SECTION 2

ENVIRONMENTAL LAW – INTRODUCTION AND INTERNATIONAL LEGAL FRAMEWORK

DROIT ENVIRONNEMENTAL – INTRODUCTION ET CADRE JURIDIQUE INTERNATIONAL

CHAPTER 2:
INTRODUCING ENVIRONMENTAL LAW[1]

Katharina RUPPEL-SCHLICHTING

1 Terminology

At the outset, it is important to explain the term environmental law, as there is more than one valid definition. This is obvious in the light of the fact that environmental law is a highly complex subject. The Oxford Advanced Learner's Dictionary broadly defines environment as "the conditions, circumstances, etc. affecting a person's life"[2]. This definition can serve as a good starting point for our analysis and definition of the term environment. Academics from various disciplines, including humanists, natural scientists and economists have made various attempts to shed light on this issue, and thus definitions vary. The etymological origin of the term environment is to be found in an ancient French word, *environner*, which means to encircle. This implicates the existence of a centre in which someone or something is situated observing the circumstances, objects, or conditions by which he, she or it is surrounded. Based on this etymological origin, it is reasonable – though not necessarily correct – for the term environment to often be used synonymously with other terms such as nature, ecology or habitat.

A commonly-used definition is that environment is

> the complex of physical, chemical, and biotic factors (like climate, soil and living things) that act upon an organism or an ecological community and ultimately determine its form and survival

and "the aggregate of social and cultural conditions that influence the life of an individual or community."[3]

Academics and decision-making bodies have dealt with the notion 'environment' in the process of drafting documents, academic papers, statutes or other legal texts, as well as judicial decisions. Most approaches describe the term very widely, whilst others are more specific, as shown by the examples below.

---

1 This chapter is a partially revised and updated version of Ruppel-Schlichting (2016).
2 Oxford Advanced Learner's Dictionary (1995).
3 Merriam Webster's Collegiate Dictionary (2004).

The Declaration of the United Nations Conference on the Human Environment, which was discussed and decided at the United Nations Conference on the Human Environment in Stockholm in 1972, is considered to be one of the basic legal foundations of international environmental protection. Part I proclaims that "the protection of the human environment is a major issue which affects the well-being of peoples and economic development throughout the world". While the declaration lacks a definition of the term itself, it is more precise in specifying what natural resources are:

> The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management as appropriate.

The encompassing nature of the term has also been emphasised by the International Court of Justice in its advisory opinion on the *Legality of the Threat or Use of Nuclear Weapons*:[4]

> The environment is not an abstraction, but represents the living space, the quality of life, and the very health of human beings, including generations unborn.

By way of summary it can be stated that the term environment denotes the entire range of living and non-living factors that influence life on earth, and their interactions. Everything living, humans, animals, plants and micro-organisms are thus part of our environment, as well as non-living resources such as air, water, land, in addition to historical, cultural, social and aesthetic components; this includes the built environment.

In a very broad sense, environmental law can generally be described as the body of rules which contain elements to control the human impact on the environment. However, given that all human activities, as well as all natural events have a direct or indirect impact on the environment, environmental protection virtually forms part and should be integrated into all areas of law and policy. Thus, environmental law cannot be seen as a distinct domain of law but rather as an assortment of legal norms, contained in a number of conventional fields of law or an[5]

> ensemble of norms, statutes, treaties and administrative regulations to ensure or to facilitate the rational management of natural resources and human intervention in the management of such resources for sustainable development.

In more detail, environmental law can thus be defined as the group of norms, rules, procedures and institutional arrangements found in civil and common law, statutes and implementing regulations, case law, treaties and soft law instruments, which deal

4 Advisory Opinion, ICJ Rep. 1996, 241, para. 29.
5 Okidi (1988:130).

with or relate to protection, management and utilisation of the environment and natural resources for sustainable development and/or intergenerational equity.[6]

Whatever the scope of environmental law, it cannot be disputed that an interdisciplinary and holistic approach is needed in order to adequately address environmental threats and concerns from a legal perspective. Disciplines that are relevant for the area of environmental law include the natural, physical and social sciences, history, ethics, and economics.

2 Foundations of environmental protection

Although environmental law is considered to be a relatively new area of law, one must go far back in the world's history when tracing the foundations of environmental protection. As stated above, environmental law is of interdisciplinary nature, and as such, it is anchored in various fields and disciplines: religion, philosophy, ethics, science, economics, national and international law. All world religions contain rules and principles regarding the conservation of the environment.[7] In the Judeo-Christian religious tradition, one basic conceptual foundation of environmental protection in terms of human guardianship for the earth and its resources can be found in the Old Testament:[8]

> God blessed them, and God said to them, "Be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth."

