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Legal status of sustainable development principles and climate change responsibilities under the Paris Agreement

Estatuto jurídico dos princípios de desenvolvimento sustentável e responsabilidades em matéria de alterações climáticas no âmbito do Acordo de Paris

Lupwana Jean Jacques Kandala

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Legal status of sustainable development principles and climate change responsibilities under the Paris Agreement*

Estatuto jurídico dos princípios de desenvolvimento sustentável e responsabilidades em matéria de alterações climáticas no âmbito do Acordo de Paris

Lupwana Jean Jacques Kandala

Abstract

The paper analyses how and to what extent, climate change mitigation and responsibility mean, and should be, influenced by principles of sustainable development law. In trying to understand the issue of climate responsibility under the Paris Agreement, a doctrinal research methodology, also known as the desktop or no-empirical research method, is used. The method relies more on the analysis of ordering and arranging legal instruments, and case law through rational deduction or legal perception. Accordingly, the paper argues that the normative character of the principles of sustainable development and their recognition as principles and use in binding international treaties form part of international law and policy in the field of sustainable development and these principles have generated obligations and rights for state parties and are able to make state parties liable for internationally wrongful acts. Unlike previous studies that rely on analysing the nationally determined contributions as the basis on which state international climate responsibilities may be asserted, this paper provides a different focus by analysing climate responsibilities through the principle of sustainable development. Particularly, because the Agreement gives promises to hold increases in global temperatures and increase adaptation to climate impacts but did not set binding commitment for state parties. Instead, it welcomes the UNGA Resolution A/RES/70/1 on Global Sustainable Development Goals and acknowledges that when taking action on climate change, states must respect, promote, and consider their human rights obligations and recognize the importance of taking national sustainable development priorities into account.

Keywords: sustainable development; climate responsibilities; Paris agreement.

* Artigo convidado

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Resumo

O artigo analisa como e em que medida a mitigação e a responsabilidade pelas alterações climáticas significam, e devem ser, influenciadas pelos princípios da legislação sobre desenvolvimento sustentável. Na tentativa de compreender a questão da responsabilidade climática no âmbito do Acordo de Paris, é utilizada uma metodologia de investigação doutrinária, também conhecida como método de investigação desktop ou não empírico. O método baseia-se mais na análise da ordenação e organização dos instrumentos jurídicos e da jurisprudência através da dedução racional ou da percepção jurídica. Assim, o artigo argumenta que o carácter normativo dos princípios do desenvolvimento sustentável e seu reconhecimento como princípios e uso em tratados internacionais vinculativos fazem parte do direito e da política internacional no campo do desenvolvimento sustentável e esses princípios geraram obrigações e direitos para os Estados Partes, e são capazes de responsabilizar os Estados-partes por atos internacionalmente ilícitos. Ao contrário de estudos anteriores que se baseiam na análise das contribuições determinadas a nível nacional como base sobre a qual as responsabilidades climáticas internacionais do Estado podem ser afirmadas, este artigo fornece um foco diferente ao analisar as responsabilidades climáticas através do princípio do desenvolvimento sustentável. Principalmente porque o Acordo promete conter o aumento das temperaturas globais e aumentar a adaptação aos impactos climáticos, mas não estabeleceu compromissos vinculativos para os Estados Partes. Em vez disso, saúda a Resolução A/RES/70/1 da AGNU sobre os Objectivos Globais de Desenvolvimento Sustentável e reconhece que, ao tomarem medidas sobre as alterações climáticas, os Estados devem respeitar, promover e considerar as suas obrigações em matéria de direitos humanos e reconhecer a importância de tomar medidas nacionais de desenvolvimento sustentável, em conta as prioridades.

Palavras-chave: desenvolvimento sustentável; responsabilidades climáticas; acordo de Paris.

1 Introduction

There are several legal issues relating to climate change. Part of this debate is raised by questions about the responsibility of the legal status of climate change, the legal obligations of state parties, and their responsibilities for the reduction of GHG emissions (Oslo principles on Global climate change obligations). Some of these questions have been affirmatively answered in legal discussions or through the adoption of legal instruments. For example, the question of how and who should bear the responsibility to limit GHG emissions has been sufficiently dealt with in the Kyoto Protocol (2005), which established quantitative commitments and determined how and who should be responsible for reducing GHG emissions. The Kyoto Protocol opportunities continue to emerge for climate change responsibilities and countries worldwide are looking to achieve national and international goals. However, despite laudable pledges by leading politicians around the globe on how and who must take responsibility, despite urgent calls made by prestigious international organisations, state parties have failed to keep their promises for almost seventeen years. During seventeen years of deadlock, potential obstacles have been identified, including the politization of climate change matters and the lack of specific legal obligations (Jaap Spier, 1997). Currently, there is no evidence as to whether or not state parties are able to keep their promises under the new climate change agreement, thus a need to explore potentially promising avenues, including the legal status of states' obligations arising from the principle of sustainable development for which the violation will induce state climate change responsibility. Particularly, the issue to be addressed is whether and how the principle of sustainable development can generate state climate responsibility and call for reparation in case of a breach. This question arises not only because of the lack of quantitative and binding commitments as set out by the Paris Agreement but also because of the need for climate responsibility after almost seventeen years of deadlock. Does reference to sustainable development principles constitute a starting point for the conceptualisation

and operationalisation of state parties' obligations under international law for which the violation calls for reparation under international law?

Against this backdrop, the paper analyses the extent to which climate change responsibilities under the Paris Agreement mean and should be, influenced by principles of sustainable development law.

