



THE UNIVERSITY OF
SYDNEY

The University of Sydney Law School

Legal Studies Research Paper Series

No. 20/25

April 2020

The Preamble

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THE PREAMBLE

Ben Boer¹

Abstract

This chapter provides a commentary on each recital of the Preamble of the Paris Agreement. It explores the legal and conceptual themes that frame and inform the context that the Preamble provides in underpinning the Agreement's objective and purpose.

Keywords

Paris Agreement. – Preamble. - Enhanced Action. - Best Available Scientific Knowledge. - Urgent Threats - Equity - Common but Differentiated Responsibilities and Respective Capabilities - Human Rights - Sustainability - Adverse Impacts - Ecosystem Integrity - Non-State-Stakeholder Engagement - Gender Equality – Right to Health - Developing countries - Vulnerable people - Climate Justice

Note: For ease reference, the recitals are numbered from 1 to 16 in this chapter, although they are unnumbered in the Agreement itself.

The Parties to this Agreement,

1. Being Parties to the United Nations Framework Convention on Climate Change, hereinafter referred to as 'the Convention',
2. Pursuant to the Durban Platform for Enhanced Action established by decision 1/CP.17 of the Conference of the Parties to the Convention at its seventeenth session,
3. In pursuit of the objective of the Convention, and being guided by its principles, including the principle of equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances,
4. Recognizing the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge,
5. Also recognizing the specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, as provided for in the Convention,
6. Taking full account of the specific needs and special situations of the least developed countries with regard to funding and transfer of technology,
7. Recognizing that Parties may be affected not only by climate change, but also by the impacts of the measures taken in response to it,
8. Emphasizing the intrinsic relationship that climate change actions, responses and impacts have with equitable access to sustainable development and eradication of poverty,

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9. Recognizing the fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change,
10. Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities,
11. Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity,
12. Recognizing the importance of the conservation and enhancement, as appropriate, of sinks and reservoirs of the greenhouse gases referred to in the Convention,
13. Noting the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, recognized by some cultures as Mother Earth, and noting the importance for some of the concept of 'climate justice', when taking action to address climate change,
14. Affirming the importance of education, training, public awareness, public participation, public access to information and cooperation at all levels on the matters addressed in this Agreement,
15. Recognizing the importance of the engagements of all levels of government and various actors, in accordance with respective national legislations of Parties, in addressing climate change,
16. Also recognizing that sustainable lifestyles and sustainable patterns of consumption and production, with developed country Parties taking the lead, play an important role in addressing climate change,

Have agreed as follows:

A. Introduction	P.01
B. International Treaty Law Rules and Preambles	P.02
C. History of the Paris Preamble	P.03
D. The Sixteen Recitals of the Preamble	P.06
1. Parties	P.06
2. The Durban Platform	P.08
3. Objective and Principles of the Convention	P.11
a. Equity	P.13
b. In the Light of Different National Circumstances	P.15
4. Response to the Urgent Threat	P.16
a. Effective and Progressive Response	P.24
b. The Best Available Scientific Knowledge	P.26
5. Specific Needs and Special Circumstances of Developing Country Parties	P.30
a. Particularly Vulnerable	P.32
b. Specific Needs	P.36
6. Least Developed Countries and Technology	P.37

a. Funding	P.39
7. Recognizing Impacts of Response Measures	P.40
8. Intrinsic Relationship	P.44
9. Fundamental Priorities and the Adverse Impacts of Climate Change	P.47
a. Safeguarding Food Security and Ending Hunger, and the Particular Vulnerabilities of Food Production Systems	P.48
10. Just Transition Imperatives	P.50
11. Common Concern for Humankind	P.52
a. Gender Equality and Empowerment of Women	P.63
b. ... the Right to Health	P.64
c. ... People in Vulnerable Situations	P.65
d. ... Children	P.66
12. Conservation and Enhancement of Sinks and Reservoirs	P.69
a. ... Sinks and Reservoirs	P.70
13. Ecosystem Integrity and Climate Justice	P.71
a. Climate Justice	P.78
14. Education, Public Participation and Access to Information	P.79
15. Participation of Non-State Actors	P.80
16. Important Role of Sustainable Consumption and Production Patterns	P.85
E. Conclusion	P.89

COMMENTARY

A. Introduction

P.01 This chapter provides a commentary on each recital of the Preamble of the Paris Agreement.² It explores the legal and conceptual themes that frame and inform the context that the Preamble provides in underpinning the Agreement’s objective and purpose. The Preamble also reflects the closely entwined relationship with pre-existing treaty law and related State Party decisions.

