified the ‘sphere of the environment’ as an area where the EU shares its competence with Member States (article 2, paragraph 2, TFEU). This means that both the internal and external dimensions of the power attributed to the EU in term of norm creation in relation to the environmental sphere, albeit primary, coexists with that of Member States. The EU environmental competence would be exclusive when, having laid down certain rules of uniform character, Member States were subsequently deprived from the right to undertake international obligations that would affect those rules. In the sphere of environmental protection, however, harmonization of rules is only partial. The faculty of Member States to adopt more stringent

rules and standards than those established by the EU, either domestically or internationally, bans the EU to exercise an exclusive environmental competence. The Treaties, in fact, provide that the competence of the EU shall be exercised, in parallel, with the competence of its Member States, which are still entitled with the power to conclude MEAs and to adopt more stringent (or different) legislation than that adopted at EU level³⁸⁸.

In relation to the power of the EU to act on the international environmental arena (i.e. entering into bilateral or multilateral relations with third entities for addressing environmental concerns) it must be also observed that the exercise of said power does no longer constitute a matter of legal debate. As eminently stressed by the doctrine, in the light of the objective and principles held by article 191, paragraphs 1 and 2, at this point of the European integration process there are 'no legal difficulties involved in determining the material external competence in the field of the environment'³⁸⁹. In other words, no doubt exists concerning the EU possibility to enter into international relations with third subjects for dealing with environmental problems, typically by

³⁸⁸. Different, provided that such obligations do not conflict with the ones stemming from the EU legal order.

³⁸⁹ J.H. Jans, H.H. Vedder, cit., at 66.

ratifying MEAs, when such instruments provide for the participation/accession of States as well as regional economic integration organizations (hereinafter REIOs), like, for instance, the CBD.³⁹⁰

The exercise of the external competence of the EU in the field of the environment, furthermore, has to be carried out by the institutions in the light of the principles and objectives enshrined by the Treaties.

On a general note, such competence must be exercised according to the principle of conferral (article 5, paragraph 2 of the TEU), that is, ‘within the limits of the competences conferred upon it by the Member States in the Treaties to attain the objectives set out therein’ and in full respect of the principles of subsidiarity and proportionality (article 5, paragraph 3 and 4 of the

³⁹⁰ CBD article 2 defines a REIO as ‘an organization constituted by sovereign States of a given region, to which its member States have transferred competence in respect of the matters governed by this Convention and which has been duly authorized, in accordance with its internal procedures, to sign, ratify, accept, approve or accede it’, and CBD articles 34 and 35, respectively, on ‘Ratification, acceptance or approval’ and ‘accession’. Not all MEAs, however, provide for this possibility (e.g. CITES). Although some stressed the Community intention ‘to become party to the 1973 CITES Convention to improve protection of endangered species of flora and fauna’, see L. Krämer (1990), *cit.*, at 14, the Convention, however, does not allow yet the accession by REIOs. Therefore CITES is unilaterally applied by the EU through regulation 338/97 on the protection of species of wild fauna and flora by regulating trade therein, in OJ 1997 L 61/I, implemented by regulation 865/2006, in OJ 2006, L 166/I.

TEU)³⁹¹. The principle of sincere cooperation (article 4, paragraph 3 of the TEU), according to which ‘the Union and the Member States shall, in full mutual respect, assist each other in carrying out tasks which flow from the Treaties’ has also to be taken into account in the development of the international environmental relation of the EU, along with the principle of integration. In fact, as seen for the development of EU measures with internal character, the principle of integration that is presently singled out under article 11 of the TFEU (which reprised old article 6 CE, as modified by the Treaty of Amsterdam) shall apply to the same extent to the development of international environmental relations, an area that is equally interested by the necessity of ensuring the achievement of environmental protection by means of incorporation of environmental concerns into all the policies pursued and the actions undertaken by the European Union with the effect of projecting the Union on the international relations arena. This is even more so, if one considers that the process of ‘Unionification’, through which the personalities of the EC and the EU were merged into a single one, allow to retain that article 11 TFEU is applicable to the various policy and legal initiatives

³⁹¹ *Infra* § 3.1.

ascribable to the external action of the European Union, thus reinforcing the legal value of the objective pursued (i.e. sustainable development)³⁹²

As for the objectives to be attained through the exercise of the EU external competence in the field of the environment, other provisions of the TEU are there to guide the conduct of the European institutions. In particular, account must be taken of the provision under article 21 of the TEU (inserted within the Title concerning the ‘General Provisions on the Union’s External Action’). The article puts the Union under the obligation to foster the sustainable economic, social and environmental development of developing countries, with the primary aim of eradicating poverty. The Union is committed also to encouraging the development of international measures with a view to preserve and to improve the quality of the environment and the sustainable management of global natural resources, untimely contributing to sustainable development on a global scale³⁹³.

³⁹² See A. Rizzo, at. 16. More problematic, though, seems to be the application of the integration principle *ex art.* 11 TFEU to the Common Foreign and Security Policy (CFSP) regulated by TEU’s Title V.

³⁹³ TEU article 21, letters (d) and (f).

3.2.2. *The EU and biodiversity-related MEAs a.k.a mixed agreements concerning biodiversity*

From an EU law perspective, international environmental agreements ratified by the EU, a category that includes biodiversity-related MEAs, fall within the definition of international ‘mixed agreements’³⁹⁴. The practice of concluding mixed agreements in an area such as the environment, in relation to which the Union and its Member States are entitled to exercise concurrent competences, has been developed, where possible, in order

³⁹⁴ The European Union is a party to number of biodiversity-related MEAs covered in the previous chapters, such as the CMS (see § *infra* 1.6), the CBD (see § *infra* Chapter 2), the Cartagena Protocol on Biosafety (see § *infra* 2.5) and the International Treaty on Plant Genetic Resources for Food and Agriculture, (Rome, Italy), of 3 Nov. 2001, in 2400, *United Nations Treaty Series*, at 303. In the context of the CMS, the EU also ratified the AEWa agreement (see Council decision 2006/871/EC of 18 Jul. 2005 on the conclusion of the Agreement on the conservation of African-Eurasian Migratory Waterbirds, in OJ 345/24 of 8 Dec. 2006). It has been argued that EU participation to the AEWa is necessary to fully realize the objectives of the Birds Directive; see E. Baroncini, *Il treaty-making power della Commissione europea*, Napoli, 2008, at 301-302. The EU is also a party numerous biodiversity-related MEAs with regional scope. Amongst the most relevant mentioned here is the Convention on the conservation of European wildlife and natural habitats (Berne, Switzerland) of 19 Sep. 1979, in force on 1 Jun. 1982, in Council of Europe *European Treaty Series* N 104, at 2-12. See C. Lasen Diaz, ‘The Bern Convention: 30 Years of Nature Conservation in Europe’, in (2010)19 (2) *Review of European & International Environmental Law*, at 185-196.

to reduce the risks associated with the possibility of undertaking incompatible international obligation on the same matter³⁹⁵. The ECJ has repeatedly asserted that mixed agreements, as all international agreements ratified by the EU as provided for by article 216, paragraph 2 of the TFEU, become a source of EU law³⁹⁶.

Amongst such mixed agreements, ratified on the basis of article 130S (inserted by the SEA to the Treaty of Rome and concerning the external environmental competence of the EU), the 1992 United Nation Convention on Biological Diversity, concluded by the EU with a decision of the Council, is easily found³⁹⁷. The terms of the parallel and jointed participation of the Union and its Member States to the CBD regime, as it is the case for other mixed agreements, is regulated by means of declarations³⁹⁸, that

³⁹⁵ See M. Montini, 'EC External Relations on Environmental Law', in J. Scott (ed.), *Environmental Protection. European Law and Governance*, Oxford, 2009, at 139.

³⁹⁶ See e.g. ECJ judgment of 19 Mar. 2002, case C-13/00 *Commission v Ireland (Berne Convention)*. It was also affirmed that mixed agreements must be implemented according to the 'principle of sincere cooperation' (TEU article. 4, paragraph 3) through 'close association between the Union and its Member States both in the process of negotiation and conclusion and in the fulfilment of the obligations entered into', Ruling of the Court 1/78 of 14 Nov. 1978, (para. 34).

³⁹⁷ Council decision 93/626/EEC of 25 Oct. 1993 concerning the conclusion of the Convention on Biological Diversity, in *OJ* 309, of 13 Dec.1993, at 1-2.

³⁹⁸ In line with CBD art. 34, para. 3, requiring REIOs to 'declare the extent of their competence with the matters governed by the

are laid down with the typical aim of clarifying the relationship between the Union and its Member States as well as their relationship *vis-à-vis* the other Contracting Parties on the matters that are governed by the Convention at hand³⁹⁹. In the light of all this, it is useful to turn to the questions involved with the application of mixed agreements (e.g. biodiversity-related MEAs) as instruments of EU law into the national legal orders of EU Member States.

The European Commission, entrusted with the task of monitoring and supervising the respect of the founding Treaties as well as the correct implementation of

Convention’, the EEC singled out a list of its most relevant legal instruments related to biodiversity (apart from the ‘Nature’ directives it inserted, e.g. Council Directive 90/219/EEC of 23 Apr. 1990 on the contained use of genetically modified organisms, in *OJ L 117* of 8 May 1990, at 1 and Council Directive 90/220/EEC of 23 Apr. 1990 on the deliberate release into the environment of genetically modified organisms, in *OJ L 117* of 8 May 1990, at 15). On the occasion of the ratification of the CBD, the EEC and its Member States also made a joint declaration on transfers of technology and biotechnology, stressing the importance of complying with the obligations under the CBD on such aspects in way that ensures also the full protection of intellectual property rights. See Council decision 93/626/EEC (*above* note 398), Annex C.

³⁹⁹ This operation, however, would be illegitimate on the part of the EU, for instance, when the EU 27 Members participate to a regime that does not provide for the participation of REIOs, because, as wittily observed: ‘the form in which the EU participates in international environmental politics *is* determined not only by internal competences, but also by the extent to which outsiders are willing to accept participation by the Community alongside the member States’, J. Vogler, *cit.* at 67 (*emphasis added*).

secondary EU legislative acts by the Member States⁴⁰⁰, has the power, as it will be seen in this chapter in relation to the application of the Birds and Habitats Directive⁴⁰¹, of bringing judicial actions against them pursuant to articles 258 and 260 of the TFEU. Considering what has been established under article 216, paragraph 2, of the TFEU, besides controlling the national legislative measures employed by Member States in order to transpose secondary legislation (e.g. environmental directives) and beside supervising how such measures are applied into the legal order of each Member State, the Commission has also been entitled with the effective power of checking out how Member States implement the obligations arising out from biodiversity-related MEAs to which the EU is also a Contracting Party⁴⁰². In the execution of its judicial powers, the ECJ is also in the position of ruling upon Member States compliance with mixed agreements on the environment. Such possibilities, in fact, have already been explored in a number of disputes that were decided by the Court.

⁴⁰⁰ See art. 17 TFEU.

⁴⁰¹ For the references of these Directive and a systematic scrutiny of their provisions, see § *infra* 3.4.

⁴⁰² Of this advice, referring generally to MEAs, see M. Hedemann-Robinson, 'EU Enforcement of International Environmental Agreements: The Role of the European Commission', in (2012) *European and Environmental Law Review*, at 2-30.

In the *Etang de Berre* case, France was brought in front of the ECJ by the European Commission according to the procedure under article 258 TFEU⁴⁰³. The case involved the alleged infringement of the 1976 Barcelona Convention on the Mediterranean Sea and its 1980 Protocol on Sea Pollution⁴⁰⁴. In particular, the Commission retained that French authorities had failed in preventing the eutropication of a saltwater marsh caused by the discharge of freshwater diverted by the operations of an upstream hydroelectric power plant. Whereas the two international agreements banned this kind of pollution, EU legislation did not foresee any prohibition to this kind of pollution. The French Government contended that the ECJ lacked jurisdiction to rule upon the case because provisions regulating the matter at stake were absent from EU environmental law. Such argument, however, was dismissed as the ECJ determined the scope of EU competence in relation to mixed agreements. Notwithstanding it acknowledged the absence of internal EU law instruments to regulate the disputed matter⁴⁰⁵, the

⁴⁰³ Case C-293/00 *Commission v France (Etang de Berre)*.

⁴⁰⁴ See § *infra* 1.4.3 (referenced in the context of other UNECE-promoted Conventions).

⁴⁰⁵ See paras. 25-28 of EJC judgment 7 Oct. 2004, case C-239/03 (*Etange the Berre*). The Court referred, however, to a number of fundamental EU legal tools adopted in order to address water

Court retained that this could not prevent it from affirming that the dispute fell within the scope of EU competence⁴⁰⁶ and that France had violated TFEU article 216, paragraph 2.

This case shows, on the one hand, that the Commission effectively detains the faculty to monitor how Member States comply with the international obligations enshrined into MEAs jointly ratified by them and EU and, on the other hand, it confirmed that the ECJ has jurisdiction to adjudicate on alleged violations of such MEAs by the Member States. The interpretation used by the ECJ in the case at hand has spared the EU the problem of bearing responsibility ‘for the failings of a Member State without having an effective legal means (at EU level) to address the problem’⁴⁰⁷, because it focused on some principle that are meant to guide the conduct of Member States in relation to mixed agreement as sources of EU law, namely, the principle of sincere cooperation.

pollution, e.g., the Water Framework Directive 2000/60/EC, in *OJ L* 327, of 22 Dec. 2000, at 1-73.

⁴⁰⁶ *Ibidem*, paras.29-30: ‘Since the Convention and Protocol thus create rights and obligations in a field covered in large measures by Community legislation, there is a Community interest in compliance by both the Community and its Member States with the commitments entered into under those instruments. The fact that discharges of fresh water and alluvia into the marine environment, which are at issue in the present action, have not yet been the subject of Community legislation is not capable of calling that finding into question’.