Accordingly, the paper argues that the normative character of the principles of sustainable development and their recognition as principles and use in binding international treaties form part of international law and policy in the field of sustainable development and these principles have generated obligations and rights for state parties,¹ able to make state parties liable for internationally wrongful acts. In support of this argument, the paper proceeds in five sections. After the introduction, section two outlines the use of sustainable development in the Paris Agreement and its predecessors and how the principle has become the objective in international environmental instruments. Section three provides a contextual analysis of the legal status and uncertainty around many principles central to the discussion of the principle of sustainable development at the international level. Section four turns to the question of the legal evolution of a norm under international law and outlines responses to the concern that arises because many of these principles are not yet recognised as rules of customary international law to generate international legal obligations, for which the state may be liable or engaged their international responsibility for the breach of an international obligation. Part five sums up the finding and draws up the conclusion that sustainable development principles generate obligations for which states can incur international climate responsibility.

2 Research methodology

In support of the argument that principles of sustainable development provide a starting point for the conceptualisation and operationalisation of state climate responsibilities, a doctrinal research methodology, also known as the desktop or non-empirical research method, is used. The method relies more on the analysis of ordering and arranging legal instruments, case laws, and legal institution studies through rational deduction or legal perception. Particularly, it relies on the literature on international environmental laws, thus the emphasis will be on primary and secondary sources. Treaties and protocols as well as other legal agreements will be used to explain and understand the climate responsibilities of the state arising from the principles of sustainable development. Unlike the non-doctrinal methods, the doctrinal research method does not rely on interviews, surveys, observations, or questionnaires. It considers that people have different views on different matters, therefore, relying on their observation and experience may lead to a negative outcome of the research. Since it is mainly a desktop, the data from the sources mentioned above is examined, and relevant information is extracted.

3 International environmental legal frameworks and the upsurge of the principle of sustainable development

After the Rio Earth Summit in 1992,² contemporary environmental and developmental policies require the need to promote harmonisation between socioeconomic needs and the protection of the environment.³

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² International Law Association Final Draft Report (ILA) at 39.

³ UNITED NATIONS. *United Nations Framework Convention on Climate Change Preamble and Article 3(4) of the 1992 United Nations Conference on Environment and Development (Earth Summit)*. Rio de Janeiro, 1992. Available at: <http://www.un.org/geninfo/bp/enviro.html>. Access on: 18 Sept. 2014.

Such views have increased in recent years and are noted among the objectives of sustainable development, which has taken a multidisciplinary approach, while the norms governing sustainability have gradually expanded in various policies and areas of international economic, social, and environmental law.⁴

Despite its expansion, sustainable development has been a running track. Partly because tracking the balance between economic, social, and environmental processes raises concerns. Likewise, defining and establishing criteria to quantify effectively sustainable development poses significant challenges. Most of the definitions capture only much of what is implicit in the general discussion. For example, Heals defines sustainability as “doing things that we can safely continue indefinitely: doing things that can be continued over long periods without unacceptable consequences or without unacceptable risks of unacceptable consequences”.⁵ This definition may not stand the test of social and economic needs, which form an integral part of the requirements for sustainability in various areas because it is more focused on the environmental aspect of sustainability.⁶ Sustainable development is indeed broader⁷ and based on socioeconomic, environmental, institutional, and human rights’ net benefits.⁸ Accordingly, the most accepted today is the definition provided by the World Commission on Environment and Development Report (or “the Brundtland Commission Report”) which defines sustainable development as the ‘development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs’.⁹

Subsequently, there is a wide range of issues to consider in addition to the three core dimensions of sustainability, namely economic, environmental, and social. This is because concerns regarding sustainability differ widely in terms of scope and coverage. Accordingly, sustainability as a norm governing sustainable development is considered an evolving dynamic system that is embedded in a multifaceted interaction between social, economic, and environmental systems. It also reflects a complete system that manages and absorbs challenges without weakening its functionality. Looking down over the past quarter-century, it is evident that a shift to a more comprehensive conception of sustainable development has barely been adopted. An important indication in support is the interpretation of the concept of sustainability as a norm. Sustainability is referred to as ‘strict or strong sustainability and weak sustainability’. The former aims to ensure the preservation of all natural capital and not to be substituted by manufactured capital.¹⁰ In other words, strict sustainability emphasises the conservation and protection of natural capital and translates the need for equity in the use of natural resources between current and future generations. By contrast, ‘weak sustainability’ perceives sustainability as equivalent to a non-decreasing overall capital store. It allows the substitution of any loss caused by human activities for natural capital.¹¹ Thus, ‘weak sustainability’ implies that money can substitute for the loss of natural capital.¹² This classification, even not yet recognised under

⁴ SALLES, Cavedon F. de.; STAVENZIOLA, Vieira R. Brazilian ‘Socioambientalismo’ and Environmental Justice. In: BENIDICKSON, J.; BOER, B.; HERMAN, Benjamin A.; MORROW, K. (ed.). *Environmental Law and Sustainability after Rio*. [S. l.: s. n.], 2011. p. 66.

⁵ SCHRIJVER, N. J. After Us, The deluge? The Position of Future Generations of Humankind in International Environmental Law. In: MOHAMED, Salish M. A. (ed.). *Climate Change and Sustainable Development: New Challenges for Poverty Reduction*. [S. l.: s. n.], 2009. p. 71.

