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The Obligation Not to Pollute: From Corollary of State Sovereignty to The Right to A Decent Environment

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The paper deals with the evolution of the principle of international environmental law prohibiting the use of the territory of a State for activities which may damage the territory of another State. This principle started to develop in relation to strictly trans-boundary situations as a sort of corollary of the well-established principle of sovereignty of States over their territory. In the last decades, international law has been increasingly faced to contexts in which pollution concerns resources over which States have no jurisdiction, such as the atmosphere. Therefore the question arises as to whether these elements - as evidence of practice and opinion juris - form the basis of a customary duty to preserve shared resources or, vice versa, if the legal problems inevitably associated with the protection of res communes omnium prevent the birth of a customary principle. A further evolution of the principle might consist in the duty not to pollute the environment in absolute terms, thus implying the prohibition, for the State, to damage its own territory. This formulation would, contrarily to what observed with respect to the first version of the principle, contradict the dogma of national sovereignty over population and territory; still, the existence of this evolution is supported by different elements. In the first place, the existence of international instruments protecting certain resources independently from their location. Secondly, the growing presence of a human right to a decent environment in legal instruments pertaining to different subsystems of international law. The jurisprudence of international tribunals confirms this tendency, therefore suggesting the idea of the protection of the environment per se is becoming one of the aims pursued by the international community.

Keywords: international environmental law, duty not to pollute, decent environment, state sovereignty

I. The Obligation Not to Pollute in the Context of Transboundary Damage

The obligation not to pollute has firstly been framed as an obligation, for the State, not to allow its own territory to be used for the purposes of activities which can damage the environment of other States. In these terms, the principle

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is a corollary of the well-known principles of territorial integrity and of sovereign equality of States, and it reflects without any doubt a rule of customary international law². Article 21 of the Stockholm Declaration and article 2 of the Rio Declaration fully confirm this idea: the obligation not to pollute other States' natural environment is matched to the recognition of their sovereign rights over natural resources.

These principles began to be established in the framework of disputes relating to transboundary pollution, and precisely in the field of management of international watercourses. The equality between riparian States as been explicitly stated in the dispute relating to the *Territorial Jurisdiction of the International Commission of river Oder*; the Permanent Court of International Justice, in deciding about the jurisdiction of Commission, stated that the community of interests among riparian States "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"³.

This idea has been further developed by the *Lake of Lanoux* award, deriving from the conflicting interests of France and Spain in the management of waters of common use, regulated by a series of "Boundary Treaties". The dispute arose because, in 1950, Electricité de France applied to the French Ministry of Industry to divert the waters of the Lake Lanoux for the purpose of electricity production. The Spanish Government intimated to the French one that such a scheme would affect its interests and requested that the scheme would not be carried out without agreement between the two Governments⁴.

According to the Treaty of Bayonne between France and Spain, "All standing and flowing waters, whether they are in the private or public domain, are subject to the sovereignty of the State in which they are located, and therefore to that State's legislation, except for the modifications agreed upon between the two Governments. Flowing waters change jurisdiction at the moment when they pass from one country to the other, and, when the watercourses constitute a boundary, each State exercises its jurisdiction up to the middle of the flow. 5"

² P. Birnie, A. Boyle, International Law and the Environment, Second Edition, Oxford, 2002, p.109; A. Kiss, J.-P. Beurier, Droit international de l'environnement, Paris, 2000, p.103.

³ Permanent Court of International Justice, Case relating to the Territorial Jurisdiction of the International Commission of the River Oder, Series A, No. 23, p.27.

⁴ Lake Lanoux Arbitration (France v Spain) – text found in Revue Générale de Droit International Public, 1958, p.88-89.

The Tribunal admitted the existence of a principle which prohibits the upstream State from altering the waters of a river in such a fashion as seriously to prejudice the downstream State, even though it concluded that such a principle would have no application to the case at issue, as the French scheme would not alter the waters of the French river⁶. Still, the obligation not to pollute found its most famous formulation in the *Trail Smelter* arbitration, driving from the activity of a Canadian factory situated near the border, seriously damaging farmers' fields in the US territory.

According to the Tribunal: "under the principles of international law, as well as of the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another State or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence".

The importance of this pronouncement has been dismissed by some authors, who underlined that the reparation paid by Canada to United States had been agreed in the very same agreement establishing recourse to arbitration. According to this position, the traditional reluctance of States to admit responsibility for damages would make reparations a mere act of courtesy and, except for the sector of international watercourses where case law is actually abundant, it would be very hard to state the existence of a general principle of international law banning States from polluting other States' territory.

Still, the *Corfu Channel* sentence issued by the International Court of Justice in 1949, opposing Albania to United Kingdom, seems to go in the opposite direction. Albania was accused to be responsible of the explosion of mines in its territorial waters, and of the damages derived to United Kingdom warships. The UK accused Albania to have placed the mines or, at least, to have been a party to the accident, by not warning its ships of the presence of mines and therefore not guaranteeing the right of inoffensive passage.

According to the Court, Albanian authorities were obliged to notify the

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⁵ Ibidem, p.84.

⁶ Ibidem, p.107.

⁷ Trail Smelter case(United States, Canada), United Nations Reports of international arbitral awards, Volume III, pp. 1905-1982, p.1965.

⁸ Ibidem, p.1907.