Christian environmental commitment has been stressed for example by former Pope Benedict XVI and his predecessor, John Paul II:[9]

---

6 See also Sands & Peel (2012:13) for a detailed discussion.

7 For a detailed description see Kiss & Shelton (2004:9ff.).

8 Gen.1:28.

9 Message of His Holiness Pope Benedict XVI for the celebration of the World Day of Peace 1 January 2008 see http://www.vatican.va/holy_father/benedict_xvi/messages/peace/documents/hf_ben-xvi_mes_20071208_xli-world-day-peace_en.html, accessed 15 January 2018; in his message for the celebration of the World Day of Peace 1 January 1990, His Holiness Pope John Paul II stated the following: "Faced with the widespread destruction of the environment, people everywhere are coming to understand that we cannot continue to use the goods of the earth as we have in the past. The public in general as well as political leaders are concerned about this problem, and experts from a wide range of disciplines are studying its causes. Moreover, a new ecological awareness is beginning to emerge which, rather than being downplayed, ought to be encouraged to develop into concrete programmes and initiatives." see http://www.vatican.va/holy_father/john_paul_ii/messages/peace/documents/hf_jp-ii_mes_19891208_xxiii-world-day-for-peace_en.html, accessed 24 January 2018.

> The family needs a home, a fit environment in which to develop its proper relationships. For the human family, this home is the earth, the environment that God the Creator has given us to inhabit with creativity and responsibility. We need to care for the environment: it has been entrusted to men and women to be protected and cultivated with responsible freedom, with the good of all as a constant guiding criterion. Human beings, obviously, are of supreme worth vis-à-vis creation as a whole. Respecting the environment does not mean considering material or animal nature more important than man. Rather, it means not selfishly considering nature to be at the complete disposal of our own interests, for future generations also have the right to reap its benefits and to exhibit towards nature the same responsible freedom that we claim for ourselves.

In June 2015, Pope Francis, with his second encyclical called *Laudato si*[10] released an environmental compass, focusing among others on climate change as a common concern and lamenting pollution, waste and the throwaway culture, a lack of clean water, loss of biodiversity, and an overall decline in human life and a breakdown of society.

Principles of environmental protection can also be found in the Islamic tradition:[11]

> The right to utilise and harness natural resources, which God has granted man, necessarily involves an obligation on man's part to conserve them both quantitatively and qualitatively. God has created all the sources of life for man and all resources of nature that he requires, so that he may realise objectives such as contemplation and worship, inhabitation and construction, sustainable utilisation, and enjoyment and appreciation of beauty. It follows that man has no right to cause the degradation of the environment and distort its intrinsic suitability for human life and settlement. Nor has he the right to exploit or use natural resources unwisely in such a way as to spoil the food bases and other sources of subsistence for living beings, or expose them to destruction and defilement.

The religious belief systems of indigenous peoples contain concepts of environmental protection to a wide extent as well, as natural resources are basic to their existence. Thus, the relationship with the land is a foundation for their beliefs, customs, tradition and culture.[12]

Semi-detached from religious concepts and traditions are the concepts of equity and justice, which are of rather philosophical or ethical nature. Three kinds of relationships can be listed in this context: Inter-generational equity, dealing with the relationships among existing persons; intra-generational equity, governing the relationships between present and future generations; and inter-species equity, covering the relationships between humans and other species. These concepts have been laid

---

10 See Encyclical Letter *Laudato Si*' of The Holy Father Francis on care for our common home, at http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html, accessed 15 January 2018.

11 Bagader et al. (1994) Section one: A general introduction to Islam's attitude toward the universe, natural resources, and the relation between man and nature.

12 Hinz & Ruppel (2008:6).

down in many environmental legal texts[13] and form basic principles for environmental jurisprudence on international[14] and national[15] level.

Science, especially biology, chemistry and physics, has been and remains one of the most important foundations in the history and the development of environmental law, as it uses science to predict and regulate the consequences of human behaviour on natural phenomena. On the other hand, environmental law must be developed in a manner that is flexible enough to respond to scientific uncertainty, possible irreversibility and the dynamics of a constantly evolving environment.[16]

Last, but not least, environmental law also rests on the world's economic system and its challenge to environmental protection[17] as economic growth – at least in its early stages – more often than not brings about environmental degradation.[18] Measures for environmental protection are expensive and therefore increase the costs of goods and services; this in turn has an impact on the free trade in goods and services, and might influence the issue of competitive advantage. This, the economic North-South divide[19], and the fact that natural resources are exhaustible, tie the need for environmental protection and economic development together. This can be addressed through environmental law mechanisms.