⁴⁰⁷ R.Hedelmann-Robinson, cit., at 9.

In the *Lesoochranárske zoskupiene* case the Court ruled on the failure to implement the Aarhus Convention on access to information, public participation in decision-making and access to justice in environmental matters, another environmental mixed agreement⁴⁰⁸. Lesoochranárske zoskupiene (hereinafter LZ) is a Slovak NGO that had challenged an administrative decision adopted by the Slovak authorities whereby they had issued permits in favor of private entities allowing them to hunt certain species of wild fauna, including the brown bear, in violation of the derogations contemplated by the Habitats Directive. Slovak law, however, did not grant any capacity to NGOs in front of the national courts to challenge administrative decisions like the one LZ was protesting against. Therefore LZ was impeded to challenge the validity of the hunting permits. This however, did not constitute an obstacle for LZ to challenge the validity of its exclusion, as an alleged contravention of article 9, paragraph 3, of the Aarhus

⁴⁰⁸ Convention on access to information, public participation in decision-making and access to justice in environmental matters, Aarhus (Denmark) of 25 Jun. 1998, in force on 30 Oct. 2001, in (1998) 2244 *United Nations Treaty Series*, at 337. See also Regulation 1367/2006/EC of the European Parliament and of the Council of 6 Sep. 2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies, in *OJ L* 264, of 25 Sep. 2006, at 13-19.

Convention, establishing that ‘each Party shall ensure that members of the public have access to administrative or judicial procedures to challenge acts and omissions by private persons and public authorities which contravene provisions of its national law relating to the environment’. The Supreme Court of Slovakia availed itself of the faculty of referring the case to the ECJ, provided for by the TFEU under article 267. Accordingly, the ECJ was required to elaborate on a number of questions: e.g. given that the EU ratified the Aarhus Convention, was article 9(3) directly effective? Such confirmation would have allowed private individuals and organizations like LZ to stand in front of the Slovakian courts.

The ECJ considered that the dispute between LZ and Slovakian authorities concerned, in essence, the granting of derogations to the strict system of protection afforded to a particular species of wild bear, a matter that entirely fell within the scope of the Habitat directive and that, consequently, could legitimately be heard by the Court. Given that the disputed authorization did not fulfill the stringent requirements established for granting derogations under the directive, the ECJ concluded that the legal dispute in respect of which a preliminary ruling had been requested (art. 267 TFEU) fell within the scope of EU

law⁴⁰⁹. Furthermore, by virtue of the general principle of effectiveness under EU law, the ECJ affirmed that national courts of the Member States are obliged to interpret national procedural rules relating to the conditions that must be met in order to initiate administrative or judicial proceedings with the objective of challenging a decision taken by the public authorities in alleged violation of EU secondary legislation (e.g. a violation of the Habitats Directive) in a manner that is uniform and ultimately consistent with the obligation under article 9, paragraph 3 of the Aarhus Convention, that is, a source of EU law.

Etange de Berre and *Lesoochranárske zoskupiene* cases demonstrated that MEAs must be rigorously implemented by all EU Member States as an integral part of the EU legal order and, most importantly, that they can produce direct effects. Referring to this jurisprudence, some suggests that the Commission should engage more in ensuring Member States' compliance to MEAs obligations by, for example, recurring to the infringement procedure laid down under articles 258 and 260 of the TFEU. Similarly, the doctrine argued that EU should restrict the use of mixity in MEAs, forbid delays to EU ratification of

⁴⁰⁹ See ECJ judgment of 8 Mar. 2011, case 240/09 *Lesoochranárske zoskupiene VLK (WOLF Forest Protection Movement) v Slovakian Environment Ministry (re Aarhus Convention)*, paras. 29-30.

MEAs, impose time limits for compliance by Member States and restrict the use of EU declaration of competence for MEAs⁴¹⁰.

The possibility of achieving a better implementation of MEAs within the EU through a more systematic reliance on judicial solutions must not be underestimated. However, such practice would not be entirely in line with the spirit and the cooperative nature of most MEAs, which emerged from the reflections made in the preceding chapters., MEAs, in fact, contain obligations of cooperative nature that are often termed in a very broad fashion and are aimed at solving or alleviating regional and global environmental problems that affects the whole Community of their Parties.

From an international law perspective, the type of control exercised by the European Commission and the ECJ is greatly different from that prevailing under all biodiversity-related MEAs, and the CBD in particular, which privilege non confrontational forms of dispute settlement, non-compliance mechanism of non judicial nature as well as the engagement by the COP with moral suasion. The monitoring and enforcement activities autonomously carried out by the EU institutions are

⁴¹⁰ See R.Hedelmann-Robinson, cit., at 29-30.

established in the Treaties⁴¹¹. The CBD system of compliance, on the contrary, has not been equipped with comparable mechanisms. As shortly anticipated, such system is principally based on the exercise of collective suasion by the COP in relation to non-complying Parties. The settlement of disputes concerning both the interpretation and the application of the Convention is organized accordingly and it is primarily structured on the negotiations between the potential litigants and as well as the recourse to the exercise of good offices or mediation by a third party, (as provided for under Article 27 paragraphs 1 and 2)⁴¹².

In our view, maintained that the Commission shall always act as the ‘guardian’ of the EU legal order as entitled to this task by the Treaties, but considering also

⁴¹¹ Not ultimately to ensure a two-tier form of compliance. See Opinion of Advocate General Mrs Kokott, C-389/09, point. 39 where she states that ‘provisions of secondary European Union law must, so far as possible, be interpreted in a manner that is consistent with the obligations of the European Union under international law’. Referring to the Habitats Directive, the Opinion stresses that its obligations are ‘intended to give effect so far as possible to the obligation to protect its habitats in accordance with Article 4 of the Bern Convention’

⁴¹² The importance attached to non judicial solution is not diminished by the prevision, under CBD art. 27, para. 3, of judicial dispute settlement solutions: (a) arbitration in accordance with the procedure found in Part 1 of Annex II to the CBD and (b) submission of the dispute to the ICJ. The absence of any practice in this regard, however, confirms the preference widely given to other kinds of solutions.

both the primitive nature of the provisions of the CBD (as well as those under other MEAs), we suggest, in relation to the biodiversity-related agreements that became part of the EU law, that the work of the institutions (both the Commission and the ECJ) should be primarily oriented at controlling the compliance with secondary legislative measures. These measures, in fact, are the ones that, at EU level, were crafted for the attainment of the objective of the CBD (or subsequently made available for this purpose as it is the case of the 1979 Bird Directive and the 1992 Habitats Directive). This observation, in our view and always in relation to the CBD, finds support by the explicit inclusion of said secondary legislative instruments in the body of the Declaration issued by the EU at the act of ratification.

There are different reasons for preferring other forms of control on Member States compliance to MEAs. Foremost, the workload with which the services of the European Commission are confronted on daily basis is already cumbersome. The ordinary verification of numerous MEAs on the part of each Member States, would require the European Commission (DG Environment and the Legal Service) to embark on an additional enterprise that would add to the already heavy

and costly task of monitoring the compliance with secondary legislation adopted by the EU institutions (e.g. compliance with the directives on environmental protection)⁴¹³.

In the second place, although international mixed agreements constitute an integral part of the EU legal order, as it was originally established by the Treaties and as it has been subsequently reaffirmed by the ECJ, they remain legally binding instruments that have been concluded by distinct and separated entities, if one looks at the issue from an international law perspective. In other words, if the judicial control is made possible by virtue of the links that exist between the EU and its Member States, determined by the cession of elements of sovereignty to a supranational entity, from an international law perspective, MEAs ultimately enter both into the EU legal system and the national legal order of European countries by stepping into different doors separately. For this reason, it is argued

⁴¹³ See L. Prete, B Smulders, 'The Coming of Age of the Infringement Proceedings', in (2010) 47 *Common Market Law Review*, at 11-13. On the issue of MEAs implementation at EU level, we retain, as eminently suggested, that 'the ECJ's substantively 'hard' control over compliance with EC legislation implementing environmental treaties (...) is the most desirable way, if feasible, to realize full implementation of those environmental treaties', cit. from Y. Shigeta, 'The ECJ's Hard Control over Compliance with International Environmental Law: Its Procedural and Substantive Aspects', in (2009) 11 *International Community Law Review*, at 225 (*emphasis added*).

here that whenever States are Parties to a MEA and are also members of a REIO which, in turn, is also Party of the same MEA (as in the case of the European Union with the CBD), all subjects involved should strive, in the first place, to achieve a major coordination of their efforts in order to comply with the MEA obligations, first of all, at a broad policy level.

Better said, the supranational institutions empowered by those very same States to pursue environmental common goals in a more efficient way – that is precisely what happens in the EU when it comes to deal with problems that require the taking of more efficient solution on a wider scale, by virtue of the principle of subsidiarity – should primarily strive for the achievement of a major coordination (if not the harmonization) of the measures that are individually undertaken by every subject involved (the Union, each Member State) in order to comply with international obligations they all decided to accept, instead of engaging themselves with ‘intestine’ and more confrontational ways of verifying the terms of such compliance. On this perspective the next subparagraph is conceived. It addresses the compliance of the EU with the obligations stemming from the CBD, especially with articles 6 and 8 of this latter instrument. The analysis,

confronted with what has been previously written on Italy's compliance with the CBD, may open the way to some useful (although necessarily limited) remarks on the implementation of the Convention that will be gathered in the Conclusions of this work.

3.2.3. How does the EU comply with the biodiversity-related MEAs? The EU Strategy on biodiversity

The EU has been granted the possibility of acceding to the CBD as its articles 34 and 35 provide for the participation of REIOs to the international legal regime set there under. In order to implement the broad obligations contained in the CBD (seen in Chapter 1) the Union, as the other Contracting Parties, is requested to 'develop strategies, plans and programs designed to ensure the conservation and the sustainable use of biodiversity' as well as 'the integration of conservation and sustainable use of biodiversity into sectoral programmes, plans and policies', in line with CBD article 6.

With the view to ensure implementation to and compliance with the above requirements, as variously

noted, many policy initiatives have been developed by the Union⁴¹⁴. The first development consisted in a Communication concerning a Community Biodiversity Strategy, a document that was firstly prepared by the Commission for adoption by the Council and the Parliament (which eventually happened during 1998)⁴¹⁵.

Later in 2001, as seen above, the EU committed to halting biodiversity loss within the territory of its Member States and to achieve said objective by 2010.⁴¹⁶ Five years later the actions in the meanwhile had been undertaken at EU level were subjected to a review. The outcome of the review process revealed that the realization of the 2010 objective was still feasible, although it required a sensible acceleration in implementing the proposals that were being put forward both by the EU institutions and by the Member States. These latter, according to the Commission, had a particular responsibility because, by improving their territorial planning, they could reconcile the need to consume the soil, on the one hand, and the

⁴¹⁴ See J. Verschuuren, 'Implementation of the Convention on Biodiversity in Europe: 10 Years of Experience with the Habitats Directive' in (2002)5 *Journal of International Wildlife Law and Policy*, at 251-252.

⁴¹⁵ Communication from the Commission to the Council and the European Parliament on a European Community biodiversity strategy, COM(98)42 final of 4 Feb. 1998.

⁴¹⁶ See COM (2001) 264 def.

need to conserve biodiversity (and to maintain ecosystem services in good health), on the other hand⁴¹⁷.

On the theme of biodiversity as a matter falling within the external policy of the EU, the Commission remarked that the UE felt the need to strengthen the implementation of the CBD and it stressed the need to add an increased share of financial assistance to what the EU already provides in the context of the Global Environmental Facility (GEF) for the implementation of the CBD into developing countries, as its contribution amounted only to a less than 1% of the total EU budget for development aid⁴¹⁸.

⁴¹⁷ See COM (2006) 216 def, of 22 May 2006, Communication of the Commission on 'Halting loss by 2010 – and beyond. Sustaining ecosystem services for human well-being', at 4. The Communication is accompanied by the 'EU Action Plan to 2010 and Beyond' (Annex I) and by the 'EU Biodiversity Headline Indicators'. It is important to note that the review of the biodiversity policy took place in 2003-2004 and that such process culminated in the so-called 'Malahide message' (outcome of a Conference held by the Irish Presidency where it was sought a intra-EU consensus on the priority objective to pursue in order to respect the 2010 commitment.

⁴¹⁸ *Ibidem*, at 10. COM (2005)134 def. of 12 Apr.2005, Communication of the Commission on 'Policy Coherence for Development Accelerating progress towards attaining the Millennium Development Goals' already stressed this need by stating that: 'the EU aspires to a leading role in the implementation of the Convention on Biological Diversity (CBD) and the World Summit on Sustainable Development (WSSD) target on biodiversity. The EU should enhance funding earmarked for biodiversity and strengthen measures to mainstream biodiversity in development assistance', see point 3.2.2 on 'Multilateral Environmental Agreements (MEAs). On this issue, see the recent contribution of E. Morgera, 'The Trajectory of EU

‘Biodiversity in the EU and the world’ is one of the four priority sectors of intervention (priority sector 2) at the basis of the EU Action Plan to 2010 and beyond, another policy instrument meant to guide the EU governance on biodiversity. Under the heading of sector 2, the Commission singled out the three distinct objectives: strengthening the effectiveness of international governance on biodiversity and ecosystem services (objective 6), increasing the aid in favor of biodiversity and ecosystem services in the framework of the external assistance of the EU (objective 7) and reducing the impact of international trade on biodiversity and ecosystem services on a global scale (objective 8)⁴¹⁹. In order to improve the global governance on biodiversity, the Commission underlined the need for the EU to a more

Biodiversity Cooperation: Supporting Environmental Multilateralism through EU External Action’, in E. Morgera, *The External Environmental Policy of the European Union: EU and International Law Perspective*, Cambridge, 2012, at 235-259.