⁹ B. Conforti, Diritto Internazionale, Seventh edition, Napoli, 2006, p.201.

existence of a minefield in Albanian territorial waters and to warn British warships of the danger. Such obligations were based not on international humanitarian law, but on certain general and well-recognized principles, among which "every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States" 10.

The idea has been more recently confirmed by the ICJ in the advisory opinion relating to the *Legality of the threat or use of nuclear weapons* where, in discussing the potential impact of nuclear weapons on the environment, "the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States" has been affirmed¹¹. This statement has been recalled by the same judicial organ in the *Gabcikovo-Nagymaros* case¹², while assessing the existence of a state of "ecological necessity" justifying the Czech Republic for not having complied with a bilateral treaty with Hungary aimed at the construction of a dam on the river Danube.

In this regard, it is to regret that in the last case relating to the management of a shared resource and precisely of a transboundary watercourse – the *Pulp Mills* case¹³ – the ICJ has not taken the chance to reaffirm the existence of this principle. The event giving origin to the case was the building, on the part of Uruguay, of two factories on the banks of the river Uruguay; the use and management of this watercourse is the object of a bilateral treaty between the two States, which establishes a joint mechanism of consultation in order to ensure the rational use of the watercourse.

In assessing the violation of the obligation, on the part of Uruguay, to prevent pollution and protect and preserve the aquatic environment, the Court recalls that "the attainment of optimum and rational utilization requires a balance between the Parties' rights and needs to use the river for economic and commercial activities on the one hand, and the obligation to protect it from any damage to the environment that may be caused by such activities, on the other". Still, these principles are both referred to the treaty binding the parties, without any reference to general international law¹⁴.

¹⁰ Affaire du détroit de Corfu, arrêt du 9 avril 1949, C.I.J. Recueil 1949, p.22.

¹¹ Legality of the threat or use of nuclear weapons, Advisory Opinion, I.C.J. Reports 1996, pp. 241-242, para, 29.

¹² Gabcikovo-Nagymaros Project (Hungary/Slovakia), Judgment, 1. C. J. Reports 1997, p. 7, par.53.

¹³ Case concerning pulp mills on the river Uruguay (Argentina v. Uruguay), 20 April 2010.

¹⁴ Ibidem, par.175.

A somewhat shy reference to the duty not to pollute can be inferred from another passage of the sentence, in which the Court, while examining the violation of the duty to coordinate measures to avoid changes in the ecological balance, recalls the its own statement, contained in the *Gabcikovo-Nagymaros* case, relating to the importance of the duty of prevention and vigilance in the field of environmental protection. Still, it does not appear clear whether this principle is used in order to support the existence of a substantial or procedural duty, as the nature of very obligation at issue (the duty to coordinate measures to preserve the ecological balance of the river) is framed with a certain ambiguity in this regard¹⁵.

Notwithstanding the ambiguities of this recent pronouncement, the prohibition to allow State's territory to be used for activities capable of damaging other States can nowadays be considered a general principle of international law, its specific application depending on precise circumstances of each case¹⁶.

II. The Protection of Global Commons and of Goods Situated Outside States' Jurisdiction

Once admitted the existence of this norm, would it be possible to widen its scope to cover those damages to environment which fall outside the jurisdiction of a particular State? Principle 21 of the Stockholm Declaration is very clear in this regard: "States have [...] the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. Albeit not binding, this declaration of principles opens the possibility of interpreting the duty not to pollute as an obligation to protect the environment beyond the idea of transboundary damage, either because the good to be protected is outside the jurisdiction of a particular State (such as the Antarctic continent), either because it is physically impossible to locate it in a particular place (such as the

¹⁵ Ibidem, pag.187: "The Court considers that the obligation laid down in Article 36 is addressed to both Parties and prescribes the specific conduct of co-ordinating the necessary measures through the Commission to avoid changes to the ecological balance. An obligation to adopt regulatory or administrative measures either individually or jointly and to enforce them is an obligation of conduct. Both Parties are therefore called upon, under Article 36, to exercise due diligence in acting through the Commission for the necessary measures to preserve the ecological balance of the river".

¹⁶ P. Sands, Principles of International Environmental Law, cit., p.246.

atmosphere), or because it is conceived as a common good whose value for humanity is independent from its physical location, even though its components are physically located (such as biodiversity). Also the ICJ advisory opinion about nuclear weapons, while defining the object of the duty not to pollute, added, to the "environment of States", the expression "areas beyond national control"¹⁷.

Principle 2 of Rio Declaration on Environment and Development expresses the same idea, and so does article 11 of the Draft International Covenant on Environment and Development, provided that the harm is "significant" 18.

We will now pass to the analysis of some examples of international conventions protecting common goods or goods outside States' jurisdiction, following the three categories defined above.

A. The environmental protection regime established by the Antarctic system
The Antarctic Treaty has been signed in 1959 and established the Antarctica as a region of peace and cooperation. The area has been the object of subsequent treaties, which nowadays constitute the "Antarctic Treaty System":
the Convention for the Conservation of Antarctic Seals (CCAS, London, 1972);
the Convention on the Conservation of Antarctic Marine Living Resources
(CCAMLR, Canberra, 1980); the Protocol on Environmental Protection to
the Antarctic Treaty (Madrid, 1991).