3 Functions of environmental law

During the past decades, environmental concerns have been high on the legal agenda, with good reason. Mankind is part of nature and life depends on the uninterrupted functioning of natural systems as this ensures the supply of energy and nutrients. Humans are directly dependent on the ecosystems and natural resources. The dependence of people on ecosystems is often more apparent in rural communities where lives are directly affected by the availability of resources such as water, food,

---

13 See for example Principle 1 of the Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration); Preamble to the Convention on Biological Diversity; Section 3 (2) of the Environmental Management Act No. 7 of 2007.

14 E.g. *Maritime Delimitation in the Area between Greenland and Jan Mayden Denmark v Norway ICJ* 14 June 1993 separate opinion by Weeramantry available at http://www.icj-cij.org/docket/index.php?p1=3&k=e0&case=78&code=gjm&p3=4, accessed 4 November 2010.

15 E.g. *Oposa and others v Factoran and another* G.R.NO: 101083 Supreme Court of the Philippines. Summary at http://www.unescap.org/drpad/vc/document/compendium/ph1.htm, accessed 4 November 2010. See also Gatmaytan (2003).

16 Kiss & Shelton (2004:14).

17 (ibid.:15).

18 Hypothesis advanced by Simon Kuznet in his Environmental Kuznet's Curve. Kuznet (1955 and 1956). For a critical discussion see Yandle et al. (2002).

19 Beyerlin (2006).

medicinal plants and fire wood. Further, ecosystems provide cultural, aesthetic, spiritual and intellectual stimulation. Every form of life is unique and merits respect, regardless of its worth to man. Humans can, however, alter nature and exhaust natural resources by action or its consequences and must therefore fully recognise the urgency of maintaining the stability and quality of nature and of conserving natural resources. Thus, environmental concerns have become subject to multiple law-making processes.

But why is law needed to conserve our environment? Given that environmental degradation is largely caused by human intervention, the public authority responsible for preventing such negative effects will act by developing legal rules in order to have at hand binding norms. The obligatory character of environmental law and enforcement mechanisms are designed to prevent acts detrimental to the environment. Not only does environmental law establish rules and regulations, it also provides for other forms of intervention such as management tools, incentives and disincentives. However, binding rules are not the only element in environmental law; other, non-binding principles such as declarations or plans might just as well be appropriate to enhance environmental protection. Thus, environmental law is an essential remedy to pollution and to the depletion of the world's natural resources. International law is needed because most environmental challenges cross boundaries in their scope.[20]

From a legal perspective, environmental protection can be achieved by international treaties and declarations, through national constitutions, and environmental policies determining the objectives and strategies which should be used in order to ensure the respect of environmental values, and further, through statutory legal instruments to reach the objectives fixed by the environmental policy. The main function of environmental law is thus to safeguard and protect non-renewable resources for future generations. Further to this, renewable resources have to be managed in such a way that continuous supply is ensured and resource depletion is avoided, e.g. deforestation, which can also trigger climate change and desertification. Habitats upon which various species of animal life depend for survival have to be protected in order to retain the food chain. Also the essential character of natural treasures has to be preserved for future generations.[21]

4 Historical development of environmental law

Although much has been written, especially with regard to the historical development of international environmental law, the following paragraphs will complementarily

20 Kiss & Shelton (2004:3).
21 Sands (2003:252); Kidd (2008:13).

provide a short overview on how international environmental has developed.[22] Writing, however, from a Cameroonian perspective, the African context will also be addressed.

International environmental law has only come into its own during the second half of the 20th century, although some international environmental legislative measures had already been taken earlier. The 1902 Paris Convention to Protect Birds Useful to Agriculture granted protection to certain birds by prohibiting their killing or destruction of their nests, eggs or breeding places, except for scientific research or repopulation purposes. The 1933 London Convention Relative to the Preservation of Fauna and Flora in their Natural State applied to Africa – then largely colonised. It did not, however, cover the metropolitan areas of the colonial powers.[23] The Convention provided for the creation of national parks, included measures regulating the export of hunting trophies, banned certain methods of hunting and provided for measures to be taken to protect animals and plants perceived to be useful to man or of special scientific interest. On the North American continent, the 1940 Washington Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere provided for the establishment of national parks and reserves, the protection of wild plants and animals, and for cooperation between governments in the field of research.[24] Following these precursors of present-day environmental law concepts, the founding of the United Nations and its specialised agencies in 1945 marks a milestone in the development of international environmental law.