B. International Treaty Law Rules and Preambles

P.02 Art 31(2) of the Vienna Convention on the Law of Treaties, which focuses on the general rule of interpretation, states: ‘The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes...’.³ Preambles play a variety of roles, from explaining purpose of the treaty to providing the context for the interpretation of the operative or substantive provisions of the treaty to being an integral

² *Paris Agreement to the United Nations Framework Convention on Climate Change* (adopted 12 December 2015; entered into force 4 November 2016) (Paris Agreement).

³ Mark E Villiger has commented: ‘The entire text of the treaty is to be taken into account as “context”, including title, preamble and annexes; *Commentary on the 1969 Vienna Convention on the Law of Treaties*, (Martinus Nijhoff, Leiden/Boston 2009) 272, 427. For observations on the status of preambles, see Jan Klabbbers, ‘Treaties and Their Preambles’ in Michael Bowman and Dino Kritsiotis *Conceptual and Contextual Perspectives on the Modern Law of Treaties* (Cambridge 2018) 172.

part of the text.⁴ As Gardiner comments: ‘It should not ... be assumed that all preambles are of equal value. Some are very carefully negotiated, others cobbled together more or less as an afterthought. In the case of major modern multilateral treaties, where there are usually good records of the negotiating history, the preparatory work will reveal whether there has been thorough attention to the content of the preamble.’⁵ In the case of the Paris Agreement, the Preamble was the subject of lengthy negotiations, as indicated below. Its status and legal effect is particularly important as the subject matter of a number of preambular recitals, are not specifically reflected in the subsequent articles of the Agreement.

C. History of the Paris Preamble

P.03 In considering the history of the negotiations of the Paris Agreement, it is notable that the Geneva Climate Change Conference in February 2015 included over forty proposed paragraphs for the Preamble, with a variety of options for several of them.⁶ In October 2015, the Bonn negotiations leading up to the Paris Agreement saw a number of proposed preambular provisions being discussed, some of which were eventually included in the Agreement. Reports of ‘spin-off groups’⁷ give some indication of the contingent nature of the negotiations.

P.04 From perusing the records of the negotiations, it is obvious that there the influence of a wide range of stakeholders was in play, with long debates as to what should be included, and what should be left out.⁸ As Carazo observes, many of the preambular recitals have parallel provisions in its operative parts of the Agreement.⁹ However, there are some significant exceptions to this parallelism, particularly the mention of human rights, the rights of specific groups, and gender issues. No doubt there was a determination to ensure that many bases should be covered to satisfy the various party and non-party stakeholders, even if some issues did not make it into the operative provisions. The fact that they were included in the Preamble was nevertheless important in terms of ensuring that there was broad agreement in coming to the final text. But, as Sands and Peel note ‘... like the 1992 Convention, many of [the Agreement’s] provisions use ambiguous or permissive language that create any soft obligations, to accommodate the interests of particular parties, such as the United States, allowing for participation by executive action’.¹⁰ The final version of the Preamble was described by the facilitator of those negotiations, perhaps with some hyperbole, as an ‘immensely revolutionary Preamble’.¹¹

⁴ Dörr and Schmalenbach argue: ‘The preamble to a treaty, usually consisting of a set of recitals, may assist in determining the object and purpose of the treaty, for it is the normal place where the parties would embody an explicit statement to that effect. By stating the aims and objectives of a treaty, a preamble can thus be of both contextual and teleological significance. There are many examples in international jurisprudence of reference being made to the preamble of a treaty in order to elucidate the meaning of a particular provision’; O. Dörr and K. Schmalenbach (eds), *Vienna Convention on the Law of Treaties*, (Springer-Verlag Berlin Heidelberg 2012) 544. See further, Max M Hulme, ‘Preambles in Treaty Interpretation’ *University of Pennsylvania Law Review*, Vol. 164, No. 5 (April 2016), pp. 1281-1343, 1289.

⁵ Richard Gardiner *Treaty Interpretation* (2nd ed Oxford 2015) 206.

⁶ Work of the Contact Group on Item 3, Negotiating text Advance unedited version 12 February 2015, 1-4, https://unfccc.int/files/bodies/awg/application/pdf/negotiating_text_12022015@2200.pdf accessed 3 March 2020.