⁶ HEAL, G. Markets and Sustainability. In: REVESZ, L. R.; SANDS, P.; STEWARD, B. R. (ed.) *Environmental Law, the Economy, and Sustainable Development*. [S. l.: s. n.], 2000. p. 410.

⁷ GASPARATOS, A.; STROMBERG, P. Biofuels in Developing Countries: A Synthesis. In: GASPARATOS, A.; STROMBERG, P. (ed.). *Socioeconomic and Environmental Impacts of Biofuels: Evidence from Developing Nations*. [S. l.: s. n.], 2012. p. 316.

⁸ RUPPEL, C. O International Trade and Sustainable Development. *International Law*, p. 439, 2016.

⁹ HILL, J. Nelson; TILMAN, D.; POLASKY, S.; TIFFANY, D. ‘Environmental, Economic, and Energetic Cost and Benefits of Biodiesel and Ethanol Biofuels’. *National Academy of Science of the United Nations of America*, v. 103, n. 30, p. 11206- 11210, 2006.

¹⁰ WORLD COMMISSION ON ENVIRONMENTAL AND DEVELOPMENT. *Report “Our Common Future”*: Brundtland Report. [S. l.]: Oxford University Press, 1987.

¹¹ DIETZ, S.; NEUMAYER, E. ‘Weak and Strong Sustainability in the SEEA: Concepts and Measurement’. *Ecological Economics*, v. 61, n. 4, p. 617-626, 2007.

¹² MORRISSEY, J.; IYER-RANIGA, U.; MCLAUGHLIN, P.; MILLS, A. ‘A Strategic Project Appraisal Framework for Ecologically Sustainable Urban Infrastructure’ *Environmental Impact Assessment Review*, v. 33, n. 1, p. 55-65, 2012.

international law, is perhaps coined because of the lack of an operational, and generally agreed-on definition of sustainable development.¹³ Nowadays, ensuring a sustainable system entails an integrated, holistic assessment of the economic, environmental, and social dimensions of such an activity. In the context of the new climate change agreement, sustainable development has a more comprehensive objective aiming at promoting human rights obligations and providing the basis for non-quantifiable commitments.

As indicated above, a consensus is almost impossible regarding what is and is not sustainable. However, in recent years, rules and practices of international law for sustainable development have evolved.¹⁴ While efforts to legitimate sustainable development in international and national legal instruments persist, its practice has not yet become a fundamental tool for public and private decision-makers. Consequently, sustainability is understood in many ways, whether as a term, a concept, a philosophy, an attitude, a request, or a need.¹⁵ Despite the challenge to define and ensure a balanced decision between the three components of sustainable development, the concept has emerged because of the growing need to define activities and events that are acceptable in terms of the opportunities they offer to meet the needs of present and future generations.

Likewise, sustainable development depicts a vision of sustainable use of (natural) resources and the protection of the environment on which nature and human lives depend. In this context, contemporary discourse on sustainable development views the principle as a unifying and useful agenda of the twenty-first century. Nowadays, sustainable development has ignited various principles of great relevance to global policy and normative frameworks aiming at ensuring allegiance to economic, social, and environmental development. Some of these principles are found in the Brundtland Commission's report, Agenda 21, the Rio Declaration, the Johannesburg Plan of Implementation, and the Commission on Sustainable Development (CSD) Decisions.¹⁶ Likewise, various leading international and national legal decisions, including court decisions at the international and national levels, have repeatedly recognised the unifying components of sustainable development principles.¹⁷ What is more, recently, the principle of sustainable development permeates the new Paris Agreement and its Adoption Decision and aims *inter alia* to 'strengthen global responses to the threat of climate change, [...] and efforts to eradicate poverty.'¹⁸

Drawing on its predecessors, the Paris Agreement has strong sets of implied references to the sustainable use of natural resources and is *inter alia* founded on the principle of sustainable development.¹⁹ The new Climate Change Agreement assumes and establishes a link between Climate Change actions, sustainable

¹³ This is in contrast with weak sustainability which implies that economic capital may replace lost natural capital. See TLADI, D. 'Strong Sustainability Weak Sustainability, Intergenerational Equity and International Law: Using the Earth Charter to Redirect the Environmental Ethics Debate' 28. *South African Yearbook of International Law*, p. 10, 2003.

¹⁴ HOLDREN, J. P.; DAILY, G. C.; EHRLICH, P. R. The Meaning of Sustainability: Biogeophysical Aspects. In: MUNASINGHE, M. SHEARER, W. (ed.). *Defining and Measuring Sustainability: Biogeophysical Aspects*. [S. l.: s. n.], 1995. p. 11.

¹⁵ Two major developments have taken place in the field of sustainable development. The adoption of the sustainable development Goals on 24 October 2015 on the occasion of the 70th anniversary of the United Nations, where the SDGs came to replace the Millennium Development Goals (MDGs), even though they are quite different in at least three respects; and the adoption of the Paris Agreement after 17 years of inaction following the 1992 United Nations Framework Convention on Climate Change and the 1997 Kyoto Protocol.

¹⁶ GOLUSIN, M. Dodic S.; POPOV S. *Sustainable Energy Management*. [S. l.]: Elsevier, 2013. p. 13.

¹⁷ The World Commission on Environment and Development "the Brundtland Commission" defined sustainable development as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs', The Johannesburg Plan of Implementation refers to "the three components of sustainable development: economic development, social development and environmental protection as interdependent and mutually reinforcing pillars." In addition to these three pillars, institutional aspects should also be considered. The CSD-3 Decision refers to the economic, social, institutional and environmental elements of sustainable development. REPORT of World Summit on Sustainable Development in Johannesburg, South Africa 2 to 4 September 2002 (Johannesburg Plan of Implementation). Available at: <http://www.joburg.org.za/pdfs/johannesburgdeclaration.pdf>.