In the 1950s, states increasingly entered into water-related agreements. Such boundary water agreements, including provisions on the problem of water pollution and efforts to combat marine pollution, were addressed by the 1954 London Convention for the Prevention of the Pollution of the Sea by Oil.[25] In 1956, the first United Nations Conference on the Law of the Sea (UNCLOS I) was held at Geneva, Switzerland. Four treaties were concluded as a result in 1958: the Convention on the Territorial Sea and Contiguous Zone,[26] the Convention on the Continental Shelf,[27] the

22 For an extensive overview of the history of international environmental law see, for example, Kiss & Shelton (2004:25), Sands & Peel (2012:16) and Sands (2003:25).

23 This convention was replaced by the 1968 African Convention on the Conservation of Nature and Natural Resources.

24 Legal instruments predating the establishment of the United Nations are the 1909 Agreement Respecting Boundary Waters between the United States and Canada or the 1921 Geneva Convention Concerning the Use of White Lead in Painting. Cf. Sands (2003:25) and Kiss & Shelton (2004:25).

25 Amended in 1962 and 1969 and replaced in 1972 by the International Convention for the Prevention of the Pollution of the Sea by Oil.

26 Entry into force: 10 September 1964.

27 Entry into force: 10 June 1964.

Convention on the High Seas,[28] and the Convention on Fishing and Conservation of Living Resources of the High Seas.[29] The four Conventions on the Law of the Sea aimed at achieving international cooperation to solve the problems related to the conservation of the living resources of the high seas. Among others, it prohibited ocean pollution by oil, pipelines and by radioactive waste; further, damage to the marine environment caused by drilling operations on the continental shelf was also addressed. The 1959 Antarctic Treaty outlawed all nuclear activity on the sixth continent and envisaged the adoption of measures to protect animals and plants.

The present ecological era is considered to have started at the end of the 1960s, when it became apparent that the world's resources were not limitless and something needed to be done to prohibit industrial and developing nations from destroying the world's water, air, biological and mineral resources. Public opinion increasingly demanded action to protect the quantity and quality of the environment.[30] New technologies, especially the development and deployment of nuclear technology led to further environmental legislation such as the 1963 Moscow Treaty Banning Nuclear Weapons in the Atmosphere, Outer Space and Underwater. It was adopted to obtain an agreement on general and complete disarmament under strict international control and in accordance with the objectives of the United Nations.

It is noteworthy, that even before the United Nations officially took up the protection of the environment with its Stockholm conference in 1972, it was at regional level, where environmental law history was written as early as 1968. On the European level, the Council of Europe adopted the first environmental texts.[31] But more remarkably, the heads of states and governments of the Organisation of African Unity in 1968 signed a comprehensive document on environmental protection, namely the African Convention on the Conservation of Nature and Natural Resources. This was remarkable in that such a document was signed despite the common view in the region that environmental degradation was primarily a problem of industrial pollution in the northern hemisphere.

Within the United Nations, which strongly shaped the evolution of international environmental law, several conferences and the results thereof are of particular relevance. In 1972, the General Assembly convened a Conference on the Human Environment in Stockholm. This environmental conference was the first of its kind and it was attended by about 6,000 participants, delegations from 113 states, representatives of every major intergovernmental organisation, 700 observers sent by 400

28 Entry into force: 30 September 1962.
29 Entry into force: 20 March 1966.
30 Kiss & Shelton (2004:27).
31 The Declaration on Air Pollution Control; the European Water Charter; and the European Agreement on the Restricting of the Use of Certain Detergents in Washing and Cleaning Products. See Kiss & Shelton (2004:27).

NGOs and 1,500 journalists.[32] The two-week conference resulted in several documents, which remain basic foundations of today's international environmental law: The Declaration on the Human Environment included 26 principles that greatly shaped future international environmental law. In its basic statements, the 1972 Stockholm Declaration on Human Environment recognises that the natural elements and man-made things are essential to human well-being and to the full enjoyment of human rights including the right to life. The protection of the environment is viewed as a major issue for economic development. It furthermore recognises that the natural growth of the world's population continuously poses problems for preserving the environment and that human ability to improve the environment is complemented by social progress and the evolution of production, science and technology. The Action Plan for Human Environment, also a result of the 1972 Stockholm conference, is made up of 109 resolutions for action with three major themes: a global environmental assessment programme;[33] environmental management activities;[34] and supporting measures focused on information and public education, and on the education of environmental specialists. One further important outcome of the 1972 Stockholm Conference was the recommendation for a central organisation charged with environmental matters, today's United Nations Environment Programme (UNEP).