The Antarctic Treaty has not been originally conceived in order to protect the environment, its first aim being the "freezing" of sovereignty claims in the continent; still, some of its provisions can positively contribute to the first objective. According to the Treaty, the Antarctic continent can only be used for peaceful purposes: military activities, nuclear explosions and disposal of radioactive waste are prohibited, whereas freedom of scientific cooperation must be guaranteed. Moreover, the preservation of living resources in the continent is one of the "matters of common interest" about which representatives of Contracting Parties should have consulted immediately after the entry into force of the Treaty.

The 1972 Antarctic Seals Convention regulates the hunting of seals, re-

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¹⁷ Legality of the Threat or Use of Nuclear Weapons, cit., par.29.

¹⁸ IUCN Environmental Law Program, Third edition, 2004, http://www.i-c-e-l.org/english/ EPLP31EN rev2.pdf (10/8/2010).

quiring Parties to set an annual limit, while granting complete protection to some species; hunting is permitted just in some periods of the year and natural reserves are established. The Convention establishes a complex mechanism for the exchange of information, according to which annual reports must be addressed to Scientific Committee for Antarctic Research (SCAR), a body related to the International Council of Scientific Unions. This latter (named International Council for Science since 1998) is a non-governmental organization created in 1931, aimed at promoting international scientific activity and its application "for the benefit of humanity"; therefore the link between SCAR and the Treaty is an interesting example of collaboration between governmental and non-governmental dimension, which will be frequent followed by other international environmental agreements.

The early eighties saw the adoption of the Convention on the Conservation of Antarctic Marine Living Resources (1980). One of the most important features of this Convention is the approach adopted, according to which the object of preservation are not natural resources individually taken, but also the relationships among organisms and processes which form part of the Antarctic ecosystem. As a consequence, the scope of application of the Treaty extends beyond the Antarctic area and includes regions subject to national sovereignty. This is the reason why the duty of cooperation extends to Contracting Parties which may exercise jurisdiction in marine areas adjacent to the area to which the Convention applies.

The emphasis put by the Convention on the rational use of resources (the Convention uses the term "sustained conservation") witnesses the relevance assumed by the concept of sustainable development, while the obligation of minimization of risks shows a shift from the idea of prevention to that of precaution in the management of natural resources²⁰.

The implementation of the Convention is entrusted to the Commission for the Conservation of Antarctic Marine Living Resources, which not only gathers and disseminates relevant data among members, but also adopts conservation

¹⁹ The Convention applies to the Antarctic marine living resources of the area south of60° South latitude and to the Antarctic marine living resources of the area between that latitude and the Antarctic Convergence which form part of the Antarctic marine ecosystem.

²⁰ The most well-known definition of the precautionary principle is the one provided for by Principle 15 of the Rio Declaration: "[...] Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.".

measures on the basis of the best scientific evidence available and carries out observation and inspection activities. Conservation measures are binding on members, unless a Party notifies the Commission to be unable to accept them.

A Scientific Committee for the Conservation of Antarctic Marine Living Resources is further established, with the aim of advising the Commission on scientific matters. The Committee is formed by State representatives competent in the field; still, the presence of non-State actors plays a relevant role, as they can accompany national representatives and can be consulted by the Committee on an *ad hoc* basis.

Still, the most advanced element of the Antarctic Treaty System is formed by the Protocol on Environmental Protection, which has been defined as the "most comprehensive and stringent regime of environmental protection rules never established under the rules of public international law anywhere in the world"²¹.

The Protocol designates Antarctica as a natural reserve devoted to peace and science and sets the principles guiding States in the field of environmental protection. After a wide prohibition of conducting activities capable of harming "the Antarctic environment and dependent and associated ecosystems", the Protocol lists with more precision the objects of States' protection: climate or weather patterns, air or water quality, atmospheric, terrestrial (including aquatic), glacial or marine environments, distribution, abundance or productivity of species of fauna and flora, threatened species and areas of biological, scientific, historic, aesthetic or wilderness significance.

This provision is of interest not only as far as the Antarctic system: given the recurrent problem, in international environmental law and in the drafting of treaties, of a definition of "environment", the list provided by the Environmental Protocol could offer an useful input in this sense.

From a substantive point of view, the main obligation is constituted by the prohibition of any activity relating to mineral resources, except for scientific research. This provision is strengthened by a 50-year moratorium on any mineral resources activity; still, this limit can be overcome by the amendment procedure provided for by the Antarctic Treaty.

²¹ P. Sands, Principles of International Environmental Law, cit., p.722.

²²P. Birnie, A. Boyle, International Law and the Environment, cit., p.3 ss.

Notwithstanding the importance of the substantive aspect, one of the main features of the Protocol is the development of procedural provisions: activities shall be planned and conducted on the basis of an environmental impact assessment, including information sufficient to allow prior assessments of, and informed judgments about, their *possible* impacts on the Antarctic environment and dependent and associated ecosystems.

It is interesting to underline that the impacts to be taken into account are not only the actual, but also the possible ones; this expression points to (even though the Protocol does not mention it explicitly) the adoption of a precautionary approach, as the mere possibility of environmental damage is sufficient to affect States' behavior.

Environmental impact assessment has been distinguished in "initial environmental evaluation" and "comprehensive environmental evaluation". The former is aimed at determining whether a proposed activity may have more than a minor or transitory impact and shall include a description of the activity, as well as consideration of alternatives and any impacts that the activity may have. If the result of the procedure indicates that a proposed activity is likely to have no more than a minor or transitory impact, the activity may proceed, provided that it is properly monitored.