¹⁸ SCHRIJVER, N. The Evolution of Sustainable Development in International Law: Inception. *Meaning and Status*, Hague Academy of International Law, p. 28, 2008.

¹⁹ UNITED NATIONS. *Paris Agreement FCCC/CP/2015/L.9/Rev.1*. 12 Dec. 2015. Article 2 (1).

development, and respect for human rights. It recommends parties when taking actions to address climate change ensure respect for the recognition of their human rights obligations, including the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities, and people in vulnerable situations.²⁰ Likewise, the Biodiversity Convention recognises the role and importance of terrestrial and marine ecosystems and requires sustainable use of these genetic resources.²¹ The principle of sustainable development has widely emerged in various international environmental legal instruments.

3.1 Principles of international law related to sustainable development

There are several legal principles and treaties central to the discussion of the principle of sustainable development at the international level. On its part, the Committee on Legal Aspects of Sustainable Development of the International Law Association (ILA) analyses the principle of sustainable use of natural resources as an important element of the evolving international law of sustainable development because of its firm status in treaty laws and its frequent application in decisions of international courts and tribunals.²² It analyses how international law can support the sustainable use and stewardship of natural resources, while also contributing to an adequate living standard and the realisation of human rights for all. Particularly, in the context of sustainable development, effective governance of natural resources, including water, forests, biodiversity, landscapes, minerals, and energy (particularly from renewable sources), is crucial, as is the relationship between armed conflict and natural resource management. Subsequently, the Committee adopted a set of ‘Principles of International Law Related to Sustainable Development.’²³ They include the principle of inter and intra-generational equity and the eradication of poverty; the principle of common but differentiated responsibilities and respective capabilities; the precautionary approach to human health, natural resources, and ecosystems; public participation; transparency and the principle of integration and interrelationship of human rights and social, economic and environmental objectives or the principle of sustainable development holding that States must take into account the environmental and social (including human rights) aspects of economic plans and projects.²⁴ Segger noted that there are seven principles of international law on sustainable development that have been discerned over a decade and are increasingly reflected in the decisions of international courts and tribunals on sustainable development.²⁵ However, sustainable development principles are non-exhaustive and are increasingly recognised by States and other actors in international law.²⁶

²⁰ UNITED NATIONS. *Paris Agreement, FCCC/CP/2015/L.9/Rev.1*. 12 Dec. 2015. Articles 2, 5.

²¹ The commitment to sustainable development permeates the Paris Agreement and its Adoption Decision. The Decision welcome UNGA Resolution A/RES/70/1 on the global Sustainable Development Goals (SDG), particularly Goal 7 and 13. The Adoption Decision recognizes that when taking action on climate change, States must respect, promote and consider their human rights obligations; the right to development; the rights of indigenous peoples, children and others in vulnerable situations; gender equality and empowerment; and inter-generational equity.

²² Preamble and Article 3(4) of the 1992 United Nation Framework Convention on Climate Change and the Preamble and articles 1,8,11, 12, 16 17 & 18 of the Biodiversity Convention.

²³ INTERNATIONAL LAW ASSOCIATION. “*Sustainable Natural Resource Management for Development*”. [S. l.: s. n.], 2016. Final Draft First Report of the Committee on the Role of International Law in Sustainable Natural Resource Management for Development. Available at: <http://www.ila-hq.org/en/committees/index.cfm/cid/1044>. Access on: 8 Aug. 2016.

²⁴ INTERNATIONAL LAW ASSOCIATION. “*New Delhi Declaration on Principles of International Law Related to Sustainable Development*”. [S. l.: s. n.], 2002. Available at: <http://www.ila-hq.org/en/committees/index.cfm/cid/1044>. Access on: 8 Aug. 2016.

²⁵ CORDONIER, Segger M. C. *International Law on Sustainable Development: Amstrong D Handbook on International Law* Routledge. [S. l.: s. n.], 2008. p. 257.

²⁶ CORDONIER, Segger M. C.; WEERAMANTRY, C. G. (ed.) *Sustainable Development in International Courts and Tribunals*. [S. l.]: Routledge, 2016. p. 258.

3.2 Principles of Sustainable Development Relevant to Climate Change

Although all these principles are central to the discussion on climate change, this discourse only provides an analysis of some of them to support the views on how they may influence climate change responsibilities.

3.2.1 Principle of Sustainable Use of Natural Resources

The principle of sustainable use of natural resources plays a vital role in the adaptation of climate change through sustainable management of forests as a key natural resource and carbon sink.²⁷ Parties are required to mitigate atmospheric and carbon resources in a sustainable manner and are encouraged to adopt *inter alia* ‘positive incentives for activities relating to reducing emissions from deforestation and forest degradation, take action for the conservation, and sustainable management of forests and alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests. A clear picture of what sustainable use of natural resources means is found in Article 1(h) of the 1968 African Nature Convention, which provides that the utilisation of all natural resources ‘must aim at satisfying the needs of man according to the carrying capacity of the environment’.²⁸ In this regard, ‘sustainable’ is closely related to the aim of conservation measures and programmes as required under the principle of sustainable development. Thus, the term conservation itself is an element of sustainable development.²⁹ Other recurring legal elements of the principle of sustainable use of natural resources include the commitment to preserve natural resources for the benefit of future generations; the use of appropriate, sustainable, prudent, or rational standards, for the exploitation of natural resources; the equitable use of natural resources between states and between generations, and the need for environmental consideration to be integrated into economic and other development plans, projects and programmes.³⁰ The principle of sustainable development has a long history in international law³¹ and its introduction by the Brundtland Commission in 1987,³² followed by its adoption by the UN Conference on Environment and Development in 1992 marked its introduction in international legal instruments as an international legal principle.³³