Subsequent to the Stockholm Conference, a multitude of environmental conventions were adopted.[35] The 1971 Ramsar Convention on Conservation of Wetlands of International Importance was adopted to stem the progressive encroachment on and subsequent loss of wetlands, while recognising the fundamental ecological functions of wetlands, including their economic, cultural, scientific and recreational value. The 1972 UNESCO Convention on the Protection of the World Cultural and Natural Heritage, adopted in Paris, established a system to protect cultural and natural heritage of outstanding universal value. In 1972 the UN Conference on the Law of the Sea produced the Convention on the Law of the Sea (UNCLOS) adopted in 1982 after ten years of work. UNCLOS encompasses, inter alia, the issue of marine environmental protection. In 1973 the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) was adopted in Washington to protect certain endangered species from over-exploitation by means of a system of import-export permits. The 1979 Bonn Convention on the Conservation of Migratory Species of Wild Ani-

32 See http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=97&articleID=1519&l=en, accessed 4 November 2010. Also see Kiss & Shelton (2004:28).

33 Establishing 'Earthwatch' a mechanism for evaluation and review, research and monitoring and information exchange.

34 Containing provisions concerning pollution (dumping of toxic and dangerous substances; elaboration of norms limiting noise; control of contaminations in food); protection of the marine environment; and protection of wildlife and natural spaces.

35 For a collection of international environmental treaties see UNEP (2005).

mals protects those species that migrate across national boundaries. The 1982 United Nations World Charter for Nature was not endorsed as a binding legal instrument, but it continues to have a strong influence on environmental law. This charter proclaims that mankind itself is part of nature, that civilisation is rooted in nature and that every form of life is unique and therefore merits respect, regardless of its worth to man. In its principles it sets forth that nature shall be respected; population levels of all wild forms, wild and domesticated shall be at least sufficient for their survival; special protection shall be afforded to the unique areas of the globe (land and sea); and that ecosystems, organisms and other natural resources shall be managed to achieve and maintain their optimum sustainable productivity and continuity.

Emerging new environmental challenges, such as long-range air pollution and the depletion of the ozone layer resulted in the adoption of the 1985 Vienna Convention for the Protection of the Ozone Layer and the 1987 Montreal Protocol, creating an international system to reduce emissions of ozone-depleting substances. The Chernobyl Disaster of 1986[36] led to the Vienna Convention on Early Notification of a Nuclear Accident and the Vienna Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency of the same year.

In 1987, Our Common Future, also known as the Brundtland Report, was drafted by a special UN Commission.[37] This report stated that individual states, and the international community at large, had come to recognise sustainable development as the single most important paradigm to maintain and improve the quality of human life. The newly-coined term, sustainable development, meant that natural resources, renewable or non-renewable, and the environment must be used in such a manner that may equitably yield the greatest benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations. Sustainable development includes the maintenance and improvement of the capacity of the environment to produce renewable resources and the natural capacity for regeneration of such resources. This concept was taken up by the United Nations Conference on Environment and Development held in Rio in 1992. It was the next big conference after Stockholm 1972, and hosted 10,000 participants, 172 states, 1,400 NGOs and 9,000

36 On April 26, 1986, the fourth reactor of the Chernobyl Nuclear Power Plant exploded. After the explosion, graphite fires broke out due to the high temperatures of the reactor. All permanent residents of Chernobyl and the zone of alienation were evacuated because radiation levels in the area had become unsafe. The nuclear meltdown produced a radioactive cloud that floated over neighbouring nations. Two hundred and thirty-seven people suffered from acute radiation sickness, of which thirty-one died within the first three months. An international assessment of the health effects of the Chernobyl accident is contained in a series of reports by the United Nations Scientific Committee of the Effects of Atomic Radiation (UNSCEAR). The radioactive contamination of aquatic systems as well as the degradation of flora and fauna became major issues in the immediate aftermath of the accident.

37 World Commission on Environment and Development (1987).

journalists.[38] Two legally binding instruments resulted from the Rio Conference, namely the 1992 United Nations Framework Convention on Climate Change (UNFCCC) and the 1992 Convention on Biological Diversity (CBD). The UNFCCC was drafted prior to the Rio Conference, adopted in New York, and then opened for signature at the Rio Conference. It regulates levels of greenhouse gas concentration in the atmosphere, so as to avoid climate change on a level that would impede sustainable economic development or compromise initiatives in food production, while the CBD aims at conserving biological diversity, promoting the sustainable use of its components, and encouraging equitable sharing of the benefits arising out of the utilisation of genetic resources.

Other texts resulting from the Rio Conference were the Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests; the Declaration on Environment and Development (Rio Declaration) as well as Agenda 21. The Rio Declaration, a soft law mechanism, reaffirms the Stockholm Declaration and provides 27 principles guiding environment and development, the core concepts being sustainable development and integrating development and environmental protection. Concepts contained in the Rio Declaration include inter-generational equity; prevention; environmental impact assessment; the polluter pays and precautionary principles; public rights such as participation and access to justice; and the special status of indigenous peoples.