If the initial environmental evaluation reveals an opposite outcome, States must carry out a comprehensive environmental evaluation, comprising not only a description of the activity and of its alternatives, but also a series of relevant data, among which the initial environmental state; the methods used in order to forecast the impact; direct, indirect and cumulative impacts; mitigation measures. Moreover, the person who realized the assessment must be fully identifiable.

Decisions about a proposed activity must be taken pursuant to the assessment, which has to be forwarded to other Contracting Parties. The impact assessment is then completed by the obligation to constantly monitor ongoing activities, including the verification of predicted impacts.

The Protocol includes a duty of cooperation, comprising the exchange of information in the promotion of scientific and technical programs, in the preparation of environmental impact assessments and in the risk management. As far as the institutional aspect is concerned, the Protocol establishes the Committee for Environmental Protection, open to all Parties, charged with the task of pro-

viding advice and formulating recommendations to the Parties in connection with the implementation of the Protocol.

Effective implementation is also guaranteed by a system of inspections, carried out by observers, which the Contracting Parties must arrange, individually or collectively. Observers must be given access to all parts of stations, installations, equipment, ships and aircraft open to inspection under the Antarctic Treaty, as well as to all records. The outcome of inspections must be circulated to the Parties and to the Committee.

At the internal level, effectiveness is guaranteed by the obligation set on Parties to elaborate national rules and procedures relating to liability for damage arising from activities covered by the Protocol. The Environmental Protocol is supplemented by an Annex on the Conservation of Antarctic fauna and flora, a Protocol on prevention of marine pollution, a Protocol on area protection and management and a Protocol on Liability arising from environmental emergencies.

As it has been observed, the Antarctic system has served "as a microcosm for the evolution of international environmental law and policy", developing rules of substantive, procedural and institutional nature in which other international environmental agreements have built on²³. Though aimed at the protection of global commons, the system provides a model for environmental protection which transcends the special characteristics of the Antarctic continent and which could be applied to any situation where the conservation of natural resources is at stake.

B. The Convention on Biological Diversity

The Convention on Biological Diversity has been signed in 1992, during the United Nations Conference on Environment and Development. The Convention has been defined as being "a starting point and a point of arrival at the same time for the protection of natural species and habitats". A point of arrival as it elaborates on principles and techniques of international environmental law already adopted in national and international legislation - such the precautionary principle or environmental impact assessment - and a starting point because

²³ P. Sands, Principles of International Environmental Law, cit., p.730, quoting L. Kimball, Environmental Law and Policy in Antarctica, in P. Sands (ed.), Greening International Law, 1993, 122 at 138-9?

of its capacity to be incremented through protocols and soft law.

The conservation of biological diversity is defined as a "common concern of humankind" by the Preamble which, while recognizing the sovereign right of States over their natural resources, affirms their responsibility for conserving their biological diversity and for using their biological resources in a sustainable manner.

The text of the Convention incorporates Principle 21 of the Stockholm Declaration, therefore recognizing a duty not to pollute not only other States' territory, but also on areas outside national sovereignty. This idea is partially mirrored in the jurisdictional scope of its application: this latter is limited to the boundaries of national jurisdiction as far as components of biological diversity, but it expands beyond these limits when processes and activities are concerned, regardless of where their effects occur (emphasis added).

The Convention imposes on Contracting parties a duty of cooperation for the preservation of biological diversity and the obligation to develop plans and strategies with this aim, including a constant monitoring activity. More precisely, the Convention distinguishes between ex situ and in situ conservation, meaning with the former the conservation of components of biological diversity outside their natural habitats and with the latter the conservation of ecosystems and natural habitats in their natural surroundings. With regard to ex situ conservation, States undertake to create areas where special measures are needed and to develop guidelines for the selection, establishment and management of these areas. Risks associated with the release of living modified organisms resulting from biotechnology have to be prevented and managed, if they are likely to have adverse environmental impact.

The duty to adopt measures in response to risks whose effect has not be or can not be properly assessed is an important feature of the Convention, as it constitutes an incorporation of the precautionary principle, even though this term is not explicitly used.

Contracting parties are also bound to respect and maintain traditional knowledge and practices of indigenous communities, when traditional lifestyles are implied; this obligation also includes the approval and involvement of the holders of such knowledge and the equitable sharing of the benefits arising from the

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²⁴ M.C. Maffei, La protezione delle specie, degli habitat e della biodiversità, in L. Pineschi, A. Fodella, La protezione dell'ambiente nel diritto internazionale, Torino, 2009, p.286.

utilization of the resource. The realization of these aims finds a limit in its subordination to national legislation; this can be easily explained if we consider the possible problems arising from the conflict between the protection of private property as conceived in the internal legal order and indigenous rights, often involving limits on the access to genetic resources by individuals not belonging to these communities.

Contracting parties are required to use components of biodiversity sustainably, to carry out environmental impact assessments of proposed projects likely to have adverse impacts and to minimise them, allowing public participation. A concrete application of the expanded jurisdictional scope of the Convention is found in the obligation to cooperate in respect of areas beyond national jurisdiction and, more specifically, to promote information, notification and consultation on activities under their jurisdiction or control which are likely to significantly affect the biological diversity of other States or areas beyond national jurisdiction.