⁷ See ‘Summary of the Bonn Climate Change Conference: 19-23 October 2015’, *Earth Negotiations Bulletin* Vol. 12 No. 651, 22 October 2015.

⁸ *Earth Negotiations Bulletin* Vol. 12 No. 651, 22 October 2015, 4; <http://www.iisd.ca/climate/unfccc/adp2-11/>, accessed 2 March 2020.

⁹ Maria Pía Carazo, in Daniel Klein, María Pía Carazo, Meinhard Doelle, Jane Bulmer, Andrew Higham (eds), *The Paris Agreement on Climate Change: Analysis and Commentary*, (Oxford 2017) 109.

¹⁰ Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (Cambridge 2018) 319.

¹¹ As quoted in Carazo (n 9) 109.

Ultimately, the Preamble to the Paris Agreement was reduced to sixteen detailed recitals that reflect the history of the development of the Convention and the Kyoto Protocol, as well as including substantive statements and commitments that relate both to the implementation of the Convention and to the Agreement. By way of comparison, the Preamble to the Convention contains ten substantive recitals that set out in some detail the fundamental purposes of the instrument. In contrast, the Preamble to the Kyoto Protocol comprises six short and non-substantive recitals.

P.05 The context of the development of the Paris Agreement includes the parallel negotiations which were taking place concerning the Sustainable Development Goals (SDGs). It was therefore logical that there is considerable correspondence between the agreement and the SDGs. This link is specifically recognised in the document *Transforming our World*,¹² which contains the SDGs and its associated Targets: ‘We acknowledge that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change. We are determined to address decisively the threat posed by climate change and environmental degradation’.¹³

D. The Sixteen Recitals of the Preamble

1. Parties

P.06 Recital 1: ‘Being Parties to the United Nations Framework Convention on Climate Change, hereinafter referred to as ‘the Convention’.

P.07 This recital follows the heading ‘Parties to this Agreement’; it simply indicates that parties to the Paris Agreement are also parties to the Climate Change Convention, as recorded in Paris Agreement Article 1(a) and (c); the question of parties is discussed in Chapter XX on Article 1. The association of the Agreement to the UNFCCC immediately points to the fact that it must be characterized as an international law treaty, pursuant to the Vienna Convention on the Law of Treaties,¹⁴ although the legal form of the instrument was debated over the four years of negotiation.¹⁵ Recital One indicates that all parties to the Agreement are also parties to the Convention; however, the converse is not true: not all parties to the Convention are parties to the Agreement. Nine states are not yet parties.¹⁶ The European Union is a party in its own right, pursuant to Convention Articles 20 and 22, which recognizes the capacity of ‘economic integration organizations’ to sign and ratify the Convention. The United States had signalled withdrawal as a party in 2017.¹⁷

2. The Durban Platform

¹² *Transforming our World: The 2030 Agenda for Sustainable Development* A/RES/70/1 (2015).

¹³ *Ibid.* para 31; see further below with respect to urgent responses.

¹⁴ Vienna Convention on the Law of Treaties 1969 1155 UNTS 131 Article 21(a): “‘Treaty’ means an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation’.

¹⁵ See Daniel Bodansky, Jutta Brunnée and Lavanya Rajamani *International Climate Law* (Oxford University Press 2019) 210-214; also, Daniel Bodansky, ‘The Legal Character of the Paris Agreement’, 25 (2) *Review of Comparative and International Environmental Law* (2016) 142; Sands and Peel, (n 11) 319.

¹⁶ The following states have signed but not yet ratified the Agreement: Angola, Eritrea, Iran, Iraq, Libya, South Sudan, Turkey and Yemen.

¹⁷ The intended effective date of withdrawal is November 4, 2020, the day after the result of the US 2020 presidential election is known.

P.08 Recital 2: ‘Pursuant to the Durban Platform for Enhanced Action established by decision 1/CP.17 of the Conference of the Parties to the Convention at its seventeenth session’.