Agenda 21, which is a Programme of Action and, like the Rio Declaration, a soft law and thus a non-binding document, was drafted to serve as a guide for the implementation of the treaties agreed to at the summit and the principles of sustainable development. Agenda 21 also established the United Nations Commission on Sustainable Development (CSD) and the Global Environment Facility (GEF). Agenda 21 remains of particular importance for international environmental law and consists of 40 Chapters with 115 specific topics. Agenda 21 is sub-divided in four main parts: conservation and resource management (e.g. atmosphere, forest, water, waste, chemical substances); socio-economic dimensions (e.g. habitats, health, demography, consumption and production patterns); strengthening the role of NGOs and other social groups; and measures of implementation (funding, institutions). Sector-specific Chapters on the atmosphere (9); biodiversity and biotechnology (15); oceans (17); freshwater resources (18); toxic chemicals (19); and waste (20ff) form part of Agenda 21.

After the Rio Conference, virtually every multilateral agreement included environmental protection, be it of particularly environmental, economic, or human rights

38 Kiss & Shelton (2004:33).

or humanitarian law nature.[39] An emerging issue in international environmental law after the Rio Conference was a new weapons system which called for the 1993 Paris Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and their Destruction. New technologies such as biotechnology and the handling of living modified organisms (LMOs) in the laboratory resulted in the adoption of the 2000 Cartagena Protocol on Biosafety to the CBD, drafted to ensure an adequate level of protection in the field of safe transfer, handling and use of LMOs that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health, and specifically focusing on trans-boundary movements.

Ten years after the Rio Conference, the next big UN Conference of environmental relevance was the Johannesburg World Summit on Sustainable Development held in 2002. Although this summit was considered to be less successful in environmental terms by environmentalists and environmental lawyers, it emphasised the interrelation between combating poverty and improving the environment. The Declaration on Sustainable Development, which emerged from the summit, focuses on development and poverty eradication and recognises three components of sustainable development: economic development, social development, and environmental protection. The Johannesburg Summit was followed by a further World Summit of the United Nations General Assembly in 2005, which reaffirmed the commitment to achieve the goal of sustainable development through implementation of Agenda 21 and the Johannesburg Plan of Implementation. The 2005 World Summit Outcome, adopted by the UN General Assembly, specifically envisages promoting a recycling economy to tackle climate change, to promote clean energy, to fight hunger, and to provide access to clean drinking water and basic sanitation.

Undoubtedly, the UN has played a vital role in the development of environmental law. However, it must also be emphasised, that environmental law has gradually developed on the regional, sub-regional and of course on the national levels as well. Seen from a Cameroonian perspective, international environmental law within the African Union and the Economic Community of Central African States (ECCAS) is of particular importance. As early as 1968, the Organisation of African Unity (OAU), which later became the African Union (AU), signed a comprehensive document on environmental protection, namely the African Convention on the Conservation of Nature and Natural Resources to enhance environmental protection; foster the conservation and sustainable use of natural resources; and to harmonise and coordinate policies in these fields. The 1968 Convention was revised in 2003 to improve institutional structures to facilitate effective implementation and mechanisms to encourage

39 (ibid.).

compliance and enforcement, but the revised convention is yet to come into force.[40] One further piece of AU legislation of environmental relevance is the African Nuclear Free Zone Treaty, which was adopted in 1995 and entered into force on 15 July 2009 to establish an African nuclear-weapon-free zone, thereby, *inter alia*, keeping Africa free of environmental pollution from radioactive waste. Within the ECCAS legal framework, environmental concerns are of increasing importance and have a place in the legal setting of the regional institution within the Treaty Establishing the ECCAS (Article 51) and its various Protocols (e.g. the Protocol on Cooperation in Natural resources between member states of the ECCAS).

The evolution of international (and national) environmental law was not restricted to the drafting of legal treaties, agreements or similar documents. Jurisprudence also played and continues to play a significant role in the process of developing environmental law standards and contributed to the protection of the environment. One early landmark decision in this regard was a case involving the United States and Canada in 1941, namely the Trail Smelter Arbitration (with involvement of the Governments of Canada and the United States).[41] The arbitration affirmed that no state has the right to use its territory or permit it to be used to cause serious damage by emissions to the territory of another state or to the property of persons found there.

Jurisprudence of the International Court of Justice (ICJ) also contributed to environmental protection. The Corfu Channel case[42] (UK v Albania), decided by the ICJ in 1949, did not specifically deal with environmental matters but addressed general principles of state responsibility also applicable to environmental matters. In 1996, the ICJ issued two advisory opinions relating to the use of nuclear weapons, one requested by the General Assembly of the United Nations,[43] the other by the World Health Organisation[44]. The latter dealt directly with environmental concerns as the question in the request was formulated as follows:

---

40 As of January 2017, 42 states have signed the Convention, sixteen member states have deposited their instrument of ratification. The revised Convention came into force on 23 July 2016, 30 days after the 15th country (Burkina Faso) had deposited its ratification instrument. Cameroon has not yet signed the Convention.