Is interesting to underline how, in this provision, the obligation to protect the environment outside national territory is subordinate to the damage to biological diversity being "significant". On the other side, the higher threshold imposed on this kind of situation is counter balanced by the "precautionary formula" used, according to which the scope of activities concerned includes those whose impact on the environment is likely and not certain. Conversely, the precautionary approach has not been endorsed for the adoption of emergency responses: States are called to react only to those activities which present a "grave and imminent danger" to biological diversity.

The Convention also includes provisions relating to the access to genetic resources and transfer of technology. After recognizing that the ultimate authority to regulate access to genetic resources rests with national governments, the Convention states that Contracting Parties should "endeavour" to facilitate access to this kind of resource by other States. This process has to be subject to prior informed consent of the country of origin of the resource, which should be involved in research activities carried out on the genetic material and entitled to fair and equitable sharing of the benefits deriving from it.

The delicate issue of biotechnology, dealt with by the Convention in a single provision, has been the object of the Cartagena Protocol on Biosafety adopted in 2000. The content of the Protocol will not be analysed in this paper; suffice it to underscore that its jurisdictional scope coincides with that of the Biodiversity

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Convention: its provisions apply to the transboundary movement, transit, handling and use of all living modified organisms that may have adverse effects on the conservation and sustainable use of biological diversity.

As far as the institutional aspect, a Conference of the Parties has been established, charged with the task of ensuring proper implementation of the Convention, adopting amendments and protocols, considering information submitted by Parties and creating subsidiary bodies. The Convention immediately created the Subsidiary Body on Scientific, Technical and Technological Advice, with the aim of providing with advice relating to the implementation of the Convention. The body is open to the participation of all members and includes government representatives competent in the relevant field of expertise. The Conference can also be attended by observers, which comprise the United Nations, the International Atomic Energy Agency and States not Party. The observer status can be recognized to any body or agency, whether governmental or non-governmental, competent in the field.

The Convention also requires the existence of a mechanism for the provision of financial resources to developing countries on a grant or concessional basis. This mechanism has been mainly realised through the Global Environment Facility, an independent financial organization, providing grants to developing countries and countries with economies in transition for projects related to environmental protection²⁵.

If, one the one side, the limits imposed by the Convention on States about the management of their own natural resources are still limited, on the other side, according to an evolutionary interpretation, the recognition of States' common concern over biodiversity might imply a weakening of national sovereignty in this field²⁶.

C. The United Nations Framework Convention on Climate Change and the Kyoto Protocol

²⁵ GEF members include: The GEF partnership includes 10 agencies: the UN Development Programme; the UN Environment Programme; the World Bank; the UN Food and Agriculture Organization; the UN Industrial Development Organization; the African Development Bank; the Asian Development Bank; the European Bank for Reconstruction and Development; the Inter-American Development Bank; and the International Fund for Agricultural Development.

²⁶ M.C. Maffei, La protezione delle specie, degli habitat e della biodiversità, cit., p.286.

The Kyoto Protocol has been adopted in the framework of the Third Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC) meeting, held in 1997. This latter dates back to 1992, and precisely to the United Nation Conference on Environment and Development, and it aims at tackling the problems deriving from increasing concentration of greenhouse gases emissions. The Preamble of the Convention states that "change in the Earth's climate and its adverse effects are a common concern of human-kind", therefore clarifying the underlying idea pursued by drafters: the protection of a component of natural environment perceived as a common good. The "global nature of climate change" becomes therefore the basis for cooperation efforts among States, even if this idea is put into perspective by the principle of common but differentiated responsibilities, recalled immediately after.

The UNFCCC is aimed at the reduction of greenhouse gases emissions, but it just establishes broad obligations among members, without setting any schedule for the realisation of this objective; this target has been entrusted to the Kyoto Protocol, which imposes the obligation of reducing carbon dioxide emissions - according to precise deadlines and in definite quantities - on a certain number of States (mainly industrialised ones and transition economies). Other countries have been exempted by reduction commitments and are only bound by more general obligations. The Protocol is an annex to the Convention and it is therefore inspired by the same philosophy.

The main obligation consists in the duty, imposed on Parties included in Annex B, to ensure that their carbon dioxide emissions do not exceed their assigned amounts, with a view to reducing their overall emissions of such gases by at least 5 per cent below 1990 levels in the period between 2008 and 2012. The only exception is constituted by transition countries, which are allowed to use a different basis than 1990.

Apart from reduction commitments, Parties are bound by other, broader kind of obligations: they have to promote energy efficiency and the use of renewable forms of energy, carbon dioxide sequestration technologies and environmentally sound technologies. Further fields of cooperation include the development of training and educational programmes, the facilitation of public awareness and of access to information on climate change.

Still, the most interesting part of the Kyoto Convention, and the one which most reveals its vocation to protect the atmosphere as a common good in the interest of mankind, is the presence of the so-called "flexibility mechanisms":

joint implementation (II); clean development mechanism (CDM) and emission trading. Joint implementation implies the possibility, for countries with an emission reduction commitment (therefore included in Annex B), to earn emission reduction units from a project carried out in another Party bound by the same obligation. The rationale of these mechanisms consists in the possibility to exploit economies of scale in order to reach the reduction target with lesser efforts, while promoting technology transfer and foreign investment.

In order to avoid a misuse of the mechanism, the Protocol poses an important condition: the reduction in emissions must be additional to what would have occurred if the mechanism had not been used. This provision is justified by the will to prevent countries from reaching their target on the sole basis of projects realized in other countries.