⁴¹⁹ The remaining three priority sectors concern, respectively, ‘Biodiversity within the EU’ (Sector 1), ‘Biodiversity and Climate Change’ (Sector 2) and ‘Knowledge Base’ (Sector 4). For a scholarly contribution on the topic covered by ‘sector 2’, see A. Trouwborst, ‘Conserving European Biodiversity in a Changing Climate: The Bern Convention, the European Union Birds and Habitats Directives and the Adaptation of Nature to Climate Change’, in (2011)20(1) *Review of European Community & International Environmental Law*, at 62-77, A. Trouwborst, ‘International Nature Conservation and the Adaptation of Biodiversity to Climate Change: a Mismatch?’, in (2009)21 (3) *Journal of Environmental Law*, at 419-442.

effective implementation of the CBD and its related instrument. For what concerns the external assistance of the EU, the Commission again stressed the need to increase the monetary contribution specifically assigned to biodiversity in developing countries. Finally, it reminded that is particularly urgent to adopt measures to fight tropical deforestation, including measures related to the exchange of products connected to such activities⁴²⁰.

The development of the EU biodiversity policy is currently underpinned by the EU Strategy on biodiversity, a policy instrument that has been adopted by the Commission in 2011 (in line with CBD article 6) and drafted in the wake of Nagoya COP 10, in the occasion of which the international community acknowledge that the 2010 biodiversity objective had not been achieved⁴²¹.

The EU Strategy on biodiversity is inspired by the commitments taken at international level as it is witnessed by the vision and the headline target that it respectively defines by envisaging an EU where by 2050 biodiversity and ecosystem services are ‘protected, valued and appropriately restored’ and setting the goal to halt the loss

⁴²⁰ See COM (2006) 216 def., at 14.

⁴²¹ Communication from Commission to the European Parliament, the Council, the Economic and Social Committee, the Committee of the Regions, COM (2011)244 final of 3 May 2011, concerning ‘Our life insurance, or natural capital: an EU strategy on biodiversity to 2020’.

of biodiversity and the degradation of ecosystems services within the EU by 2020⁴²².

Through an assessment of the Strategy it is possible to identify how the EU complies (or wishes to comply) with its obligations under the Convention and, in particular, with CBD article 8, letters a) to e), concerning *in situ* biodiversity conservation. In this regard, the Strategy recalls Natura 2000 as the ‘world’s largest network of protected areas’⁴²³ but acknowledges that more should be needed for giving full implementation to the Birds and Habitats Directives by reaching a favourable conservation status for both migrating species and species and habitats of Community importance. Accordingly, the Strategy sets out two important targets. The first (target 1) requires the Union to take action in order halt the deterioration in the status of all species and habitats covered by ‘Nature’ Directives and, most importantly, to achieve a significant and measurable improvement⁴²⁴ The second (target 2), instead, calls for the maintenance and enhancement of

⁴²² *Ibidem*, at 2.

⁴²³ *Ibid.*, at 2.

⁴²⁴ The Strategy specifies that by 2020 100% more habitat assessments and 50% more species assessments under the Habitats Directive must show an improved conservation status; and 50% more species assessments under the Birds Directive show a secure or improved *status*.

ecosystem services by establishing green infrastructure and restoring the 15% or more of degraded ecosystems.

3.3. The policy framework for the conservation of EU biodiversity: between integration and specialization⁴²⁵

According to eminent scholars in the field of EU environmental law ‘a real policy of conserving biological diversity is gradually emerging in a series of non-binding acts adopted by EC institutions’⁴²⁶. This view certainly deserved to be shared nowadays as the application of legal instruments for the protection of biodiversity within and beyond Europe is backed up by a rather consistent framework of relevant policy documents.

The elaboration of relevant policy instrument in the field of biodiversity protection was decisively boosted by the initiatives that took place into international *fora* for

⁴²⁵ See, *ex multis*, N. de Saadler, ‘EC Law and Biodiversity. How to save Noah’s Ark’, in (2007) *Journal of European Environmental & Planning Law*, at 168-180. J. Hiedanpaa, D.W. Bromley, ‘The Harmonization Game: Reasons and Rules in European Biodiversity Policy’, in (2011) *21 Environmental Policy and Governance*, at 107-111.

⁴²⁶ See de Saadler (2007), *cit.*, at 172.

environment and development at the turn of the millennium.

Accordingly, during the European Council's meeting of Goteborg (Sweden) on 15-16 June 2001, EU Heads of States and Prime Ministers committed their respective countries to halt the loss of biodiversity that was occurring at an unprecedented rate in territory of the European Union by the year 2010⁴²⁷. With such a commitment, the Community was reckoning that protecting biodiversity not only was one possibility amongst many to explore in order to achieve sustainable development but, on the contrary, it was acknowledging the fight against biodiversity loss rather as one of the most crucial tasks to be carried out for achieving sustainable development (in line with the aspirational goal established at UN level)⁴²⁸.

⁴²⁷ Conclusions of the Presidency, European Council (Goteborg, 15-16 Jun. 2001). See also COM(2001) 264 def. of 15 May 2001, Communication of the Commission of the 'Sustainable development in Europe for a better world: Strategy of the European Union for sustainable development' where it recognizes biodiversity loss as a major threat to sustainable development (at 4), sets the objective to protect and restore habitats and natural systems in order to halt biodiversity loss by 2010 and proposes, as an EU measure, to develop a system of biodiversity indicators by 2003 (at 12-13).

⁴²⁸ The European Council solemnly affirmed that sustainable development was 'a fundamental objective under the Treaties' (see Conclusions, point 19). Such affirmation was, inter alia, confirmed by the same institution at the Summit of 10-11 Dec. 2009 (see European Council Conclusion, EUCO 6/09).

This commitment, was consequently included in the 2001 Strategy of the EU for sustainable development⁴²⁹ where it is recognized that the conservation of biodiversity is one fundamental element (the premise, we would say) of sustainable development.

The 2001 EU Strategy on sustainable development (SDS), conceived as a supplementary tool for the so-called ‘Lisbon Strategy’ – a policy instrument that was aimed at orienting the socio-economic development of the EU up to 2010⁴³⁰ – was subsequently abandoned because the 2004 enlargement round leading to the admission of ten new Member States, required a renewed perspective and renewed objectives.

For this reason, the 2001 SDS underwent a revision process that culminated in the adoption of the 2006 Sustainable development strategy for an enlarged EU⁴³¹. Amongst the numerous issues covered by the 2006 EU SDS, there are some that are directly linked to biodiversity. The Strategy, for instance, called for an

⁴²⁹ European Commission, COM (2001)264 def.

⁴³⁰ Noteworthy is, in particular, strategic goal at point 5, by which the EU is ‘to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion’.

⁴³¹ Council of the European Union, Doc. N° 10917/06 of 26 Jun. 2006, on ‘Review of the EU Sustainable Development Strategy (EU SDS) – Renewed Strategy’.

improved management and conservation of natural resources, with particular emphasis on biodiversity and marine ecosystems, it restated the ‘imperative’ need to halt the worldwide rate of biodiversity loss by 2010 and urged Member States to implement the EU Biodiversity Strategy in both its internal and its global dimensions, working with the Commission in order to identify and implement ‘priority actions’ with the view to stop biodiversity loss⁴³².

Spurred by the entry into force of the Lisbon Treaty, the Commission commenced a revision of the EU 2006 SDS. While illustrating the efforts that were being made by the EU in order to mainstream sustainable development into all the policy areas of the EU, the Commission kept unaltered the challenge of halting the loss of biodiversity as a fundamental element of the SDS (albeit recognizing that on this element further and significant progress needed to be made)⁴³³.

Together with the guidelines adopted at the highest political level, following the pyramidal architecture of the

⁴³² *Ibidem*, at 14.

⁴³³ European Commission, COM (2009) 400 final, of 12 Dec. 2009, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions ‘Mainstreaming sustainable development into EU policies: 2009 Review of the European Union Strategy for Sustainable development’, at 3 and 7-8.

EU environmental governance, the Sixth EU Action Programme for the Environment stands out as another tool guiding reference for elaboration of the action of the Union on biodiversity protection.⁴³⁴ The Program, covering the decade from 2002 to 2012, is the first of its kind – it must be recalled – that has been jointly adopted by the Council and the European Parliament through what would later be called ‘ordinary legislative procedure’. This document, as just underlined, may well be seen as another piece of the multi-layered EU policy on biodiversity, chiefly because it identifies the protection of biodiversity as one of its four ‘priority areas’ of action. Such identification is consequential to the affirmation of the legitimate EU goal of:

⁴³⁴ See European Parliament and Council decision 1600/2002/EC of 22 Jul. 2002 laying down the Sixth Community Environment Action Programme, in OJ 2002 L 242. See F. Fonderico, ‘Sesto Programma di azione UE per l’ambiente e “strategie tematiche”’, in (2007) *Rivista giuridica dell’ambiente*, at 695 ss and C. Adelle, T. Fajardo del Castillo, M. Pallemarts et al, *The External Dimension of the Sixth Environment Action Programme: an Evaluation of Implementing Policy Instruments*, Report for the IBGE-BIM, IEEP, London, 2010. On the previous environment action programmes, L. Krämer (1995), op. cit., at 147, particularly where the author stresses their being ‘multiannual action programmes which fixed objectives, principles and priorities (...) ‘with the objective of preventing the creation of problems rather than combating their consequences’ and where he criticized the lack of ‘assessment of the achievements and failures of the respective actions programmes made at the end of each programme’.

‘Protecting, conserving, restoring and developing the functioning of natural systems, natural habitats, wild flora and fauna with the aim of halting desertification and the loss of biodiversity, including diversity of genetic resources, both in the European Union and on a global scale’⁴³⁵

An ambitious goal such as the one agreed upon in relation to the ‘biodiversity’ priority area necessarily had to be matched with a series of ‘specific actions’ in order not to dangle in space. Significantly, the Union comprises in the list of actions to be undertaken in relation to nature and biodiversity protection, the establishment of the Natura 2000 (ecological) network⁴³⁶, along with research, fair and equitable sharing of the benefits arising from the use of genetic resources and prevention on the negative effects that alien species can have on EU biodiversity.⁴³⁷

⁴³⁵ 6th EU Action Programme on the Environment (*above* note 434), art. 2, para. 2 (ii).

⁴³⁶ See *infra* § 3.4 (extensively).

⁴³⁷ Decision 1600/2002/EC, art. 6, para. 2, (a). The coincidence of the objectives pursued at EU level through these specific actions with those laid down under the CBD is striking. Other specific actions, such as the integrated management of coastal areas and forest management, are singled out at art. 6, para. 2 (g) and (h).

Shifting the focus to the policy developments that build a properly called ‘EU Biodiversity Policy’, the EU Strategy on biodiversity that was prepared in 2006 by the European Commission deserves to be mentioned⁴³⁸. This comprehensive document has confirmed, *inter alia*, that the Habitats Directive, together with the Birds Directive, constitutes the cornerstone of biodiversity protection in Europe and that the correct application of both directives is key for the EU to comply with its international obligations⁴³⁹.

From a public international law perspective, the EU Strategies on biodiversity constitute one of the mechanisms – if not the major one at procedural level – through which the EU complies with its obligations under the CBD. For this reason, the Strategy that currently guide the EU biodiversity policy, adopted on 3 May 2011 by the Commission in substitution of the 2006 one, has been previously assessed, in the context of biodiversity

⁴³⁸ COM (2006) 216 final, ‘Halting the loss of biodiversity by 2010 - and beyond - Sustaining ecosystem services for human well-being’

⁴³⁹ *Infra* § 3.4 (extensively). The literature detected a gap in terms of legal effectiveness existing between the Habitats Directive, on the one hand, and the international law instruments for nature conservation, on the other hand: ‘because international conventions, to which the European Community is a party, did not achieve too satisfactory results and in particular, did not stop the slow but progressive degradation and even disappearance of natural habitats in Western Europe’, L. Krämer (1995), *cit.*, at 19.

protection as an element of the external relations of the Union⁴⁴⁰.

Other detailed policy tools, however, fall within the framework of the European biodiversity policy. The European Commission, in fact, driven by the need to integrate biodiversity concerns into the wide range of sectoral policies that were referred to in the first Communication on a Community biodiversity strategy (again prepared for submission to the CBD COP by the European Commission)⁴⁴¹ prepared four thematic action plans in 2001.

These action plans appear together in a Communication from the Commission and respectively deal with biodiversity protection in the context of natural resources conservation, biodiversity and agriculture, the promotion of biological diversity in fisheries and, finally, the integration of biodiversity in the area of economic cooperation and developmental aid⁴⁴². All these action plans are based on the integration approach and single out specific goals and measures that shall guide and inspire the work of the EU institutions, Member States and all the other public and private stakeholders that participate into

⁴⁴⁰ *Infra* § 3.2.3.

⁴⁴¹ COM(1998) 42.

⁴⁴² COM (2006) 216 final.

the sectors that have been identified by the Commission as requiring an integration of biodiversity-related concerns.