Sustainable development and its governing norm of sustainability have emerged in various international and regional legal instruments. Particularly, during the environment versus development debate in the 1980s the concept of sustainability became an important principle applicable to many environmental instruments.³⁴ This continued until the 1990s when sustainability ceased to be viewed only as a precondition for environmental protection but also as an important component of any economic activity.³⁵ Since then

²⁷ SCHRIJVER, N. The Evolution of Sustainable Development in International Law: Inception. *Meaning and Status*, Hague Academy of International Law, p. 329, 2008.

²⁸ Article 5 of the Paris Agreement and Paragraph 55 of the Adoption Decision (n above).

²⁹ Article 1(h) of the African Convention on the Conservation of Nature and Natural Resources (Revised in 2003). Available at: www.au.int.

³⁰ LEGAL Experts Group of World Commission on Environmental and Development (1986) WCED Legal Principles, para. (i).

³¹ PHILIPPE, Sands; PEEL, J.; FABRA, A.; MACKENZIE, R. *Principles of International Environmental Law*. 3rd ed. Cambridge: Cambridge University Press, 2012. p. 28.

³² International Fisheries Law for instance used the term “maximum sustainable yield” in order to require parties to maximize fish catch over the long term and hence economic turn. The Convention also includes an obligation for coastal States to preserve a good and environmentally responsible management of their marine areas, including the Exclusive Economic Zone (Part V of the UN Convention on the law of the Sea). The first main international political document in which the concept “sustainable” appeared was the World Charter for Nature, adopted by the General Assembly of the United Nations in 1982, where the concept “sustainable” means sustainable use of natural resources; see also SIMMA, B.; MOSLER, H.; PAULUS, A. L. (ed.) *The Charter of the United Nations: A Commentary*. [S. l.: s. n.], 2002. p. 551.

³³ WORLD COMMISSION ON ENVIRONMENTAL AND DEVELOPMENT. *Report “Our Common Future”*: Brundtland Report. [S. l.]: Oxford University Press, 1987

³⁴ NEW DELH. Declaration of Principles of International Law Relating to Sustainable Development. *International Law Association*, 2002. Available at: <http://cisdl.org/tribunals/pdf/NewDelhiDeclaration.pdf>. Access on: 12 Feb. 2015.

³⁵ WILLIAM, M. Lafferty; MEADOWCROFT, J. Introduction. In: WILLIAM, M. Lafferty; MEADOWCROFT, J. (ed.) *Implementing Sustainable Development: Strategies and Initiatives in High Consumption Societies*. [S. l.]: Town & Publisher, 2000. p. 34.

sustainability became a parameter of evaluation in all areas of life and activities and was given a new dimension as an obligation to manage all natural resources with an ethic of conservation to maintain the optimal functioning and productivity of our common environment.³⁶

3.2.2 The Principle of Equity and the Eradication of Poverty

The idea that present generations should hold natural resources in trust for future generations is a very well-established principle of international law underlining the principle of intra and intergenerational equity.³⁷ These concepts arise frequently in the Paris Agreement and were announced before the conclusion of the treaty. The Preamble of the Paris Agreement and its adoption decision repeatedly makes references to the principle of equity and intergenerational equity, which must guide parties to achieve the objective of the Convention.³⁸ It notes that Parties should protect the climate based on equity for the benefit of the present and future generations. In this context, the sustainable development approach requires the adoption of appropriate, genuine, or rational standards governing the proportion of exploitation of specific natural resources. Efforts to eradicate poverty are also highlighted in the Preamble of the Agreement in paragraphs 8 and 9, in the statement of the general objective of the Agreement in Article 2 as well as in the cooperation to implement the NDCs in Article 6.

3.2.3 The Precautionary approach to human health, natural resources, and ecosystems

This principle is announced in the preamble of the Paris Agreement, paragraph 4 and article 4(1) on the urgent ‘threat’ of climate change, the need to strengthen the global response to the ‘threat’ of climate change, and to significantly reduce the risks of climate change. The Paris Agreement and the UNFCCC itself are founded on the precautionary principle. To stabilize GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system and allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed sustainably, mitigation and adaptation actions must be taken, even not in the event of scientific uncertainty, to identify the exact contours of the challenges.

As asserted in several places in the Paris Agreement, including Articles 7 (1) and 7 (7c) on adaptation and Article 14(1) on the global stocktake, with specific reference to the work of the IPCC, actions on climate change should be guided by the best available scientific knowledge. However, because scientific knowledge may evolve and render knowledge uncertain, precautionary approaches need to be adapted to new realities. In this context, the precautionary principle precludes parties from relying on scientific evidence only to predict absolutely when, why, and how to conserve biological diversity.³⁹ In the absence of reliable evidence, parties are required to consider any information available to them for the identification, conservation, and prevention of climate change impacts.