Moreover, projects must have the approval of the host Party and participants have to be authorized by a Party involved in the project. With the term "participants", the text means legal entities which can take part to the process; non-State actors therefore play a full part in this flexibility mechanism.

The clean development mechanism is carried out by a Party bound by reduction commitments and a Party not bound: the former can use emission reductions units deriving from projects it decides to undertake in the territory of the latter. Also in this case, recourse to the mechanism is subject to the condition that emission reduction will be higher than that which would have been reached in normal conditions; participation of non-State entities (private or public) is possible, even if subject to the supervision of the executive board of the CDM.

Emission reduction units obtained on the basis of the mechanism must be certified, in order to guarantee the existence of real, measurable, and long-term benefits related to the mitigation of climate change. Moreover, a part of the proceeds deriving from these activities will be used in order to meet adaptation costs to climate change incurred by particularly vulnerable developing countries which are Party to the Protocol.

Finally, emission trading allows Parties to buy and sell emission reduction units with other countries bound by reduction obligations. This scheme is clearly inspired by the idea of economic efficiency, according to which countries unable to abide by reduction commitments will pay an extra price in order to satisfy their energy needs, whereas countries which did not exhaust the quantity of emissions assigned to them can draw an economic advantage out of their own efficiency.

The UNFCCC and the Kyoto Protocol are not the only international conventions devoted to the protection of atmosphere and to the fight against climate change; still, they exemplify - more than any other international instrument — the conception of management of a common good in the interest of mankind. The ultimate goal of the Convention being a *global* reduction of carbon dioxide emissions, it does not really matter the amount of reduction obtained by every single member to the Protocol. The only limit is constituted, as we have seen, by the prohibition to use this mechanisms in an abusive way. Strict adherence to national targets is therefore, from both a conceptual and practical point of view, a means to an end, a means which is supplemented by flexibility mechanisms in view of the global effort against climate change.

III. States' Obligation not to Pollute Their own Territory and the Emergence of a Right to a Decent Environment

A. From a general obligation not to pollute to the emergence of a human right approach to environmental protection

The ultimate evolution of the process outlined so far is the birth an obligation not to pollute in absolute terms, i.e. a norm preventing States from carrying out any activity capable of damaging their own natural environment. The revolutionary potential of this idea is evident: it would contradict the principles of sovereignty and national integrity, as it would limit States' freedom to act on their own territory.

International instruments supporting this idea are not many. The Stockholm Declaration and the Rio Declaration do not contain such an obligation, even though—one might argue—this duty could emerge as a result of other principles set forth by these declarations, such as the obligation to eliminate unsustainable patterns of production and consumption or, even more, to enhance citizens' participation to decision making in environmental matters. It has been remarked how Principle 21 of the Stockholm Declaration took instead "three steps backward" to the doctrine of State sovereignty, by reaffirming States' full control over natural resources and by excluding any obligation on the territory of the polluting State or on its inhabitants²⁷.

²⁷ H.-J. Uibopuu, Internationally guaranteed right of an individual to a clean environment, in Comparative Law Quarterly, 1977, p.105.

Still, the obligation not to pollute finds a source in the second paragraph of article 11 of the Draft International Covenant on Environment and Development; according to this provision, "States have the right and the duty, in accordance with the Charter of the United Nations and principles of international law, to protect the environment under their jurisdiction from significant harm caused by activities outside their national jurisdiction. If such harm occurs, they are entitled to appropriate remedies" (emphasis added).

This provision could simply be the pendant of the duty not to cause transboundary damage we analyzed at the beginning - States have the right not to see their territory damaged by another State - if it was not for the fact that protection of the national environment is not just a right, but also a duty, which suggests the idea of an obligation limiting States' behavior in their own territory. Still, this duty only applies in those cases where harms derives from activities carried out in another State and, paradoxically, it does not prohibit States to undertake in their territory the very same activities which, carried out in another State, could and must unchain a reaction and even give rise to compensation. As a consequence, States' action in defense of another State's natural environment harmed by activities carried out by this latter State is banned; this also excludes claims made on the basis of extraterritorial application of national laws if the State trying to implement its own legislation does not suffer any prejudice28. If these contradictions can be explained on the basis of the dogma of national sovereignty, on the other side the obligation to protect the environment in general terms cannot but appear definitely jeopardized.

B. Right to a decent environment in international law

If the "unchaining" of the duty not to pollute from the concept of national sovereignty and integrity finds little space in a general obligation not to pollute, it seems to emerge more strongly under the form of a human right to a decent environment. The preliminary problem of defining a human right to a decent

²⁸ In the environmental field, extraterritorial application of national law has been especially considered with regard to trade disputes deriving from import bans based on the violation, on the part of the exporting State, on environmental protection norms of the importing State. In the Shrimps dispute, the Appellate Body report of the World Trade Organisation did not rule out this possibility, on the basis of the migratory nature of sea turtles, creating "a sufficient nexus" between this species and United States (United States - Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R, 12 October 1998, par.133).

environment is the relationship between the human rights system and environmental protection and, more precisely, the question as to which of the two sets of rights should be seen as a derivation of the other.

One possible position consists in including environmental protection within the human rights system, as the ultimate objective of the former is to enhance quality of life²⁹. More precisely, environmental rights can be seen as a prerequisite for the enjoyment of human rights; alternatively, environmental protection would constitute an integral part of the enjoyment of human rights; it is the case, as we will see, of complaints regarding environmental harm introduced in front of international human rights tribunals³⁰.