3.4. Preserving Biodiversity within the EU: directives for the *in situ* conservation of nature⁴⁴³

The Natura 2000 network comprises many thousands of protected areas that were set up all across the territory of

⁴⁴³ See D. Addis, 'Attuazione in Italia delle direttive n. 92/43/CEE «Habitat» e n. 79/409/CEE «Uccelli» in relazione alle aree protette marine', in *Diritto Comunitario e degli Scambi Internazionali*, 2002, at 629-640; N. de Sadeleer, 'Habitats Conservation in EC Law – From Nature Sanctuaries to Ecological Networks', in (2005) *5 Yearbook of European Environmental Law*, at 215-252; European Commission, *Nature and Biodiversity Cases. Ruling of the European Court of Justice*, Luxemburg, 2006; J.H. Jans, H.H. Vedder, cit., at 506-517; A. Milone, 'In merito ad alcune questioni in materia di valutazione di impatto ambientale e di valutazione di incidenza', in (2007) *Rivista giuridica dell'edilizia*, at 644; D. Owen, 'The application of the wild birds directive beyond the territorial sea of European Community Member States', in (2001) *13 Journal of Environmental Law*, at 39-78; N. Pacini, 'La conservazione della biodiversità e dell'habitat naturale', in R. Giuffrida, cit., at 157-172; J. Verschuuren, 'Effectiveness of Nature Protection Legislation in the EU and the US: The Birds and Habitats Directives and the Endangered Species Act' in M. Dieterich, J. van der Straaten (eds.), *Cultural Landscapes and Land Use: The Nature Conservation-Society Interface*, Dordrecht, 2004, at 39-67; K. Wheeler, 'Bird Protection & Climate Changes: A Challenge for Natura 2000?', in (2007) *13 Tilburg Foreign Law Review*, at 283-299.

the European Union, in each Member State⁴⁴⁴. This ecological network builds on the so-called ‘Nature’ Directives, which are widely acknowledged as the ‘pillar’ of the EU action in the field of biodiversity conservation⁴⁴⁵. Given the fairly homogeneous distribution of the sites belonging to the network, protection is given to a wide number of animal and vegetable species that inhabit the European Continent⁴⁴⁶. A detailed examination of the norms contained in these two legislative instruments will allow to understand properly how *in situ* protection of nature has been conceived at European level, which obligations Member States have to comply with and which interpretation has been given by the European Court of Justice (hereinafter ECJ) to the obligations crystallized into the above mentioned ‘Nature’ Directives.

⁴⁴⁴ State-of-the-art information about the implementation of this ecological network is public and made available through the ‘Natura 2000 Barometer’, an instrument jointly managed by the European Commission (DG Environment) and the European Environmental Agency (EEA). Up-to-date information can be found on-line at: http://ec.europa.eu/environment/nature/natura2000/barometer/index_en.htm. Some properly observed that ‘Natura 2000’ does not constitute a ‘legal framework’ in itself, see K. Wheeler, at 284.

⁴⁴⁵ European Commission, COM (2004)431 of 15 Jul. 2004, ‘Financing Natura 2000’, at 3.

⁴⁴⁶ It must be recalled, in fact, that Natura 2000 was not created with the only objective of ensuring the conservation of endangered or rare species and habitats. A great number of sites belonging to the network is merged into the greater agricultural (or even semi-urban) landscape.

3.4.1. *Directive 79/149/EEC on the conservation of wild birds*

By adopting the 1979 Directive on the conservation of wild birds (79/409/EEC)⁴⁴⁷, the European Communities established a comprehensive regime of the protection of wild bird species naturally occurring in the European territory⁴⁴⁸. As pointed out by the doctrine, another “layer” of non-utilitarian protection was thus added to the international and regional rules applicable in the European continent on wild birds⁴⁴⁹. The Court confirmed the comprehensive scope of the Directive (as well as its protective effects) by specifying that the expression ‘all species of naturally occurring birds in the wild state in the territory of the European territory of the Members States to which the Treaty applies’ (article 1) entails that a

⁴⁴⁷ Council Directive of 2 Apr. 1979 on the conservation of wild birds (79/409/EEC), in *O.J.* 1979, L 103/79.

⁴⁴⁸ Some scholars spoke of ‘an attempt’ to build a comprehensive regime, e.g. L. Krämer (1990), *cit.*, at 13. Art. 1 of the Birds Directive, establishing its material and geographical scope, established that the Directive applies to birds, their eggs, nests and habitats (paragraph 1) but excluded Greenland.

⁴⁴⁹ In this sense, refer to A. Kiss, D. Shelton, at 192-193. This is because the considerations that led to the adoption of the Birds Directive intrinsically diverged from those at the basis of the adoption of the 1902 Paris Convention for the Protection of Birds Useful to Agriculture.

Member State must ensure protection also to the bird species naturally or usually living in other Member States (because, as it will be seen, some of them may be transported and traded). It implies also that protection must be given also to bird species that regularly pass through the territory of a Member State during their migrations, which are considered as ‘naturally occurring’ (although for a limited time period).⁴⁵⁰ The Court, in a similar vein, stressing that the protection of migrating species requires transboundary cooperation, affirmed that the Directive was precisely adopted in order to equip Member States with a viable instrument to tackle a common transnational environmental problem⁴⁵¹

Many hurdles, however, stood in the way of Member States compliance with the obligations set under the Directive, ultimately causing them to fail in fulfilling their primary duty of applying the norms stemming from the EU legal order within their jurisdictions⁴⁵². The initial life

⁴⁵⁰ In this sense, the ECJ concluded that a Belgian Royal Decree of 20 Jan. 1970 failed in transposing the Directive by limiting the scope of protection to bird species occurring in the Benelux. See ECJ judgment of 8 Jul. 1987, case C-247/85, *Commission v Belgium*, point 22. See also the more recent ECJ judgment of 26 Jan. 2012, case C-192/11, *Commission v. Poland*, in OJ C 073 of 10 Mar. 2012, at 6-7.

⁴⁵¹ Reaffirming what indicated at the 3rd recital of the Preamble to the Birds Directive.

⁴⁵² In line with the principle of ‘sincere cooperation’. TEU Article 4, paragraph 3 (second sentence).

of the Directive, in fact, was marked by the lethargic transposition of its substantive content into the national legislation of the Member States, which caused the European Commission to initiate many infringement proceedings (under what currently is article 258 of the TFEU) practically against all Members of the Community. Many of these proceedings, of course, reached the litigation stage and therefore were heard by the ECJ⁴⁵³.

Non compliance problems with the Birds Directive, unfortunately, were not confined to bad or incomplete transposition, from which, however, the effectiveness of environmental directives greatly depends⁴⁵⁴. The issue of non compliance was aggravated by bad application of the

⁴⁵³ Early cases heard by the ECJ were, e.g.: Case 262/85, *Commission v Italy*, [1987] E.C.R. 3037; Case 247/85, *Commission v Belgium*, [1987] E.C.R. 3029; Case 412/85, *Commission v Federal Republic of Germany*, [1987] E.C.R. 3503; Case 236/87, *Commission v Netherlands*, [1987], E.C.R. 3989; Case 252/85, *Commission v France*, [1988] E.C.R., 2243. On the first case, L. Krämer 'Conservation of wild birds: Case 262/85 – Italian conservation measures' in L. Krämer, (1993), cit., at 185-206. On the issue of transposition, in particular, the ECJ retained that 'while transposition into national law does not necessarily require the relevant provisions to be enacted in precisely the same words in a specific express legal provision, and a general legal context may be sufficient if it actually ensures the full application of the directive in a sufficiently clear and precise manner, faithful transposition becomes particularly important (...) where the management of the common heritage is entrusted to the Member States in their respective territories', See the Judgment of 7 Mar. 1996, case C-118/94 (*Associazione Italiana per il World Wildlife Fund and Others v Regione Veneto*), point 20.

⁴⁵⁴ See J. Verschuuren, at 307-308.

obligations set in the Birds Directive by the public authorities within each Member States, which indirectly contributed to the impairment of bird habitats all over Europe. National authorities at every administrative level granting permissions to the execution of activities which negatively affects bird sites protected by the Directive or failing to adopt measures suitable for the protection of those same sites, frequently received a strong public condemnation which often ‘reached the ear’ of the Commission and, when supported by internal investigation findings, led to the commencement of infringement proceedings. In particular, as noted by the doctrine, application problems were often caused by ‘the more than generous interpretation of the strict derogations allowed by the Directive at local, regional or national level’⁴⁵⁵. Non compliance episodes, unfortunately, still persist in many EU Member States as demonstrated by recent ECJ rulings on nature conservation. It must be noted, furthermore, that compliance issues still persists notwithstanding the old Birds Directive has undergone a revision process that was mainly due to the enlargement

⁴⁵⁵ See L. Krämer, *EEC Treaty and Environmental Protection*, London, 1995, at 18. Interpretation problems mostly arose with the derogations concerning the deliberate killing of birds.

rounds that in the meanwhile were completed⁴⁵⁶. Besides increasing EU membership, the processes of enlargement had shifted the ecological boundaries of the European environment. This required, evidently, a work on the technical and scientific content of the Directive and its application to additional bird species and habitats of the new regions that have fallen within the system of protection. Therefore Directive 79/409/EEC has been recently repealed by Directive 2009/147/EC, which is a ‘codified’ version of the original Birds Directive as amended⁴⁵⁷.

⁴⁵⁶ Especially the 2004 enlargement round which significantly altered the membership scenario (from EU-15 to EU-25). Compliance issues are eminently legal. Recently collected data have shown, however, that ‘the Birds Directive has brought demonstrable benefits to bird populations in the EU and that international policy intervention can be effective in addressing conservation issues over large geographical areas’, see P.F. Donald et al., ‘International Conservation Policy Benefits for Birds in Europe’, in (2010) 317 *Science*, at 812.

⁴⁵⁷ See article 18 of the Directive 2009/147 of the European Parliament and of the Council of 30 Nov. 2009, on the conservation of wild birds, in *O.J.* L 20 of 26 Jan. 2010, at 7-25. The text of this subsequent directive will be referred to throughout the present Chapter. The adjective ‘codified’ is used in the Official Journal.

3.4.1.1. Birds Directive: provisions on habitats protection

The structure of the Birds Directive is divided into two parts. If, at first, it singles out the relevant provisions for the conservation of habitats that are especially important for bird species, then, it lays down the rules for the protection of bird species themselves. As it will be seen later, this approach was replicated by the Habitats Directive, thus setting the conceptual and legal pattern upon which *in situ* biodiversity conservation is construed at EU level.

Article 2 of the Birds Directive established that Member States shall adopt the measures they deem necessary to maintain or adapt bird populations at a level that satisfies ecological, scientific and cultural requirements, having regards, however, to the economic and recreational ones.

Article 3, paragraph 1, mandates that, in the light of the requirements of article 2, Member States can adopt requisite measures to preserve, maintain or restore a sufficient diversity and areas of habitats for all the bird species referred to at article 1. According to article 3,

paragraph 2, letter a), measures aimed at preserving, maintaining and restoring of biotypes and habitats involve, notably, the establishment of protected areas⁴⁵⁸. The Court eminently clarified the content of the obligations arising under article 3, by affirming that they must be applied *a priori*, that is, the maintenance or the re-establishment of diversity and area of habitats must be implemented before any decline in the population of a particular species is observed, before the risk of extinction becomes evident for a particular species⁴⁵⁹. It is important to remark that the obligation under article 3 is general in scope as it applies to the *whole* territory of the EU and, as such, it implies that Member States must take positive steps to ensure conservation within their jurisdictions⁴⁶⁰.

Article 4, paragraph 1 and 2, of the Birds Directive is crucial to its implementation at national level for it concerns the classification of protected areas aimed at

⁴⁵⁸ Other measures concern the upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones (b), the re-establishment of destroyed biotypes (c) and the creation of biotypes (d).

⁴⁵⁹ See ECJ judgment of 2 Aug. 1993, case C-355/90, (*Commission v Spain – Santoña Marshes*), point 15.

⁴⁶⁰ E.g. the ECJ easily concluded that Ireland failed in taking the requisite measures to preserve, maintain or re-establish sufficient diversity and sufficient area of habitats (art. 3) as the country did not take any measure either to prevent or control overgrazing of a particular kind of grass that constitutes the nutrition of the Red Grouse (*Lagopus lagopus scotica*), leading to a sharp decline of the Irish Red Grouse population. See case C-117/00, *Commission v Ireland*.

protecting endangered and migratory species through the implementation of a ‘specifically targeted and reinforced regime’⁴⁶¹. In particular, the provision requires Member States to classify certain natural sites as Special Protection Areas (hereinafter, referred to as SPAs). More specifically, article 4, paragraph 1, concerns the protection of the species listed in Annex I to the Bird Directive (rare species or species with specific habitat needs), which shall be ‘subject of special conservation measures concerning their habitat’. These special conservation measures, in turn, are key to their ‘survival and reproduction in their areas of distribution’. Article 4, paragraph 2, instead, concerns the birds not listed in Annex 1, namely, the regularly occurring migratory bird species which must be protected by conferring special consideration to their ‘breeding, moulting and wintering areas and staging posts along their migration routes’. Two other aspects in this regard deserve to be stressed. Firstly, the directive requires Member States to classify as SPAs the most suitable territories in

⁴⁶¹See the ECJ judgment of 14 Oct. 2010, case C-535/07, *Commission v. Austria*, point 56. According to settled jurisprudence, whereas art. 3 concerns general protection measures, art. 4 imposes an additional layer of protection that is required by the very special nature of the protected object, namely, endangered species (Annex I) and migrating birds (regarded as a common heritage of the EU). Refer also to Case C-44/95 *Royal Society for the Protection of Birds*, para. 23 and Case C-293/07, *Commission v Greece*, point 23.

number and size. As far as this obligation is concerned, the Court specified, *inter alia*, that a Member State cannot elude the classification of suitable sites as SPAs on the grounds that similar sites (instituted for the protection of the same species) have already been designated elsewhere (i.e. other Member States) in a substantial and appropriate manner⁴⁶². Secondly, the Court stressed the implementing function that the Birds Directive is supposed to exercise with regard to the Ramsar Convention, as for migratory birds Member States must pay attention to ‘the protection of wetlands and *particularly to wetlands of international importance*’⁴⁶³. The emphasis placed by the norm upon the spatial designation of protected areas (SPAs) was considered in 1979 one of the more innovative aspects of the Directive which departed from a species protection-based approach: bird species as well important bird areas are subject to the rules laid down by the Directive. Article 4, paragraph 4, mandates that:

in respect of the protection areas referred to in paragraphs 1 and 2, Member States shall take

⁴⁶² See ECJ judgment of 13 Dec. 2007, case C-418/04, *Commission v Ireland*, paras. 60-61. Other relevant aspects of this judgment were widely addressed by W. Vandenberghe, ‘Case Note’, in (2008)17(2) *Review of European Community & International Environmental Law*, at 243-246.