Moreover, where reasonable evidence exists, parties are required to take immediate and appropriate action, including promoting and encouraging an understanding of the importance of biological diversity and the protection of the ecosystem. Article 12 of the Paris Agreement is more explicit on how parties should take appropriate measures. It provides for the need to develop research and training. It urges parties to ‘establish and maintain programmes for scientific and technical education and training, to promote and encourage research which contributes to the conservation and sustainable use of biological diversity, and

³⁶ GOLUSIN, M. Dodic S.; POPOV, S. *Sustainable Energy Management*. [S. l.]: Elsevier, 2013. p. 45.

³⁷ S’TRYDOM, Hennie; KING, N. D. (ed.) *Environmental Management in South Africa*. 2nd ed. [S. l.]: Juta Law, 2009. p. 45.

³⁸ BROWN, Weiss E. “Our Rights and Obligations to Future Generations for Environment?”. *American Journal of International Law/ AJIL*, v. 84, n. 1, p. 198-207, 1990.

³⁹ Preamble of the Paris Agreement.

to cooperate in developing methods for conservation and sustainable use of biological resources'. Unlike many other principles, the precautionary principle has been incorporated into many regional policies to ensure the environmental sustainability of project development. For instance, the European Union Directive urges the European Commission to report on the requirements for a sustainability scheme. It requires 'that reports and any proposals contained therein shall be based on the best available scientific evidence, considering new developments in innovative processes'.⁴⁰

3.2.4 The Principle of Integration of Environmental, Human Rights, and Social Considerations into Economic Programmes

The principle of integration of environmental, social, and human rights considerations into economic programmes is very important, particularly when considering the far-reaching nature of climate change's impacts on environmental, social, and economic sectors, as well as the need for a timely and effective response to prevent detrimental impacts. Article 7 (9 e), which also highlights the resilience of socioeconomic and ecological systems, underlines the need for adaptation measures to integrate all three objectives, namely environmental, economic, and social. Parties must ensure that climate change actions are economically viable and that respect for human rights is guaranteed.⁴¹ The principle of integration is also a safeguard to food security, promotion and protection of human rights, gender equality, and indigenous rights. This was also affirmed by the International Law Association Washington Resolution on Climate Change in 2014, which attested that states have an obligation of due diligence when developing social and economic plans to mitigate climate change impacts that may result in significant emissions of greenhouse gases.⁴² Accordingly, it is suggested that states must take into account the 'economic development and available resources, scientific knowledge, the risks involved in an action, and the vulnerability of affected states.

3.3 Legal Status and Uncertainty around Principles of Sustainable Development at the International Level

There are increasingly intense debates around the legal aspects of climate change. Particularly, the concern is whether climate change is international law, human rights law, national environmental law, and, to a lesser extent, tort law issues.⁴³ Although much of the attention has been on legal issues regarding climate change, several other questions arise. One is what are the respective legal obligations of States and other stakeholders to reduce their GHG emissions. The other core question is that of the legal sources of such obligations as well as their legal status under international law, which may generate obligations for which the violation may incur the state's international responsibility arising from the breach of an international obligation and call for the duty to make reparation. The latter is based on the fact that many of the principles central to the discussion of sustainable development, in some cases, are not yet and may not be recognized as binding rules of customary international law or general principles of international law for which the violation may incur international responsibility of the state. This is not to say that the use of the principle of sustainable development is meaningless. Rather, they will be much more effective if substantive obligations are sufficiently clear. For example, the precautionary principle is not accepted by all as a customary international law principle.⁴⁴ The EU considers that the principle is already a customary rule of international law

⁴⁰ Article 2 of the CBD

⁴¹ Article 17 (9) of the 2009 EU-RED.

⁴² Paragraph 7 of the Preamble of the Adoption Decision and paragraph 11 of the Paris Agreement Preamble.

⁴³ INTERNATIONAL LAW ASSOCIATION. *Resolution 2/2014 Declaration of Legal Principles Relating to Climate Change Committee On Legal Principles Relating To Climate Change*. Washington D.C.: International Law Association, 2014. Available at: <http://www.ila-hq.org/En/Committees/Index.Cfm/Cid/1029>. Access on: 22 June 2017.

⁴⁴ Oslo Principles on global climate change obligations.

or at least a general principle of law,⁴⁵ and such assumptions are supported by EU institutions,⁴⁶ including the European Court of Human Rights, where several judges in a dissenting opinion criticised the majority decision because it ‘ignored the whole trend of international institutions and public international law towards protecting persons and heritage, as evident in ... the development of the precautionary principle’.⁴⁷ The US by contrast is still more restrained in its approach, arguing that the principle is not yet established in customary international law.⁴⁸ Interestingly, the Arbitration Tribunal on the Iron Rhine Railway case between Belgium and the Netherlands gave a clear meaning of the precautionary principle. The tribunal concluded that in cases where economic development causes serious damage to the environment, there is an obligation to stop, prevent, or at least minimise such damage. The tribunal further recognises that such an obligation to adopt precautionary measures has become a general principle of international law.⁴⁹

Likewise, despite the wide use of the sustainable development principle, its meaning and definition in all cases remain unclear.⁵⁰ Particularly, it is difficult to strike a balance between environmental, social, and economic objectives within the parameters of any activity. Prioritising one aspect of sustainable development over another one has not been an option. It is like asking, ‘which is more important to human life: air, water, or food?’⁵¹ While efforts to legitimate sustainable development in international and national legal instruments persist, its practice has not yet become a fundamental tool for public and private decision-makers. Consequently, sustainability is understood differently. Thus, the challenge is to enforce them when the legal obligations of the player are up in the clouds.