The opposite view is based in the idea that human beings are just one of the several components of the ecosystem, which should be preserved for its own sake. Human rights would thus be a tool in order to reach the aim of an adequate quality of the environment³¹.

The intermediate view consists in the idea that the two categories of rights reflect different values and cannot be incorporated one inside the other, even if they share a set of interests, consisting in the protection of the biosphere in the common interest of humanity. The "third view" thus recognizes the mutual benefits which can arise from the interplay between the two systems; this is witnessed by the growing reference, in international instruments, to the concepts of intergenerational equity and sustainable developments³². On the other side, this position also implies the recognition of potential conflicts between human rights and environmental protection: an example is constituted by those situations where a measure taken by the State for environmental purposes conflicts with an individual right, such as the right to private property.

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²⁹ M.R. Anderson, Human Rights Approaches to Environmental Protection: An Overview, in A.E. Boyle and M.R. Anderson, Human Rights Approaches to Environmental Protection, Oxford, 1996, p.3.

³⁰ D. Shelton, Human Rights, Environmental Rights, and the Right to Environment, in Stanford Journal of International Law, 1991-1992, p.104 and 112-113. In this sense see also R.S. Pathak, The human rights system as a conceptual framework for environmental law, in E.B. Weiss ed., Environmental Change and international law: New challenges and dimensions, Tokyo, 1992, p.205 ss.; A.A. Cançado Trindade, The contribution of international human rights law to environmental protection, with special reference to global environmental change, in E.B. Weiss ed., Environmental Change and international law: New challenges and dimensions, cit., p.244 ss.

³¹ R. Anderson, Human Rights Approaches to Environmental Protection: An Overview, cit., p.3-4;

Tensions may also derive from the fact that the priority assigned to the human being by human rights activists could actually endanger the quality of global environment, as the fulfilling a certain threshold of well being would inevitably imply the exhaustion of natural resources. On the other side, environmentalists have been criticized for not having taken into adequate consideration some basic human needs whose fulfillment should prevail over concerns about the integrity of the natural environment³³.

The current debate about the use of biofuels is perhaps one of the most evident examples of the complexity of the relationship between the two sets of rights: biofuel production is detrimental to the environment, as it determines the abatement of wide portions of rainforest and this can negatively affect the quality of life of indigenous populations whose existence, well being and identity are based on their relationship with the environment. On the other side, biofuels or at least those with a certain performance in terms of emissions reduction—constitute an environmental-friendly alternative to fossil fuels, and their production benefits the economy of countries (mainly developing ones) producing and exporting them. At the light of these elements, it is therefore easy to understand why the recent European Union directive on renewable sources of energy, which prohibits the import into the EU of biofuels whose performance in terms of emissions reduction is below a certain level, has been hardly criticized.

Even admitting the validity of the "human right approach" to environmental protection, different options would be available on how to actually implement this approach. A first solution could consist in using existing rights contained in international human rights conventions in order to guarantee a human right to a decent environment³⁴.

Some authors distinguished the different role played in this sense by civil and political rights on the one side and economic, social and cultural rights on the other. The relevance of the first ones would consist in their ability to create an environmental friendly political order, by giving individuals and groups the possibility to express their concern about environmental protection³⁵. On the

³² D. Shelton, Human Rights, Environmental Rights, and the Right to Environment, cit., p.105-106 and 110.

³³ M.R. Anderson, Human Rights Approaches to Environmental Protection: An Overview, cit., p.3.

³⁴ Ibidem, p.6.

³⁵ Idem.

other side, economic, social and cultural rights, being directly linked to human well being, are conceptually closer to environmental issues than civil and political rights, which simply relate to the characteristics of the political order³⁶.

A second possibility would lie in a reinterpretation of existing rights. This process will be mainly carried out by the judiciary, but it has also been outlined by the Ksentini Report, which mainly tried to "green" existing human rights³⁷.

A further venue can be found in the definition of a specific human right to the environment, whose content could be defined as "the right [of individuals] to be protected also through the protection of their environment". One of the first difficulties arising out of this definition is to give a precise meaning to the term "environment", not only because of the complexity of this concept, but also because any meaning assigned to this term must be related to a precise economic and social context³⁹. That is why some authors think that the notion of "decent environment" might imply the setting of minimum standards "essential to the preservation of life at a realistic level" more than a perfect environment, which would be impossible to obtain⁴⁰.

Once admitted that the content of the right to environment would translate into the creation of duties on States, one might wonder who the beneficiary would be: the very same idea of environmental protection seems to suggest that the duty exists towards the environment itself, and not towards the individual, which implies that the right could not be enforced before a tribunal. Notwith-standing the fast development of environmental-related case law by human rights tribunals, this problem is not completely a theoretical one. The characteristics of victim requirement applied and the consequent exclusion of forms of actio popularis implied the refusal of claims where, according to the Court, a direct interest of the individual was not discernable.

³⁶ Idem; see also P. Birnie, A. Boyle, International Law and the Environment, cit., p.253-254.

³⁷ Economic and Social Council, Commission on Human Rights, Sub-Commission on Prevention of Discrimination and Protection of Minorities, Forty-sixth session- E/CN.4/Sub.2/1994/9, 6 July 1994. In 1989 the Sub-Commission on Prevention of Discrimination and Protection of Minorities asked Mrs. Ksentini to prepare a study of the problem of the environment and its relation to human rights; the final report has been submitted in 1994; see also P. Birnie, A. Boyle, International Law and the Environment, cit., p.259-260.