41 Trail Smelter Arbitration (1938/1941) 3 RIAA 1905 Arbitral Tribunal: US and Canada.

42 ICJ Corfu Channel (*United Kingdom of Great Britain and Northern Ireland v Albania*) judgment available at http://www.icj-cij.org/, accessed 5 November 2010.

43 ICJ Legality of the Threat or Use of Nuclear Weapons; Request for Advisory Opinion by the General Assembly of the United Nation, 8 July 1996, at http://www.icj-cij.org/docket/index.php?p1=3&p2=4&k=e1&case=95&code=unan&p3=4, accessed 5 November 2010.

44 ICJ Legality of the Use by a State of Nuclear Weapons in Armed Conflict; Request for Advisory Opinion by the World Health Organisation, 8 July 1996, at http://www.icj-cij.org/docket/index.php?p1=3&p2=4&k=e1&p3=4&case=93; last accessed 5 November 2010.

> In view of the health and environmental effects, would the use of nuclear weapons by a State in war or other armed conflict be a breach of its obligations under international law including the WHO Constitution?

The court in its advisory opinion denied the request by the WHO because the legality of the use of nuclear weapons "does not relate to a question which arises within the scope of activities of that organisation". The court held that although negative effects on human health and the environment may result from the use of nuclear weapons, the WHO needs to undertake measures irrespective of the legality of their use. The request by the United Nations General Assembly was, however, accepted and with regard to environmental concerns the court recognised that[45]

> the environment is under daily threat and that the use of nuclear weapons could constitute a catastrophe for the environment. The Court also recognises that the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn. The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment.

And further the court stated that[46]

> while the existing international law relating to the protection and safeguarding of the environment does not specifically prohibit the use of nuclear weapons, it indicates important environmental factors that are properly to be taken into account in the context of the implementation of the principles and rules of the law applicable in armed conflict.

One further case of particular importance decided by the ICJ was the case concerning the Gabcíkovo-Nagymaros Project.[47] This case raised a multitude of environmentally related legal issues, such as the concept of sustainable development, the principle of continuing environmental impact assessment and the handling of *erga omnes* obligations in *inter partes* judicial procedure.

---

45 ICJ Legality of the Threat or Use of Nuclear Weapons; Request for Advisory Opinion by the General Assembly of the United Nation, 8 July 1996, 21 para. 29, at http://www.icj-cij.org/docket/index.php?p1=3&p2=4&k=e1&case=95&code=unan&p3=4, last accessed 5 November 2010. For a discussion of the ICJ's advisory opinion and of the question whether or not the use of nuclear weapons during international armed conflict would violate existing norms of public international law relating to the protection and safeguarding the environment see Koppe (2008).

46 ICJ Legality of the Threat or Use of Nuclear Weapons; Request for Advisory Opinion by the General Assembly of the United Nation, 8 July 1996, 21 para. 33, at http://www.icj-cij.org/docket/index.php?p1=3&p2=4&k=e1&case=95&code=unan&p3=4, accessed 5 November 2010.

47 ICJ Gabčíkovo-Nagymaros Project (*Hungary v Slovakia*), 25 September 1997, at http://www.icj-cij.org/docket/index.php?p1=3&p2=3&k=8d&case=92&code=hs&p3=4, accessed 5 November 2010.

But not only the jurisdiction of the ICJ contributed to the development of environmental law and to the protection of the environment. Other international and national judicial bodies had to deal with environmental concerns as well. The Dispute Settlement Body of the WTO, for example, was frequently confronted to resolve issues regarding environmental protection.[48]

Environmental protection was also a burning issue in the Ogoni case, a case which was heard in national courts of Nigeria[49] and the United States,[50] as well as by the African Commission on Human and Peoples' Rights[51] and which was also subject to a United Nations Special Rapporteur's Report on Nigeria,[52] which accused Nigeria and Shell of abusing human rights and failing to protect the environment in oil-producing regions, and called for an investigation of Shell. Subject to judicial review in this case was the fact that, since Shell began drilling for oil in Ogoniland in the Niger Delta in 1958, the people of Ogoniland have had pipelines built across their farmlands and in front of their homes, have suffered constant oil leaks from these very pipelines, and have been forced to live with the constant flaring of gas fires. This environmental assault has drenched land with oil, killed masses of fish and other aquatic life, and introduced devastating acid rain to the land of the Ogoni, a people dependent upon farming and fishing. The poisoning of the land and water has had devastating economic and health consequences.