⁴⁶³ *Emphasis added.*

appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds, in so far as these would be significant having regard to the objectives of this Article. Outside these protection areas, Member States shall also strive to avoid pollution or deterioration of habitats.

As it will be seen in the next section, the above provision is no longer applied because after the adoption of the 1992 Habitats Directive, it was repealed by the provisions of article 6, paragraphs 2, 3 and 4 of the latter instrument, currently applied to activities likely to have negative impact on the ecological values protected within SPAs. Therefore, a pretty strict regime, supported *inter alia* by the interpretation of article 4, paragraph 4, by the Court in the *Leybucht* case⁴⁶⁴, requiring Member States to

⁴⁶⁴ ECJ judgment of 28 Feb. 1991, case C-57/89, *Commission v Germany – “Leybucht”* where it was affirmed that Member States are not entitled of the right to reduce or modify the extent of SPAs because of the deterioration of a site. This approach (admitting the reduction of SPAs only for superior grounds of public interests, e.g. danger of flooding) would later be confirmed by the Court who extended the obligation under art. 4(4) to all the ‘areas which are the most suitable for the conservation of wild birds, even if they have not been classified as special protection areas, provided that they merit such classification’, cfr. ECJ judgment of 25 Nov. 1999, case C-96/98, case *Commission v France ‘Poitevin Marsh’*, para. 41. However in the light of the subsequent application of art. 6, paras. 2, 3 of the Habitat Directive to SPAs the *Leybucht* ruling became largely

act in order to avoid any harm to the birds and their habitats, gave way to a regime that remains strict, allowing though the possibility to accept the likely occurrence of a damage to the ecological values protected within SPAs motivated by reasons of overriding public interest, whenever national authorities recognize that the socio-economic benefits deriving from the implementation of certain activities, plans and projects are featured by a general and public character that does prevail on the interest of environmental conservation⁴⁶⁵.

Classification of SPAs, however, has always been an issue for Member States, who saw the Commission bringing waves of infringement proceedings against them. Consequently, the Court had the chance to clarify many different aspects of article 4. In particular the Court declared that SPAs must be the object of a specific (national) legal protection regime⁴⁶⁶ and that Member States cannot escape from the classification of SPAs (when Annex I species occur in their territories) by claiming to have adopted other kinds of special

non influential. The Court has reoriented its case law in line with the legislative developments.

⁴⁶⁵ K. Wheeler, cit., at 286.

⁴⁶⁶ E.g. case C-166/97, *Commission v France (Seine Estuary)*. This also mean that maps setting the boundaries of SPAs shall be given legal force. See case C-415/01, *Commission v Belgium*.

conservation measures⁴⁶⁷. The Court, furthermore, affirmed that declassification or reduction of a site, if theoretically admitted, may be carried out only in presence of certain circumstances and, in particular, it must be supported by scientific evidence, as it recently upheld in the *Commission v. Austria* case, in relation to the reduction of the Nedere Tauern SPA⁴⁶⁸. Recently, the Court clarified also that even though a site may have already been designated under the Habitats Directive, a Member State is not exempted from proceeding to its classification as SPA, if the same site hosts Annex I or migratory species, therefore requiring the parallel application of the Birds Directive.⁴⁶⁹ More importantly,

⁴⁶⁷ E.g. case C-3/96, *Commission v Netherlands*.

⁴⁶⁸ See the ECJ judgment of 14 Oct. 2010, case C-535/07, *Commission v. Austria*, point 26. Such an approach, ultimately aimed at avoiding the arbitrary dismantling of SPAs, thus guaranteeing the coherence of the Natura 2000 network, may be ineffective, if one considers either the existence of biodiversity dynamics underpinned by climate change or the emergence of temporary sites with ecological values. With regard to habitat loss caused by man-induced climate change, some suggest to introduce compensation for habitat loss as an additional requirement to classify for reducing/declassifying SPAs/SCAs, see K. Wheeler, at 292. On the concept of temporary nature, see the H. Schoukens, A. Cliquet, P. De Smedt, 'The Compatibility of "Temporary Nature" with European Nature Conservation Law', in (2010) *European Energy and Environmental Law Review*, at 106-131.

⁴⁶⁹ In other words, if the site satisfies the ornithological criteria referred by EU institutions. See C-535/07, *Commission v. Austria*, point 24: 'even if it is established that a good part of the Hansåg site was already protected under the Habitats Directive in the Natura 2000 network (...) since the legal regimes of the Birds and Habitats

however, the Court clarified the discretion that Member States enjoy in selecting ‘the most suitable territories in number and size’ as SPAs. In practice, the Court, adopting the ‘Inventory of Important Bird Areas in the European Community’ (IBA)⁴⁷⁰ as the litmus paper for testing the extent (number and total area) to which Member States have implemented article 4, excluded any margin of discretion and eliminated the possibility that considerations other than the ornithological criteria established under article 4, paragraph 1 and 2, fell within the calculus on SPA designation⁴⁷¹.

Directives are separate, a Member State cannot exonerate itself from its obligations under Article 4(1) and (2) of the Birds Directive by relying on measures other than those prescribed by that directive’.

⁴⁷⁰ The IBA list was prepared by the International Council for Bird Preservation. Many stressed that, although not originally binding from a legal point of view and not included or referred to by any means into or by the Birds Directive, the IBA has been given certain legal *status* or authoritativeness by the Court. In this respect, see B.A. Beijen, ‘The Implementation of European Environmental Directives: Are Problems Caused by the Quality of the Directive?’, in (2011) *European Energy and Environmental Law Review* at 155. The Court observed that the IBA ‘contains scientific evidence making it possible to assess whether a Member State has complied with its obligation to classify as special protection areas the most suitable territories in number and size for the conservation of protected species’, see ECJ judgment of 7 Dec. 2000, case C-374/98, *Basses Corbières*, para. 25.

⁴⁷¹ Some are of the view that ornithological criteria do not show in the Birds Directive, e.g. B.A. Beijen, *cit.*, at 155. The Court however stressed that: ‘With respect, more specifically, to the obligation to take special conservation measures for certain species under article 4, grounds for derogation must, in order to be acceptable, correspond to a general interest which is superior to the general interest represented by the ecological objective of the directive (C-355/90, *Santoña*

3.4.1.2. *Birds Directive: provisions for species protection*

Articles 5 to 9 of the Birds Directive concern the protection of wild bird species. The rules established under these articles, therefore, contemplate a series of prohibitions that are aimed at ensuring birds safety. The Directive, under article 5, establishes a ‘general system of protection’ which bans, respectively, a) the deliberate killing or capture of birds by any method, b) the deliberate destruction of, or damage to, their nests and eggs or removal of their nests, c) the taking of their eggs in the wild and keeping these eggs even if empty, d) the deliberate disturbance of these birds (in particular during the period of breeding and rearing) and e) the keeping of birds of species whose hunting and capture of are prohibited. In many occasions the Court reasserted the generality of the system of protection by sanctioning

Marshes, summary para. 2). Later on, the ECJ reasserted that ‘It is the criteria laid down in paragraphs (1) and (2) of Article 4 which are to guide the Member States in designating and defining the boundaries of SPAs’ and ‘Article 4(1) or (2) of the Birds Directive is to be interpreted as meaning that a Member State is not authorized to take account of the economic requirements mentioned in Article 2 thereof when designating an SPA and defining its boundaries’ (ECJ judgment of 11 Jul. 1996, case C-44/95, *Lappel Bank*, paras. 26-27).

national measures or practices that were incompatible with a regime and, above all, by interpreting derogations to this regime in a narrow and strict sense. As for article 5 in particular, the Court stressed the general character of the prohibitions established therein, for example, in *Commission v France*, when it stated that the destruction or damage to eggs as well as their taking (article 5, letters b-c) constitute general bans that cannot be in any way suspended by national legislative or administrative measures during particular periods of the year⁴⁷². Accordingly, in *Commission v Germany*, the Court observed that a national law allowing derogations to the general regime on birds protection for the activities carried out ‘in the course of the normal use of the land for agricultural, forestry or fishing purposes’ cannot be compatible with the Directive because unintentional infringements cannot be ruled out from all the potential ones that may occur during the development of land-related activities⁴⁷³. Subsequent articles 6, 7 and 8 set the obligations that Member States must respect in relation to

⁴⁷² ECJ judgment of 27 Apr. 1988, case C-252/85, *Commission v France*, point 9.

⁴⁷³ According to the Court the German law in question was incorrectly based on the presumption of the absence of any intentional act against bird species in the activities connected with ‘the normal use of land’, see EJC judgment of 17 Sept. 1988, case C-412/85, *Commission v. Germany*, in particular, see point 15.

the marketing and the hunting of birds. In particular, article 6 concerns the marketing of birds: again, the norm imposes a general prohibition as it forbids *tout court* 'the sale, transport for sale, keeping for sale and the offering for sale of live or dead birds (or parts and derivatives thereof) for all species indicated at article 1. Article 7, in turn, concerns hunting practices. Hunting, as a rule, is generally prohibited by EU law and, since conservation of bird species is the standard, it follows that hunting practices must be strictly regulated by Member States to avoid incurring in a violation of the Birds Directive which, however, consents derogations. Article 8 is inherently linked with its preceding provision as it prohibits large-scale and non-selective hunting (the capture and killing of wild birds by indiscriminate means and methods that are expressly listed in Annex IV (a).

The Directive, however, laid down exceptions to the general prohibition of all human activities that could cause to damage wild bird populations. Some bird species can, as a matter of fact, be hunted as long as hunting does not endanger their populations. Furthermore, under specific circumstances, birds may also be kept and marketed (within the EU). Moreover, general derogations to articles 5, 6, 7, and 8 can be found under key article 9. Such

provision accepts that Member States may derogate from the provisions relating to birds conservation when, in the absence of other satisfactory solutions, they are compelled to damage (or allow the damage) birds populations for reasons of overriding public interest (public health and safety, air safety, prevention of crop damages or damages to livestock, forests, fisheries and water, protection of flora and fauna)⁴⁷⁴. Derogations cannot, by definition, be granted without temporal and spatial limitations. Accordingly, article 9, paragraph 2, sets the formal conditions that derogations to the general system of protection authorized at national, regional or local level, must satisfy. In this regard, the Court developed a solid jurisprudence, unfortunately driven by that fact that regional and local authorities of many Member States with a strong presence of hunting groups and lobbies (notably, Italy and France) use to grant derogations for hunting activities which ultimately interfere with life-cycle dynamics of protected bird species.

In particular, the Court specified that derogations concerning the marketing and hunting of wild birds, that

⁴⁷⁴ Art. 9, para. 1, (a). Derogations are allowed also for purposes of research and teaching, of repopulation, of reintroduction and for breeding (b), to permit, under strictly supervised conditions and on selective basis, the capture, killing or other judicious use of certain birds in small numbers (c).

is, derogation to a general system of protection must be granted subject to three conditions. Firstly, the faculty of allowing derogation must be limited to cases where no other satisfactory solution exists; secondly, they must be based on the grounds exhaustively listed in article 9, paragraph 1, letters a), b) and c); lastly, they must satisfy the formal requirements set out in article 9, paragraph 2⁴⁷⁵. Paragraph 3 and 4, request Member States to submit an annual report on the implementation of article 9 to the Commission which, in turn, is given the task to guarantee that the consequences of the derogations permitted by Member States do not ultimately run contrary to the objective pursued by the Birds Directive.

Noteworthy in connection with cases involving hunting practices that are incompatible with the EU system of wild birds' protection is also the reliance on interim orders by the Court. In the case *Commission v Malta*, for instance, the Court ordered Malta authorities not to grant any permit in derogation of the general hunting prohibition for two species (the quail and the turtle dove) during their 2008

⁴⁷⁵ See ECJ judgment of 8 Jul. 1987, case C-247/85, *Commission v Belgium*, point 7 and, more recently, ECJ judgment of 11 Nov. 2010, case C-164/09, *Commission v. Italy*, and ECJ judgment of 26 Jan. 2012, case C-192/11, ECJ judgment of 10 Mar. 2012, *Commission v. Poland*.

spring migration⁴⁷⁶. The rationale behind this kind of order, as it is often the case, is to prevent the Court from judging on the merits while an alleged *fait incriminé* has become, in the meantime a *fait accompli* (and a likely damage to EU biodiversity has occurred).

The remaining articles of the Birds Directive relate mainly to minor or procedural issues less crucial for the material application of the general system of birds protection at national level. Member States are invited (‘encouraged’) to undertake research activities, in particular, for the species listed in Annex V. Article 11, concerns the introduction of alien species, a practice that is likely significantly to affect European biodiversity and therefore requires the Commission to be consulted.

Besides consulting the Commission on the matter of alien species, Member States are also obliged by article 12 to submit a triennial report to the Commission on the measures they undertake at domestic level in order to enable the elaboration of a further report by the

⁴⁷⁶ Order of the ECJ President of 24 Apr. 2008, case C-76/08, *Commission v Malta*. In the subsequent judgment of 10 Sept. 2009, the ECJ observed, inter alia, Malta failed the ‘no other satisfactory solution’ tests because the derogation was aimed at allowing hunting without any apparent need in a sensitive period (return to the rearing grounds), with the only effect of extending an already authorized hunting season (paras. 29 and 30). For a brief comment on the judgment, see V. Vandenberghe, ‘Biodiversity’, in (2009) *Yearbook of International Environmental Law*, at 719.