3.3.1 Understanding the legal evolution of a norm under international law

Understanding the concern about the legal evolution of an international norm and how certain norms achieve the status of *jus cogens*,⁵² doctrinal views assume that certain norms affect the interests of the world community as a whole and threaten the peace and security of humankind, shocking the conscience of humanity are part of *jus cogens* norms. Debates on the legal evolution of an international norm continue to devolve scholars as they are based on philosophical and methodological views that look at the sources, the content, the evidentiary elements, and the value-oriented goals of international norms. This means that an international norm, which has or creates a positive capacity or is universally accepted and aimed at the preservation of fundamental human rights, can be considered as arising at the level of a *jus cogens* norm. Such views lack a scholarly accepted agreement as several factors have drawn legal attention. They include the lack of methods by which to ascertain the existence of a peremptory norm or to assess its significance and to determine its elements as well as a norm priority over other competing or conflicting norms or principles

⁴⁵ SCHRIJVER, N. The Evolution of Sustainable Development in International Law: Inception. *Meaning and Status*, Hague Academy of International Law, p. 329, 2008. at 65.

⁴⁶ WIRTH, D. A. ‘European Communities Restrictions on Imports of Beef Treated with Hormones’. *American Journal of international Law*, v. 92, p. 755-759, 1998. p. 755-759.

⁴⁷ The European Court of Human Rights rejected the applicant’s (Balmer- Schafroth) claim that Switzerland failed to provide an administrative review of the decision extending the operation of a nuclear facility and that such failure violated article 6 of the EU Convention on Human Rights. The court ruled that the applicant failed to “establish a link between the operating conditions of the power station. . . , in the absence of such findings, the effects on the population of the measures which the Federal Council could have ordered to be taken in the case therefore remained hypothetical [...]” Case concerning the administrative review of the decision to extend the operation of nuclear facility (*Balmer – Schafroth v. Switzerland*) 1987 ECHR Reports IV Paragraph 40.

⁴⁸ Desisting opinions of Judge Pettiti supported by Judge Golcukul, Walsh, Russo, Valticos, Lopes Rocha and Jambrek.

⁴⁹ The principle does not constitute an international tort for which there is universal consensus in the international community as to its binding status and content. Case concerning the status of the precautionary principle (*Beanal v. Freeport- McMoran*) 1977 US District Court for Eastern District of Louisiana at 362 -969.

⁵⁰ Case concerning the arbitration on the Iron Rhine railway (the Kingdom of the Netherlands v the Kingdom of Belgium) 2005 Arbitration Court Hague at Par 59-84 and 222.

⁵¹ SCHOLTZ, W. Legal Protection of the Environment. *International Law*, p. 513, 2016. p. 513.

⁵² BLACKBURN, W. R. *The Sustainability Handbook: The Complete Management Guide to Achieving Social, Economic and Environmental Responsibility*. [S. l.: s. n.], 2007. p. 48.

of international law.⁵³ A scholarly agreement must determine not only the principles of legal evolution of a legal norm or how a given norm may be ascertained at the level of *jus cogens* but also and perhaps determine the implication and consequences of its application.

Another interesting debate has been about whether *jus cogens* and customary international law sources are from the same source⁵⁴ or not, or whether they simply describe certain general principles. Such a debate is said to only add to the level of uncertainty because certain customary international norms, including those related to aggression, genocide, crimes against humanity, war crimes, piracy, slavery, slave-related practices, and torture are already part of *jus cogens* crimes and these raise no debate because sufficient legal basis exists to ascertain that they are indeed from the same source.⁵⁵ More prominent is that international *opinion Juris* recognizes these crimes as such. Thus, international recognition or pronouncement expresses such views.⁵⁶ This includes their acknowledgment of various international and regional court decisions as well as international treaties. These treaties have been ratified by many, if not all, states which justify their recognition as *jus cogens* norms. As far as the question of the legal status of the principles central to the discussion of sustainable development is concerned, their normative character has generated obligations and rights for state parties.⁵⁷ They are increasingly recognized as principles and made operational in binding international treaties, thus forming part of international law and policy in the field of sustainable development⁵⁸ and have widely emerged in various international and national legal instruments of an environmental, economic, and social character, including court decisions at international⁵⁹ and national levels and are accepted as a global objective.⁶⁰ Their normative character in international law has generated rights and obligations such as the obligation to act or not to act, for member states.⁶¹ Likewise, these principles play a significant role in the interpretation and application of international law and guide the development of laws and policies toward social, environmental, and economic objectives.⁶² Such assumptions imply that principles of sustainable development generate international legal obligations, for which states may be liable or engaged in their international responsibility for the breach of an international obligation. Thus, because of the international pronouncement supporting such views, principles of sustainable development set out a solid footing for the definition of legal obligations of States for climate change responsibilities and can serve a useful purpose in claiming reparation under international law.

⁵³ BASSIOUNI, M. C. 'Universal jurisdiction for international crimes: Historical perspectives and contemporary practice'. *Va. J. Int'l L.*, v. 42, p. 81-83, 2001.

⁵⁴ B., Ian. *Principles of public international law*. 3rd. ed. [S. L.: s. n.], 1979. p. 512-515. At the same time, inquiry into the relationship between peremptory norms and the sources and functions of international law have been virtually non-existent. This is indeed surprising, given the recent substantial interest in these areas as part of a larger "theoretical explosion" in international legal studies.

⁵⁵ D'AMATO, A. *The concept of custom in international law*. [S. L.: s. n.], 1971. p. 132.

⁵⁶ BASSIOUNI, M. C. 'Universal jurisdiction for international crimes: Historical perspectives and contemporary practice'. *Va. J. Int'l L.*, v. 42, p. 801-809, 2001.