Summarising, it can be stated that the history of modern environmental law originated in the second half of the past century and is strongly influenced and developed by international and national political action and legislative measures, as well as by international and national jurisprudence.

---

48 See for example the following cases: Panel Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products* WT/DS58/R and Corr.1, adopted 6 November 1998, modified by Appellate Body Report, WT/DS58/AB/R, DSR 1998:VII, 2821; Panel Report, *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, WT/DS135/R and Add.1, adopted 5 April 2001, modified by Appellate Body Report, WT/DS135/AB/R, DSR 2001:VIII, 3305; Panel Report, *Brazil – Measures Affecting Imports of Retreaded Tyres*, WT/DS332/R, adopted 17 December 2007, as modified by Appellate Body Report, WT/DS332/AB/R.

49 Judgment delivered by the Nigerian High Court on 14 November 2005.

50 *Kiobel v. Royal Dutch Petroleum*; United States Court of Appeals for The Second Circuit, Docket Nos. 06-4800-cv, 06-4876-cv. http://www.ca2.uscourts.gov/decisions, last accessed 5 November 2010. For a comment on this decision see Ikari (2010).

51 Communication 155/96. *The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria*, at http://www.achpr.org/english/_info/decision_article_24.html, accessed 5 November 2010.

52 Released 15 April 1998. The report condemned Shell for using a "well-armed security force which is intermittently employed against protesters." The report was unusual both because of its frankness and its focus on Shell, instead of only on member countries.

References

Bagader, AA, AT El-Chirazi El-Sabbagh, M As-Sayyid Al-Glayand & MY Izzi-Deen Samarrai in collaboration with O Abd-ar-Rahman Llewellyn, 1994, *Environmental protection in Islam*, 2nd edition, Gland, IUCN/International Union for the Conservation of Nature & MEPA/the Meteorological Protection Administration of the Kingdom of Saudi Arabia, at http://cmsdata.iucn.org/downloads/environemental_protection_in_islam.pdf; accessed 1 March 2017.

Beyerlin, U, 2006, Bridging the North-South divide in international environmental law, 66 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* (ZaöRV), 259.

Gatmaytan, DB, 2003, The illusion of intergenerational equity: Oposa v. Factoran as pyrrhic victory, 15 *Georgetown International Environmental Law Review*, 457.

Hinz, MO & OC Ruppel, 2008, Legal protection of biodiversity in Namibia, in: Hinz, MO & OC Ruppel (eds), 2008, *Biodiversity and the ancestors: Challenges to customary and environmental law*, *case studies from Namibia*, Windhoek, Namibia Scientific Society, 3-62.

Ikari, B, 2010, U.S. Appeals Court dismisses Ogoni lawsuit against Shell – no corporate liability, means more corporate killings, genocide and instability, *Sahara Reporters*, 22 September 2010, at http://www.saharareporters.com/article/us-appeals-court-dismisses-ogoni-lawsuit-against-shellno-corporate-liability-means-more-cor, accessed 5 November 2010.

Kidd, M, 2008, *Environmental law*, Cape Town, Juta.

Kiss, A & D Shelton, 2004, *International environmental law*, New York, Transnational Publishers.

Koppe, E, 2008, *The use of nuclear weapons and the protection of the environment during international armed conflict*, Oxford, Hart Publishing.

Kuznets, S, 1955, Economic growth and income inequality, 45 (1) *American Economic Review*, 1.

Kuznets, S, 1956, Quantitative aspects of the economic growth of nations, 5 *Economic Development and Cultural Change*, 1.

Ruppel-Schlichting, K, 2016, Introducing environmental law, in: Ruppel, OC & K Ruppel-Schlichting, *Environmental law and policy in Namibia*, Windhoek, Hanns-Seidel-Foundation, 9-21.

Sands, P & J Peel, 2012, *Principles of international environmental law*, Cambridge, Cambridge University Press.

Sands, P, 2003, *Principles of international environmental law*, 2nd edition, Cambridge, Cambridge University Press.

UNEP / United Nations Environment Programme, 2005, *Register of international treaties and other agreements in the field of the environment,* Nairobi, UNEP.

World Commission on Environment and Development, 1987, *Our common future*. Report transmitted to the General Assembly as an Annex to document A/42/427 - Development and International Cooperation: Environment, at http://www.un-documents.net/wced-ocf.htm, accessed 2 March 2017.

Yandle, B, M Vijayaraghavan & M Bhattarai, 2002, The environmental Kuznets Curve – a primer, 2 (1) PERC/Property Environment and Research Centre Study, 1.