Commission to review implementation practices. Finally, while article 13 seems to refer to the need not to adopt measures that lead to ‘deterioration in the present situation’, meaning that implementing measures and national practices shall not ultimately lead to more biodiversity loss, Article 14 allows Member States to adopt stricter measures than those envisaged by the Directive (a possibility that, as underlined before, is in line with TFEU article 193).⁴⁷⁷ Advocate General Mazák, however, suggested in the recent *Azienda Agro-Zootecnica Franchini sarl and Eolica di Altamura srl v Regione Puglia* case that said faculty can be exercised by Member States in conformity with the environmental policy of the EU and to the general principles of EU law⁴⁷⁸

⁴⁷⁷ For instance, the Italian Ministerial Decree of 17 Oct. 2007, on ‘Criteri minimi uniformi per la definizione di misure di conservazione relative a Zone speciali di conservazione (ZSC) e a Zone di protezione speciale (ZPS)’, (setting minimum uniform criteria for the definition of conservation-related measures to be applied within Natura 2000 sites), banned the realization of windmills on the lands given SPA/SCA *status* (see art. 5, para. 1, lett. l).

⁴⁷⁸ See the Opinion of Mr Advocate General Mazák of 14 April 2011, C-2/10, point. 39.

3.4.2 Directive 92/43/EEC on the conservation of natural habitats

Directive 92/43/EEC (hereinafter, ‘Habitats Directive’) is unquestionably the most relevant piece of EU legislation concerning nature protection⁴⁷⁹. The first chapter of Habitats directive is dedicated to the definition of the terms utilized through the body of the directive. The objective of the Habitat directive, as stated under article 2, paragraph 1, is ‘to contribute to safeguard biodiversity by conserving natural habitats, wild flora and fauna in the European territory of the Member States to which the Treaty applies’. It further requests Member States to adopt the necessary measures in order to maintain and restore some habitats and species ‘in a favourable conservation status (article 2, paragraph 2)’ and to adopt conservation measures taking also into account, ‘economic, social and cultural requirements’ as well as the regional and local characteristics’ of the areas subjected to a regime of nature protection (article 2, paragraph 3).

⁴⁷⁹ It was even argued that, with a view to the centrality of this directive in EU environmental law, the objective of ‘protecting nature and landscape values’ should be added to art. 191, para. 1 TFEU. See J.H. Jans, H.H. Vedder, *cit.*, at 32.

The obligations enshrined by the Habitats directive are grouped within two subsequent chapters. The first, entitled ‘Conservation of natural habitats and species habitats’ entails articles from 3 to 11. The second chapter, instead, is entitled ‘Species protection’ and goes from article 12 to article 16.

3.4.2.1. Habitats Directive: provisions on the conservation of natural habitats

Article 4 of the Habitats Directive, as article 4 (paragraphs 1 and 2) of the Birds Directive, concerns the designation of protected areas. In this case, such areas as referred to as Special Areas of Conservation (hereinafter SACs). The designation of SACs, varies from the designation of SPAs and consists in a more complex procedure that is developed along three distinct phases. At a first stage, (which is described by article 4, paragraph 1), Member States are required to submit a list of sites that can alternatively host peculiar types of habitats (listed in

Annex I) or endangered species (list in Annex II)⁴⁸⁰. The two Annexes, in turn, contain the so-called ‘priority’ habitats or species that, being the most vulnerable, rare or endangered, require the application of *special conservation measures*⁴⁸¹. During the second phase, the European Commission comes into play by choosing the sites that are appointed as ‘sites of Community importance’ (hereinafter SCI) from the national lists drawn by Member States (article 4, paragraph 2). According to the Directive, the sites which satisfy SCI requirements contribute in a significant manner to the maintenance or re-establishment either of an Annex I type of habitat or an Annex II species at a favourable conservation status within the bio-geographic regions the

⁴⁸⁰ According to the Habitats Directive (article 5), if a Member States fails in including into its national list of proposed SCI, a site which, according to scientific data, hosts one or more priority habitats or species, bilateral negotiations are opened between the Member State concerned and the Commission. If consultation is fruitless, the Commission transmits its proposal to the Council. This latter, in turn, decides unanimously whether or not to appoint the site as SCI. Criteria for guiding the selection of sites at national level are defined in Annex III to the Directive.

⁴⁸¹ *Emphasis added.* Art. 1, lett. d) of the Habitats Directive defines ‘types of priority natural habitats’ as natural habitats that risk to disappear from the EU territory, while art. 1, lett. h), in order to define ‘priority species’ refers to art. 1, lett.g (i), which contains, in turn, the definition of ‘endangered species’. In both cases, the Directive stresses the special responsibility of the EU for their conservation.

sites belong to⁴⁸². The last phase of the designation procedures, again, involves Member States as they are required to institute as SCAs the sites previously selected by the Commission as SCI. For designation to be definitive and effective, article 4, paragraph 4, requires Member States to proceed by enacting national legislative measures serving this purpose.

Article 6, on the protection of SCAs/SCI, is undoubtedly the most crucial obligation concerning the protection of the European habitats and ecosystems which can be found in the text of Habitats Directive. Its correct transposition into national legislation and, subsequently, its implementation and enforcement by the competent authorities in each Member States, are deemed fundamental in ensuring the balance between the interest of nature conservation and other competing interests of socio-economic character. Said article, in fact, contains key obligations for the conservation and the management of sites belonging to the Natura 2000 ecological network that must be domestically implemented. As pointed out by the European Commission, the right implementation of the obligations stemming from article 6 of the Habitats Directive contributes in shaping the relationship between

⁴⁸² See Habitats Directive, art. 1, lett. k). SCI contribute also to the coherence of the Natura 2000 network.

conservation and land use⁴⁸³ and, ultimately, ensures the coherence of Natura 2000.

The examination of this crucial provision starts from article 6, paragraph 1, concerning the adoption of the so-called ‘requisite conservation measures’. The Court clarified that such measures shall consist in positive and proactive interventions undertaken by the public authorities and/or the entities managing SCAs (e.g. private landowners, parks, etc.).

Article 6, paragraph 2, instead, requires Member States to take steps to avoid the deterioration and the degradation of natural habitats as well as the disturbance to the species sheltered within SCAs. As stressed by the European Commission, this norm has a preventive character⁴⁸⁴ and, again, obliges Member States to take positive steps.

Article 6, paragraphs 3 and 4, differs substantially from the general obligations that appear in the two preceding paragraphs (1 and 2), as they have established a series of

⁴⁸³ European Commission, ‘Managing Natura 2000 sites. The provisions of article 6 of the ‘Habitats’ directive 92/43/EEC’, Luxemburg, 2000, at. 9. For a comment on the *soft law* nature of the guidance provided by the Commission in order to help States in the enforcement of the Habitats Directive and for the reasons behinds the adoption of such guidance, B.A. Beijen, cit., at 161-162.

⁴⁸⁴ Such a character is deducible, *inter alia*, from Habitats Directive art. 5, para. 4, establishing that, pending a decision of the Council, obligations under art. 6, para. 2 apply to sites that might have appeared into the national lists (art. 4, para. 1) but have not.

procedural and concrete safeguards that are triggered in relation to particular circumstances that are likely to be detrimental for the conservation of habitats and species hosted by SCAs. It must be underscored, indeed, that while paragraphs 1 and 2 set a general regime, paragraphs 3 and 4, instead, define a procedure that must be applied by Member States only when individuals propose to the public authorities certain activities (generally, projects and plans) that are likely to have significant effect on the ecological values protected by a Natura 2000 site. As noted above, it must be recalled that paragraphs 2, 3 and 4 of article 6, pursuant to article 7 of the same Habitats Directive, equally apply to projects and plans that are likely to impact on the SPAs established under the Birds Directive⁴⁸⁵.

The whole procedure foreseen by article 6, paragraphs 3 and 4, is progressive as it entails three different phases. The first phase, contemplated by article 6, paragraph 3, first sentence, entails an environmental assessment of the projects (e.g. the construction of a highway, the transformation of a railroad track into a bike line, etc) or

⁴⁸⁵ Art. 3. par. 1 of the Habitats Directive foresees that the Natura 2000 network comprises also SPAs classified by Member State pursuant to directive 79/409/EEC. In general, the Commission noted that there is a high degree of fusion between the schemes employed in both directives.

plans (e.g. the plan for the touristic promotion of a region or concerning the development of an area where an airport would be constructed, etc)⁴⁸⁶. From the norm at hand, it can be deduced that the proponents of such developments must enable the public authorities to carry out the requisite impact assessment, in the light of the conservation objective of the site likely to be affected. Therefore, the impact assessment procedure (article 6, paragraph 3, second sentence) is normally started by the submission of an environmental assessment study by the proponents of a certain development. The actual procedure, then, consists of two phases: if at the end of a *screening* test carried in line with the precautionary principle, negative impacts can be definitively excluded, i.e. it is possible to ascertain with no doubts that the proposed project or plan does not affect the integrity of a site, public authorities can grant the

⁴⁸⁶ Art. 6, par. 3, first sentence of the Habitats Directive reads as follows: ‘Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives’. In her Opinion of 28 Jun. 2011, case C-404/09, *Commission v Spain*, Advocate General Mrs Kokott noted that the criteria to be used by the competent authorities in order to exclude negative impacts on the integrity of a site, shall allow not to leave any reasonable scientific doubt. Competent authorities shall also rely upon the best scientific knowledge available (point 51).

permits for its development⁴⁸⁷. Whenever, on the contrary, a proposed project or plan does not pass the screening test, i.e. negative effects on the nature and biodiversity value of a site cannot be ruled out with absolute certainty, a full impact assessment must be carried out⁴⁸⁸. If the environmental assessment concludes that no appreciable negative effects on Natura 2000 are determined by the proposed development, this latter can be authorized. When negative effects are confirmed in the conclusion of the environmental assessment, the proposed project will be turned down by the competent authorities. However, as anticipated before, the regime of article 6 of the Habitat Directive is less restrictive than what initially appeared in the Birds Directive because it contains room for a departure to the protection regime, which is singled out at article 6, paragraph 4.

⁴⁸⁷ *Emphasis added.* Art. 6, para. 3 (last sentence), contemplates the involvement of the public, (however, with no further and useful specification of how the involvement should be realized). On the precautionary principle as the point of departure to the whole environmental assessment procedure, see Opinion of 28 Jun. 2011, case C-404/09, point 40.

⁴⁸⁸ Such practice does not actually emerge from the wording of article 6. It was developed by the services of the Commission and its validity confirmed by the EJC. On the environmental assessment, see e.g. J. Parker, 'Relazioni tra VIA, VAS, VINCA e IPPC'. Presented at the Conferenza internazionale sulle valutazioni ambientali VIA, VAS e VINCA: riflessioni sull'integrazione delle procedure di valutazione ambientale, Pescara (Italy), 20 May 2011.

Under this provision, in fact, the competent authorities of each Member State are anyhow conferred the right to issue authorization for projects or plans which, subject to the environmental assessment procedure described above, are said to have negative impacts on protected species and habitats hosted by Natura 2000 sites. Such faculty, however, is not unfettered, in that it shall not be exercised without restrictions. In particular, for such developments to be lawful, from an EU environmental law perspective, three conditions must be satisfied.

First of all, the obligation at hand specifies that Member States can issue authorizations to developments carrying proven negative effects only insofar as *alternative solutions*⁴⁸⁹ are lacking. Secondly, it must be shown that the proposed developments shall be in any case implemented for *imperative reasons of overriding public interest, including those of a social or economic nature*⁴⁹⁰. Finally, the Directive mandates that, for such developments to take place, national authorities must ensure that *all the necessary compensatory measures*⁴⁹¹ are taken, with the view to ultimately guarantee the coherence of the Natura 2000 network. The fulfilment of

⁴⁸⁹ *Emphasis added.*

⁴⁹⁰ *Emphasis added.*

⁴⁹¹ *Emphasis added.*

these three conditions can by no means be avoided when the public powers intend to authorize developments that are proven to have detrimental effects on SPAs/SCAs. Even more crucial, however, in order to comply with the obligation laid down under article 6, paragraph 4, as remarked by Advocate General Kokott, is to satisfy the three above mentioned conditions on the basis of knowledge on the harmful implications of projects or plans that has been accumulated through the environmental assessment procedure, which is the ‘necessary prerequisite’ for the application of the provision at hand⁴⁹².

In this regard, it is important to note that Member States are under the obligation to notify the Commission with all the pertinent information regarding the compensation measures that are needed to accompany authorized developments. However, even more important is to note how the second paragraph of article 6, paragraph 4, narrows the scope of the derogation in relation to sites hosting priority habitats and species, for which the

⁴⁹² See the Opinion of 28 Jun. 2011, point 60. Advocate General Kokott added that: ‘the assessment of any imperative reasons of overriding public interest and that of the existence of less harmful alternatives require a weighing up against the damage caused to the site by the plan or project under consideration. In addition, in order to determine the nature of any compensatory measures, the damage to the site must be precisely identified’.

imperative reasons of overriding public interest are limited to those connected with human health, public safety or beneficial to the environment itself, otherwise decided by the Commission⁴⁹³.

As for its spatial application, article 6, paragraph 3, applies not only to plans and projects occurring within SACs and SPAs, but also to those which are to be proposed outside (or immediately outside) sites which, nevertheless, can have negative effects on their conservation and management, either alone or in conjunction with other developments and activities⁴⁹⁴.

But what does fall within the definition of plans and projects, respectively? There are many arguments in favour of a broad interpretation of such terms, but first of all, it has to be noted that the wording of the Habitats Directive does not limit the scope of a “plan” or a “project” by avoiding any explicit reference to particular categories of plans and project. Secondly, the continuous

⁴⁹³ This latter specification, to tell the truth, re-opens the scope of the possible derogation (although it is highly unlikely that the Commission uses its discretion in a way that is ultimately detrimental to the ecological values of SPAs/SCAs).