⁵⁷ ACKEHURST, M. 'Custom as a source of international law'. 1 Brit. Y.B. Int'l. L. 1974. p. 1.

⁵⁸ Case Concerning Military and Paramilitary Activities (Nicaragua v. United Nation) 1986 ICJ Rep 14 par 99-101.

⁵⁹ International Law Association Final Draft Report (ILA) (n 27) p. 39.

⁶⁰ Case concerning Gabčíkovo –Nagymaros Project (Hungary v. Slovakia) 1997 ICJ Reports 78 at par 140; See also SANDS, P. "International Courts and the Application of the Concept of 'Sustainable Development'" Yearbook of UN Law, 1999. p. 389.

⁶¹ Declaration on Establishment of the Arctic Council, 35 ILM 1382 (1996); Yaoundé Declaration on the Conservation and Sustainable Management of Forests, 38 ILM 783 (1999); Agreement on Co-operation for the Sustainable Development of Mekong River Basin, 34 ILM 864 (1995); and Revised Protocol on Shared Watercourses in the Southern African Development Community, 40 ILM (2001).

⁶² CORDONIER, Segger M. C. Khalfan. *A Sustainable Development Law: Principles, Practices & Prospects*. [S. L.]: Routledge, 2004. p. 368.

4 Sustainable development and climate responsibilities

Every internationally wrongful act of a state entails the international responsibility of that state. This principle is a long-standing general rule of state responsibility for an internationally wrongful act, which has become part of the customary international law since its expression in the 1907 Hague Convention (IV) and Additional Protocol I to the Geneva Convention.⁶³ This principle applies whether the wrongful act is attributable under international law and whether the wrongful act constitutes a breach of an international obligation of the state.⁶⁴ The two elements of an internationally wrongful act emanate from different sources, namely customary international law⁶⁵ and conventional international law, and are not cumulative. More prominently, the principle is governed by international law and not by national law.⁶⁶ This means, an act may be lawful under national law but not as such under international law. “There is a breach of an international obligation by a state when an act of that state is not in conformity with what is required of it by that obligation, regardless of its origin or character.”⁶⁷ More interesting in the discussion above is that international law on state responsibility for an internationally wrongful act makes it a serious or grave violation when there is a breach of a peremptory norm of general international law. Consequently, an internationally wrongful act of a state entails full reparation for the injury caused by the internationally wrongful act.⁶⁸ While the injury may include any damages, whether material or moral, reparation may take various forms, including restitution, compensation, and satisfaction, either singly or in combination. As discussed above, state responsibilities arising from the legal obligation under principles of sustainable development constitute a normative framework for the conceptualisation and operationalisation of the state’s climate change responsibilities under the Paris Agreement.

5 Conclusion

Unlike the Kyoto Protocol, it may appear that state parties to the climate change agreement have no quantifiable commitments, or nationally determined contributions (NDCs) are not binding upon the state as they are based on principles of sustainable development, this paper argues that such a conception is wrinkled because of the firm acceptance and the normative character of principles of sustainable development under international law. While recognising the lack of recognition of some of these principles or the fact that many are not yet and, in some cases, may not be recognized as binding rules of customary international law. This paper argues that their normative character generates rights and obligations that are enshrined in binding international treaties forming part of international law and policy in the field of sustainable development. Thus, in the absence of clear binding commitments, states have legal obligations to curb the environmental as well as socio-economic impacts of climate change. Such obligations arise from the normative character as well as the introduction of sustainable development principles in binding instruments, including human rights instruments. If such an interpretation is accepted by all, it may contribute to the creation of

⁶³ When it comes to customary norms and treaties law related to sustainable development, International law, especially the 1969 Vienna Convention on the Law of Treaties (art. 30), help to resolve overlaps. See PHILIPPE, Sands. *International Law and Sustainable Development*. In: REVEZ, R.; SANDS, P.; STEWART, R. *The Economy and Sustainable Development* Environmental Law. [S. l.: s. n.], 2000. p. 101.

⁶⁴ Articles 3 and 91 of the Hague convention and Additional Protocol I to the Geneva Conventions.

⁶⁵ Article 1 of the Draft Articles.

⁶⁶ See Rules 149. A state is responsible for violations of international humanitarian law attributable to it, including violations committed by its organs, including its armed forces; b) violations committed by persons or entities it empowered to exercise elements of governmental authority; c) violations committed by persons or groups acting in fact on its instructions or under its direction or control; and d) violations committed by private persons or groups which it acknowledges and adopts as its own conduct.

⁶⁷ Article 3 of the Draft Articles.

⁶⁸ Article 12 of the draft articles.

an internationally agreed foundation on which this discourse is grounded. Alternatively, it is suggested that whenever doubts arise about the legal status of these principles, each be examined and determined separately as to whether it comprises one or more of the elements to qualify as an international norm for which the violation may incur state international responsibilities. Likewise, a doctrinal determination is always preferable in determining how and when, in the historical legal evolution of a given norm, it can be said to achieve the status of international norms.

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- Case concerning Gabčíkovo –Nagymaros Project (Hungary v. Slovakia) 1997 ICJ Reports 78 at par 140; See also Sands P "International Courts and the Application of the Concept of "Sustainable Development"" v. 3 Yearbook of UN Law (1999) at 389.
- Case Concerning Military and Paramilitary Activities (Nicaragua v. United Nation) 1986 ICJ Rep14 par 99-101.
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