³⁸ A. Kiss, Définition et nature juridique d'un droit de l'homme à l'environnement, in P. Kromarek, Environnement et droit de l'homme, Paris, 1987, p.17.

³⁹ Ibidem, p.20

⁴⁰ H.-J. Uibopuu, Internationally guaranteed right of an individual to a clean environment, cit., p.110.

It has further be underlined how the right to environment is a "droit tout azimut", as it generates obligations not only towards the State, but also towards other individuals and collective organs, with the consequence that everybody is committed and therefore responsible of their realization. Once outlined the main issues in the debate about the human rights approach to environment, we can look at international human rights treaties in order to outline the current evolution towards a human right to a decent environment.

Starting from non binding instrument, we can quote the Stockholm Declaration on the human environment, whose Principle 1 states that "Man has the fundamental *right* to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being". Similarly, Principle 1 of the Rio Declaration affirms that human beings "are entitled to a healthy and productive life in harmony with nature". A more detailed definition of the right to environment is contained in the Draft Covenant of Environment and Development: article 12 imposes on State Parties to fully realize the right of everyone to an environment and a level of development adequate for their health, well being and dignity (par.1). The provision then lists a series of procedural rights: participation to decision-making (including that of indigenous populations), right to information and access to justice.

If we take into consideration international human rights instruments at the regional level, the landscape is more nuanced. The European and the Inter-American Convention on Human Rights are completely silent on the matter and this lacuna - which can be explained with the scarce environmental conscience present at the time when these instruments have been drafted - has been filled through case law. The European Social Charter, adopted in the framework of the Council of Europe, even if not directly aimed at environmental protection, requires the States to ensure workers' right to health, and therefore directly affects working environment. The effectiveness of this provision is guaranteed by a system of collective complaints, giving rise to a report addressed to the Council of Minister and to the Party concerned, which can be invited to adopt specific measures. The only human right charter explicitly recognizing a right to environment is the African Charter on Human and Peoples' Rights, whose article 2 states peoples' right to "a general satisfactory environment favorable to their development".

⁴¹ A. Kiss, Définition et nature juridique d'un droit de l'homme à l'environment, cit., p.23.

The jurisprudence of all these organs has firmly established the existence of a human right to a decent environment. Given the absence (apart from the African Charter) of an explicit right to environment, some existing rights - such as the right to life, to physical integrity, to privacy and family life - have been mobilized in order to establish the duty, for the State, to ensure an adequate quality of life for the individual. This implies not only an abstention from behaviors which can be detrimental to the quality of the environment, but also the adoption of positive measures. In practical terms, the State has the responsibility to create substantive standards of environmental protection, to respect them, but also to make sure that they are abided by individuals, and to prevent environmental damage.

The right to private property has also been involved, as the damage to natural environment can negatively affect the value of a private property; this article has shown a remarkable potential in cases concerning indigenous populations, whose land and traditional hunting rights can be affected by the action of the State. Moreover, courts have recognized a series of procedural rights, such as the right to access to justice, but also the right to information, and the right to take part in decision making.

Within this jurisprudence, some principles are progressively consolidating as a kind of "common core" of environmental rights, both substantive and procedural, and the circulation of legal models and concepts begins to appear 2. Beyond the theoretical debate about the relations between human rights and environmental protection, the developments illustrated above show how the former, thanks to their universal recognition and the growing presence of effective enforcement mechanisms, can help advance the latter, included the progressive emergence of a customary right to a decent environment.

IV. Conclusion

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Assessing the emergence of customary norms in a relatively young subject such as international environmental law is a challenging task. Without aspiring to provide a complete picture of the current state of the art, I tried to outline the

⁴² Extremely interesting, in this sense, is the Endorois decision by the African Commission on Human and Peoples' Rights, recalling both the jurisprudence of the Inter-American Court relating to indigenous rights (par.160 of the decision) and the case law of the European Court dealing with property rights (par.185) and with the proportionality principle (par.100).

process by which the obligation not to pollute emancipated from the strict transboundary dimension and increasingly points to a human dimension, passing through the protection of global commons in the interest of humankind. The result of this assessment can be so summarised: the obligation not to pollute another State's natural environment can be considered a customary norm, not only on the basis of the abundant practice recognizing it, but also as directly related to sovereignty equality of States⁴³. The scope of this obligation expands so as to include the territory or resources beyond States' jurisdiction in the context of the protection of natural resources by treaty law. Notwithstanding the difficulty to affirm the existence of a customary norm, the growing number of conventions protecting natural environment conceived as a "global common" supports the idea of international cooperation in this field as a way to pursue a "common concern of humankind" and not a national interest. If, on the one side, States' duty not to pollute their own territory is very far from being accepted - as this would contradict the principle of sovereignty - on the other side, international human rights charters and tribunals increasingly recognize the human right to a decent environment, which could thus assume, in the future, customary value. Protection of the environment in general terms and the right to environment are not fully coincident in nature; still, the existence of common aims between the two systems make it reasonable to assume that the emergence of the latter could contribute to the strengthening of the former.

⁴³ G. Handl, Tranboundary impacts, in D. Bodansky, J. Brunnée, E. Hey ed., The Oxford Handbook of International Environmental Law, Oxford, 2007, p.534.