⁴⁹⁴ The settled case law of the ECJ reaffirmed that, under art.6, para. 3, the effects of individual projects and plans must be assessed, if circumstances so requires, in conjunction with the effects of other projects and plans that might affect the conservation objectives of a Natura 2000 site. E.g. extensively, judgment of 7 Sep. 2004, case C-127/02 *Waddenvereniging and Vogelbeschermingsvereniging*.

applicability of article 6, paragraph 2, to all activities not covered by article 6, paragraphs 3 and 4, allow us to exclude any narrower definition of the term ‘plan’ and ‘project’,⁴⁹⁵.

It has been elsewhere stressed that article 6 correspond to a norm which enjoys direct effects⁴⁹⁶. This view may not be completely shared because as any other constituting element of a directive, this provision must be transposed into national legislation in order to become

⁴⁹⁵ Such arguments are fortified, for instance, by the definition of ‘project’ crystallized into directive 85/377/EEC, the so-called ‘EIA directive’. Art. 1, par. 2, of said directive established that a ‘project’ amounts to: “the execution of construction works or of other installations or schemes — other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources”. This clearly entails a broad definition of ‘project’ that is not confined to the concept of ‘physical construction’. The ECJ is also oriented toward a comprehensive interpretation of the terms ‘project’ and ‘plan’ although, it must be observed, the Court itself has experienced some difficulties in drawing clear-cut lines between the two categories as shown in case C-127/02. In the corresponding judgment (point 29) the ECJ, acknowledging that mechanical cockle fishing was an activity (traditionally licensed in the Netherlands every year on the basis of an environmental assessment) falling within the definition of ‘project’ and ‘plan’, failed in determining which of two applied to the contested activity (*emphasis added*).

⁴⁹⁶ R. Montanaro, ‘Direttiva Habitat e valutazione di incidenza: primi interventi giurisprudenziali’, in (2002) *Foro Amministrativo*, at 2799 ss. On the direct effects of a directive, the ECJ asserted that: ‘mere adverse repercussions on the rights of third parties, even if the repercussions are certain, do not justify preventing an individual from invoking the provisions of a directive against the Member State concerned’. See Judgment of 7 Jan. 2004, case C-201/2, (*The Queen on the application of Delena Wells vs Secretary of State for Transport, Local Government and the Regions*), para. 57.

implementable. It is true, however, that the paramount importance of article 6 has been highlighted by a plurality of sources, not least by the European Commission noting how it represents a manifestation of the principle of integration⁴⁹⁷. In the light of this, national judges should stop enforcing national measures that are or may be not compatible with the obligations established under article 6 of the Habitats Directive. This could be the case, for instance, of article 3 of the Decree of 30 March 2007 adopted by the Region of Sicily⁴⁹⁸. Such norm, that supposedly constitutes the regional transposing measure of article 6, excludes from the application of the environmental procedure a whole list of activities (ranging from ordinary agronomic practices on existing cultivations to the installation of solar photovoltaic plants or solar heating systems not exceeding 100 squared meters). In

⁴⁹⁷ COM (2000), at 11.

⁴⁹⁸ Regional Decree of 20 Mar. 2007, on 'Prime disposizioni d'urgenza relative alle modalità di svolgimento della valutazione di incidenza ai sensi dell'art. 5, comma 5, del D.P.R. 8 settembre 1997, n. 357 e successive modifiche ed integrazioni' in *GURS*, Part I n. 20 of 2007 [Early urgency norms concerning the modalities of the environmental assessment under art. 5, para. 5 of the Presidential Decree of 8 Sept. 1997, n. 357 and subsequent modifications and integrations, ToA]. Available at: <http://www.regione.sicilia.it/bdlr.asp>. It must be clarified that, whereas article 5 of Presidential Decree n° 357 of 8 Sept. 1997 is the national general transposing measure of Habitats Directive art. 6, regional transposing norms are also required on the basis of the competences conferred to Regions and Autonomous Provinces by the Italian Constitution in the field of the environment.

other words, the Sicilian norm does not seem compatible with the Habitat Directive nor in line with article 193 TFEU because, instead of contemplating the requirements of the Directive or fixing more stringent ones, it reduces the scope for the application of article 6, paragraph 3 and 4, which, as established by the Directive, does not allow any express exception (article 6, paragraph 3, in fact, refers to ‘any plan or project not directly connected to the management of a site’). For the above reasons, it should not be applied by Italian courts⁴⁹⁹.

The section on habitats protection closes with article 8 of the Directive. Such provision laid down the basis for setting up a system of co-financing for the measures that are deemed necessary to protect priority habitats and species. A peculiar feature of this system is that it can be triggered when it is considered that action of a Member State would impose an excessive economic burden on it. For this reason, it can indeed be stated that, for the reason illustrated above, article 8 constitutes a tangible manifestation of the consideration given by the EU

⁴⁹⁹ This view is completely personal and was developed by the author during his work period at the European Commission, DG Environment Unit A.1. It is not intended by any means to reflect the view of the Commission services.

institutions to the ‘policy aspects’ (or factors) currently referred to under TFEU article 191, paragraph 3.

Indeed, a whole system for co-financing the establishment and maintenance of the Natura 2000 network is in place. The system, however, supplements an already existing *ad hoc* line of financial assistance for the management of SPAs/SAC under the LIFE program, which is the EU financial instrument for the environment⁵⁰⁰. However, co-financing of Natura 2000 takes place also on the basis of the integration of biodiversity conservation into other EU policy areas, such as, the Common Agricultural Policy (CAP). The integration approach that currently features biodiversity co-financing was originally adopted by the Commission with its 2004 Communication on ‘Financing Natura 2000’, an instrument that laid the basis for the multi-annual financing scheme for the period 2007-2013⁵⁰¹. Within the framework of the CAP, for instance, projects related to the management of SPAs/SACs (especially those aimed at

⁵⁰⁰ The LIFE programme supporting projects on nature conservation commenced in 1992. The ‘LIFE+’ Regulation 614/2007/EC in OJ L149 of 9 Jun. 2007 covers the present six-year period (2007-2013). According to the Commission the new financial instrument for the environment (LIFE+) provides a total funding of €2.143 billion. Further information on biodiversity financing can be found at <http://ec.europa.eu/environment/life/index.htm>.

⁵⁰¹ COM(2004) 431 final.

improving or introducing agro-environmental measures that make agricultural activities more compatible with nature through the sustainable use or conservation of targeted elements of biodiversity), are eligible for funding⁵⁰².

The efforts being done for enhancing the establishment of the Network, however, are presently not sufficient according to the Commission which stressed the need to mainstream the financing of Natura 2000 also into the definition and implementation of other EU policies (apart from the CAP) and urged Member States to improve and coordinate their investments by means of the ‘Natura 2000 Prioritized Action Frameworks’ to be established at Member State level⁵⁰³.

⁵⁰² Funding for projects on the management of SPAs/SACs is also available through the financial instrument of the Rural Development Policy (RDP). On the matters on financing nature protection through an integrated approach (nature/agriculture/development) see, B. Jack, ‘The European Community and Biodiversity Loss: Missing the Target?’ in *Review of European Community & International Environmental Law*, 2006, at 304-315.

⁵⁰³ European Commission, SEC(2011) 1573 final of 21 Dec. 2011, Commission Staff Working Paper ‘Financing Natura 2000. Investing in Natura 2000: delivering benefits to nature and people’, at 14.

3.4.2.2. Habitats Directive: provisions on species protection

The section of the Habitats Directive on species protections contains different provisions on the surveillance that Member States must carry out in relation to wild animals and plants. Accordingly, article 11 prescribes that Member States ‘shall undertake surveillance of the conservation status’ of natural habitats and species (especially those that are considered of ‘priority’ under the meaning of article 2). Article 14, again, refers to the faculty of adopting certain measures in relation to the taking or the exploitation of animal and vegetal species (listed by Annex V) with a view to ensuring the maintenance of their ‘favourable conservation status’. The Court stressed that ‘a detailed, clear and precise’ transposition of the obligations on surveillance are key for the effectiveness of the Directive as surveillance and monitoring activities carried out on a systematic basis are the only way to ensure the favourable

conservation status of the ecological values for which protection is sought under the Directive⁵⁰⁴.

Having established such general obligation on surveillance of SPAs/SACs, the Directive turns into defining a two-tier set of obligations. While the first concerns the protection of animal species, the second concerns the protection of vegetal species. As interestingly suggested, these two norms do not impose a general obligation to guarantee the maintenance of the favourable conservation status, preferring, instead, the introduction of particular measures.

Accordingly, article 12 of the Habitats Directive requires Member States to build a ‘strict system of protection’ for the animals listed in Annex IV (part a). The requisite measures, that contribute to the definition of the system of protection, amount to a series of prohibitions which largely resemble (or reproduce) the prohibitions contemplated by the Birds Directive in relation to the population of wild birds⁵⁰⁵. In detail, article 12 forbids all

⁵⁰⁴ ECJ judgment of 20 Oct. 2005, case C-6/04, *Commission v United Kingdom*, para. 65.

⁵⁰⁵ On the issue of animal species protection, see also the IUNC’s Species Survival Commission – Large Carnivore Initiative For Europe, ‘Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC’ of February 2007. This policy document can be consulted on-line at:

forms of deliberate capture or killing of wild specimen, their deliberate disturbance, particularly during sensitive periods (breeding, rearing, hibernation and migration), the deliberate destruction or taking of their eggs and the deterioration or destruction of their breeding or resting sites (article 12, paragraph 1). Annex V species are also granted a reinforced kind of protection since, as mandated by article 12, paragraph 2, their keeping, transport, sale, exchange and offer are banned with no exceptions and, as mandated by article 12 paragraph 3, the prohibitions contemplated by the overall provision must be applied to ‘all the stages of life of the animals’. These specifications are key to the system of protection so established as they serve to make clear that protection is not undermined by temporal and spatial limitation and that derogation whatsoever is permitted in relation to youngest specimens or to those specimens or parts thereof that could have a high market value⁵⁰⁶.

Confronted by the many infringement proceeding commenced by the Commission, the Court did not lose any chance to condemn proven breaches of article 12 and,

http://circa.europa.eu/Public/irc/env/species_protection/library?l=/commission_guidance/final-completepdf/_EN_1.0_&a=d.

⁵⁰⁶ Art. 12, para. 2. The prohibition does not however apply to the specimens that were legally taken before the implementation of the Habitats Directive became effective.

consequently, to provide helpful interpretation of its provisions.

In the famous case *Commission v Greece*, the Court dealt with sea turtles protection⁵⁰⁷. Particularly, the Court embraced the approach developed by Advocate General Léger in his Opinion where he informed that a ‘strict protection system’ must be interpreted as requiring the adoption of ‘coherent and coordinated’ national measures. Such measures, in his view, shall not be undertaken on an *ad hoc* basis nor be undertaken once a certain endangered species shows signs of decline. On the contrary, they shall have an inherently preventive character⁵⁰⁸. Having embraced this view, the Court condemned Greece for not having put in place an adequate system of protection, in violation of article 12, paragraph 1, letters b) and d). The activities permitted by Greek authorities on the island of Zakhintos (e.g. use of umbrellas, deck-chairs, mopeds and pedalos, erosion of the beaches by construction of access routes, etc) were found to be of disturbance to the *Caretta caretta* sea turtle, that is one of the species listed in Annex IV(a) of the Directive. In particular, the Court found that despite some activities were carried out for leisure and

⁵⁰⁷ ECJ judgment of 30 Jan. 2002, case C-103/00, *Commission v Greece* (‘*Caretta caretta* on Zakinthos’).

⁵⁰⁸ Opinion of Mr Advocate General Léger of 20 Oct. 2001, case C-103/00, *Commission v Greece*, paras. 43-44.

tourism on Zakhintos and others were explicitly prohibited under national law (anyhow with no enforcement by the local authorities), they ultimately caused disturbance to the *Caretta caretta* during the laying of eggs and deteriorated the beaches where their breeding usually takes place⁵⁰⁹.

The jurisprudence of the ECJ on article 12 has been further developed in the *Commission v France* case of 2009 where it ascertained that France failed in adopting a coherent and rigorous set of preventive measures to contrast the decline recorded in population of the common hamster (*Cricetus cricetus*) in the region of Alsace in the period 2001-2007 determined by urbanization and soil consumption⁵¹⁰. In particular the Court observed that the measures undertaken by the French authorities (e.g. establishing ‘Zones of Priority Action’) were too limited as they were not inscribed in the context of legislative framework for the conservation of protected species. Too unambitious, when confronted with scientific data was,

⁵⁰⁹ In this regard, the ECJ in the judgment of 10 Jan. 2006, case C-98/03, *Commission v Germany*, subsequently specified that art. 12, para. 1 (d) referring to ‘deterioration’ and ‘destruction’ must be interpreted as including ‘non-deliberate act’ that may interfere with breeding grounds and resting places. Referring without specifications to disturbance and deterioration, according to the Court, the Community legislator intended to afford them an increased form of protection. See Judgment *above*, para. 55.

⁵¹⁰ See ECJ judgment of 9 Jun. 2011, case C-383/09, *Commission v France*, in *OJ C 226*, 30 Jul. 2011.

according to the Court, the objective of introducing cultivations in order to favour the recovery of the common hamster (e.g. 2% of alfalfa and 20% grains).

The Habitats Directive replicates for plant species the pattern employed under article 12 in relation to species of wild animals. In this regard, article 13 establishes a ‘system of strict protection for the flora listed in Annex IV (part b), by forbidding the deliberate picking, collecting, cutting, uprooting or destruction of plants in their natural range in the wild (article 13, paragraph 1, letter a) and the keeping, transport and sale or exchange and offering for sale or exchange of specimens of plant species taken in the wild (article 13, paragraph 1, letter b)⁵¹¹. The strict protection thus legally created is fortified by the expressed affirmation that Annex IV plant species must be protected through their entire biological cycle.

The strict system of protection so established is further enriched by the prohibition to the use of indiscriminate means of taking, capture and killing of Annex IV animal species that the Community legislator introduced under article 15 of the Habitats Directive⁵¹². Such prohibition

⁵¹¹ Art. 13, para. 1, (b), last sentence specifies that the prohibition established therein does not apply to the specimens legally taken before the implementation of the Directive.

⁵¹² Prohibited means of capture and killing are listed in Annex VI (a) whereas prohibited forms of capture and killing resulting from the

applies, whenever national authorities decide to grant derogations for hunting or trade-related activities that involve the species subjected to the strict protection. As seen in relation to the system of protection created under the Birds Directive, it must not surprise the fact that also the Habitats Directive contemplates the faculty of granting derogations. Member States detain the power of granting derogations under article 16 and, as expected, in using that power, they must respect a certain number of conditions. Before granting exceptions to the general obligations enshrined at articles 12, 13, and 15, Member States must fulfil the conditions laid down by the Directive. Specifically, derogations can be granted only insofar ‘there is no satisfactory alternative’. Secondly, they must not ‘be detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range’. Furthermore, in order to limit as much as possible, the indiscriminate reliance on derogations, the Community legislator introduced an explicit list of grounds that must exist (i.e. their absence

modes of transport are referred to in Annex VI (b). Failure for not transposing into domestic law all the means and methods forbidden under article 15 has been sanctioned by the ECJ. E.g. judgment of 20 Oct. 2005, case C-6/04, *Commission v United Kingdom*. The UK had in place a law on seals protection that only prohibited some of the means and methods listed by the Directive (points 92- 105).

prevents any derogation to be granted)⁵¹³. As specified by the Court, this list has to be considered as exhaustive and complete. In many occasions, the Court repeatedly stressed that:

Article 16 of the Habitats Directive defines in a precise manner the circumstances in which Member States may derogate from Articles 12, 13, 14 and 15(a) and (b) thereof, so that Article 16 must be interpreted restrictively.⁵¹⁴

Another safeguard, established by the Directive (article 16, paragraph 2) relates to the creation of a ‘Committee on

⁵¹³ Art. 16, para. 1, establishes that derogation can be granted in the interest of protecting wild fauna and flora and conserving natural habitats (a), to prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property (b), in the interest of public health and public safety, or for other imperative reasons of overriding public interest, including those of social and economic nature and beneficial consequences of primary importance for the environment (c), for the purpose of research and education, of repopulating and reintroducing these species and for the breeding operations necessary for these purposes, including the artificial propagation of plants (d), to allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species listed in Annex IV in limited numbers specified by the competent national authorities.

⁵¹⁴ See the Judgment of 20 Oct. 2005, case C-6/04, point 111. The Court also argued that ‘Article 12, 13 and 16 form a coherent body of provisions intended to protect the populations of the species concerned, so that any derogation incompatible with the Directive would infringe both the prohibitions set out in Article 12 and 13 and the rule that derogations may be granted in accordance with article 16’ (point 112).

derogation' that is entrusted to receive the two-year reports produced by Member States.⁵¹⁵ Infringement proceedings involving non compliance with article 16 that reached the litigation stage are numerous. The most recent ECJ ruling on this matter regards Poland which was condemned by the Court for having failed to transpose correctly the conditions that must be fulfilled in order to grant derogations under article 16, paragraph 1, of the Habitats Directive⁵¹⁶.

3.4.3. Concluding remarks on EU secondary legislation implementing the CBD

The above examination on the obligations that EU Member States have to comply with in order to manage and preserve valuable elements of biodiversity hosted on the territory of the Union and conceived as a 'common heritage' has been carried out with the view to see if, and to what extent, such obligations are linked to the one

⁵¹⁵ According to art. 16, para. 2, the Committee on derogation shall give its opinion to the Commission on the reports received. Art. 16, para. 3, set the requirements that national reports must fulfil.

⁵¹⁶ ECJ judgment of 15 Mar. 2012, case C-46/11, *Commission v Poland*, in OJ C 103 of 2 Apr. 2012 (operative part of the judgment).

stemming from IEL and, more specifically, from the 1992 Convention on Biological Diversity.

The existing bonds between EU law, the CBD and other biodiversity-related MEAs, have been judicially reaffirmed by the ECJ also in relation to matters that fall outside the scope of primary environmental protection (i.e. trade)⁵¹⁷. However, from the analysis of the provisions under both the Birds Directive and the Habitats Directive, as well as from all the rulings rendered by the ECJ sanctioning Member States' infringements of their EU obligations in the field of nature protection, such bonds are revealed in all their strength. In other words, there can be little or no doubts about the fact that the legislative instruments available at EU level share the same (or an equivalent) legal philosophy that was crystallized under the CBD. On a final note, it must be added, the safeguards, in terms of implementation and enforcement provided for by the Treaties (i.e. through the role assigned to the

⁵¹⁷ Judgment of 23 Oct. 2001, case C-510/99, (*Tridon* case) para.25 and, more evidently, Judgment of 3 Dec. 1998, case C 67/97, (*Bluhme* case) where, in relation to an infringement of Danish legislation that banned the introduction on the island of *Læsø* of bees others than the local ones, the ECJ found that the national legislation had an effect equivalent to a quantitative restriction contrary to Article 30 TEC (now 34 TFUE). In particular, the Court stated that: Conservation of biodiversity through the establishment of areas in which a population enjoys special protection, which is a method recognized in the Rio Convention, especially Article 8a thereof, is already put into practice in Community law' at para. 36 (*emphasis added*).

Commission and to the ECJ) constitute additional and extraordinary elements which strengthen the protective regime that was established by the Member States (and the EU itself) in order to halt the loss of global biodiversity. It is also in the light of these legal and judicial safeguards that the prolific activity carried out by the EU institutions (especially by the Commission) in terms of policy-making and target-setting shall be evaluated.

Conclusions

This doctoral research tried to shed light on the complexities that characterize the implementation of international and EU norms on the conservation of nature in the wilderness. Most of all, it has been shown that the compliance to these norms depends from a wide range of factors.

One first factor that hampers implementation is, at international level, given by the difficulties that international tribunals experience when faced by disputes involving transboundary harm to certain (fragile) elements of biodiversity. Given that the international judiciary has not proved yet to be able either to define the possible traits of a general norm on biodiversity conservation nor to give application to MEAs relevant provisions in this regard, it has been suggested that international adjudication may not be the most suitable way to ensure a substantial protection to biodiversity, a subject matter that has been given legal protection under a growing number of MEAs and, above all, under the CBD.

Not even the rich and continuously evolving body of non-legally binding international instruments helps in

strengthening the legal force of existing international treaty obligations on biodiversity conservation since it fails in providing any possible evidence pointing to the existence of general norms of conduct in this regard. This circumstance is determined, *inter alia*, by non uniform State practice in the field of conservation (and sustainable use) of biodiversity (i.e. the non consistent implementation of treaty norms on biodiversity conservation emerges from the research as an indirect factor that perpetuates biodiversity loss as a globally occurring and steadily accelerating phenomenon). Biodiversity conservation and sustainable use rather appear, in the soft law realm, as requisite tenets of the sustainable development principle. Non biodiversity-related MEAs, on their part, contain residual provisions that either incidentally or on purpose address questions of biodiversity conservation and prevention of harm to components of biodiversity. Although in some cases, norms on the conservation of nature are defined and augmented in their scope by the adoption of additional, ancillary or complementary instruments, said norms are implemented only in so far as this is required in order to achieve the main objectives of the MEAs in which they are included. The presence of these articles points, at least, to the existence of a diffused

interest in protecting biodiversity within the international community (if not signaling the tension toward the growing acceptance and acknowledgment of general obligations in this regard). Such an interest, on their part, is confirmed by the provisions contained by the universal conventions that were concluded in order to guarantee, through international cooperation, the protection of some elements of the natural world (i.e. wetlands of international importance, certain natural sites of outstanding value, migratory and endangered species) that are conceived as ‘common heritage’ or whose preservation constitutes a ‘common concern’ of mankind. As such, the preservation of these elements of the natural world necessarily implies the diffused interest and is based on the subsequent undertaking of common actions by the Contracting Parties of the conventions at hand. The implementation of these universal biodiversity-related conventions is standardized as it typically depends from the designation of protected areas and/or the creation of lists that submit the matters worth of international legal protection to the application of a series of procedural and substantial safeguards. Some differences concerning the techniques adopted under each regime have emerged from this analysis. In some cases, the designation of protected

sites is unilateral (e.g. Ramsar Convention and Birds Directive), whereas in others, designation occurs through the involvement, at varying degrees, of supranational entities entrusted for this specific task (e.g. WCNH Convention and Habitats Directives).

Another factor that undermines the implementation of these instruments, as the CBD is given by the open-endedness of the provisions they entail which, as abundantly shown, are the result of laborious negotiations between States with diverging views and interests on environmental and developmental matters. Furthermore, it has been observed that, in addition to their scarce legal force, the implementation of treaty obligations on biodiversity conservation suffers the limit of being devolved upon national authorities that may not always have the capabilities to proceed in a proper manner (as it has been shown, for instance, in relation to the system of trade permits under the CITES and in relation to measures for the protection of migrating bird species foreseen by the CMS). In turn, lack or inability of implementation is exacerbated by the lack of effective monitoring mechanisms on the international level, a weakening factor that is directly linked to the generalized criticalities of the global biodiversity governance.

In fact, although the CBD possess a framework character and, as a framework Convention, it enjoys an almost universal participation, States have not shown any willingness to ameliorate its system of governance, for instance, by strengthening its bonds with biodiversity-related MEAs on a normative level. As a result, the global biodiversity governance currently has a dispersed, fragmented and scarcely institutionalized structure. In our view, these characteristics may be detrimental to the effective achievement of the objectives pursued through the implementation of the already loosely worded treaty obligations of the CBD and other biodiversity-related MEAs, as they increase the risks associated with duplication and the absence of control. The heavy reliance on the goal-setting method in relation to the fight against biodiversity loss is another factor that, in our understanding, affects the legal force of the objectives established under the CBD and the other biodiversity-related MEAs. In other words, if the scheduling of aspirational goals for the protection of biodiversity at international level (and by reflection also on EU and national levels) may be desirable in terms of benchmark-setting, it has nevertheless proved not to be fully effective in guiding States in the elaboration and adoption of

national measures of implementation. In terms of guidance, instead, the role exercised by COPs must be appreciated for a number of reasons. Firstly, because, as seen in relation to biodiversity *in situ* conservation and protected areas, COPs endorse valuable instruments that are the result of a policy-science interaction which may be taken as a reference by States and supranational organization when it comes to implement treaty obligations. Secondly, COPs are the venue for the application of treaty obligations at international level (e.g. by adopting decisions regarding the form and content of international cooperation and assistance). Thirdly, because through the adoption of *consensus*-based decisions COPs have (in substitution of the international judiciary) the power to provide interpretation and specification on the content of treaty-based obligations, as well as the power to address episodes of non compliance.

Attempts to survey and assess State practice in relation to the implementation of the norms on biodiversity conservation have encountered some limitations. National strategies and biodiversity action plans that are required in order to implement the CBD at domestic level, in some cases, do not provide substantial information on the measures that were adopted, for instance, in order to

institute, manage and conserve protected areas. In particular, it has been stressed how information on the legal enforcement of conservation measures is omitted from all the documents that have been reviewed and compared.

Another factor preventing the full evaluation and comparison of the national strategies is given by the adaptation of said documents to the aspirational goals and targets that are progressively agreed upon at international level. The process of adaptation necessarily takes time and there may be temporal gaps in passing from a strategy to another, as happened after the international community ascertained the failure in stopping the accelerating rate of global biodiversity loss by the year 2010, which has triggered the revision of preexisting strategies and their consequent adaptation to new goals and targets for 2020 and beyond. Discrepancies of this kind emerge, in particular, in the attempt of establish a connection between the Italian and the EU Strategy on biodiversity (whereas the former still revolves around the 2010 goal, the latter has already been revised).

As to what concerns EU law on the conservation of biodiversity, the research has mainly addressed the questions posed by implementation by the Member States.

The study has been conducted, respectively, in the light of the normative evolution of the shared competence of the EU and its Member States in the environmental sphere and in the light of the European biodiversity policy that has been developed in the past thirty years.

What emerges from the analysis of the policy and legal developments concerning biodiversity, is how the said developments, affecting both the preservation of biodiversity within the Union and the preservation of biodiversity as a matter of EU external action, are inherently permeated by the informative principles that, in general, characterize the environmental law of the European Union: subsidiarity, proportionality and, above all, integration.

As for the stratified policy tools that the EU institutions have progressively elaborated on biodiversity, the research tried to address the linkages that exist amongst them and, accordingly, to reconstruct the way by which the entire EU biodiversity policy is organized, as many aspects of its structure are not immediately apparent.

In this context, the norms of the Birds Directive and the Habitats Directive have been addressed. The conduct of Member States terms of their implementation has been contrasted by the case law of the European Court of

Justice which has shown that, although such directives have been established to ensure a balance between conservation and sustainable use of European biodiversity, their implementation suffers from a number of deficiencies, primarily due to faulty transposition and incorrect application of the provisions on species and habitat protection.

Finally, it has been suggested that, since the EU legislation on nature protection is, as explicitly affirmed by the Union itself, instrumental to the achievement of the objectives established under many biodiversity-related MEAs to which the European Union is also a Contracting Party (notably, the CBD), the institutions and the Member State should preferably strive to reach a better coordination and harmonization of the policy means that they use to comply with their international obligations contained in the such MEAs (or biodiversity-related mixed agreements), instead of recurring to confrontational means for the verification of compliance.

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