P.09 This recital focuses on the crucial seventeenth Conference of the Parties in Durban (COP17). COP17 was seen as a turning point in the long years of climate change negotiations: ‘In Durban, governments clearly recognized the need to draw up the blueprint for a fresh universal, legal agreement to deal with climate change beyond 2020, where all will play their part to the best of their ability and all will be able to reap the benefits of success together’.¹⁸ An increasing sense of urgency was felt to promote action on climate change at COP17, which is seen to some degree in the Paris Agreement four years later, and is reflected in Recital 4, below. A ‘need for greater ambition’ was identified, with a recognition that it was important for ‘bigger and bolder action that is required to keep the world on the right track to reduce emissions, to deal with existing climate change and to help smooth the way for an effective new global climate change agreement in 2015’.¹⁹

P.10 The Paris Agreement was initiated by the Ad Hoc Working Group on the Durban Platform for Enhanced Action²⁰ (known as the ADP). The ADP is a subsidiary body established by COP17.²¹ The mandate of the ADP was ‘to develop a protocol, another legal instrument or an agreed outcome with legal force’ that was to be universally applicable. In other words, there was no necessarily pre-conceived form that such an instrument would take.

3. Objective and Principles of the Convention

P.11 Recital 3: ‘In pursuit of the objective of the Convention, and being guided by its principles, including the principle of equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances’.

P.12 It is of course logical for the Paris Agreement to pursue the objective of the Convention and to be guided by its principles. The recital mentions both the equity principle and the principle of common but differentiated responsibilities and respective capabilities, making it clear that these two principles are fundamental to both the Convention and the Agreement.²² These principles are referred to by Voigt and Ferreira as the ‘normative legacy of the UNFCCC’.²³ The recital should also be read in conjunction with Article 2 of the Agreement, which provides that the Agreement, ‘in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty...’.²⁴

¹⁸ ‘Turning point in the negotiations’ <https://unfccc.int/process/conferences/the-big-picture/milestones/outcomes-of-the-durban-conference> accessed 23 February 2020.

¹⁹ ‘Turning point in the negotiations’ (n 19).

²⁰ ADP bodies page <https://unfccc.int/adp-bodies-page> accessed 23 February 2020.

²¹ See Report of the Conference of the Parties on its seventeenth session, 28 November to 11 December 2011, FCCC/CP/2011/9/Add.1, Decision 1/CP.17, accessed 23 February 2020.

²² The other principles included in Article 3 of the Convention in summary are: to give full consideration to specific needs and special circumstances of developing country Parties; the precautionary principle; sustainable development; and the principle of cooperation.

²³ Christina Voigt and Felipe Ferreira, ‘Dynamic Differentiation’: The Principles of CBDR-RC, Progression and Highest Possible Ambition in the Paris Agreement’ *Transnational Environmental Law*, Vol 5, October 2016, 285-303, 293.

²⁴ See further, Anna Huggins and Rowena Maguire, ‘The implementation of the principle of common but differentiated responsibilities within the Paris Agreement A governance values analysis’ in Vesselin Popovski *The Implementation of the Paris Agreement on Climate Change* (Routledge, 2019).

a. Equity

P.13 Equity is mentioned three times in the Preamble. In this recital, it is simply referred to as the ‘principle of equity’. In Recital 11, it relates more specifically to gender equity and to intergenerational equity (see Recital 11, below). In Article 3 of the Convention, the principle is depicted as including both intra-generational and intergenerational aspects: ‘The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity...’.²⁵

P.14 The second part of the recital is specifically associated with the principle of equity by the conjunctive ‘and’, involving a judgment as to what obligations are placed on particular parties with respect to their ‘common but differentiated responsibilities and respective capabilities, in the light of different national circumstances’. With regard to ‘common but differentiated responsibilities’ in this recital, the phrase is not only qualified by ‘respective capabilities’, as found in Article 3 of the Convention, but by the additional phrase ‘in the light of different national circumstances’. The seeds of this addition were already evident in the Article 3(2) of the Convention, which makes it clear that the specific needs and special circumstances of developing country Parties, which would ‘have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration’. Taking the two parts of the recital together the question how an equitable balance can be achieved between particular parties with respect to their obligations, given the differing economic, political, social and cultural circumstances of developed and developing nations.²⁶

b. In the Light of Different National Circumstances

P.15 This phrase relates to the negotiation of a bilateral agreement²⁷ between the US and China, negotiated between President Obama and President Xi of China, which recognised that the two countries ‘have a critical role to play in combating global climate change, one of the greatest threats facing humanity. They are committed to reaching an ambitious 2015 agreement that reflects the principle of common but differentiated responsibilities and respective capabilities, *in light of different national circumstances*’ (emphasis added). In addition to the Preamble, the phrase appears in Article 2 para 3, and Article 4(3) (4) and (19), always following the phrase ‘common but differentiated responsibilities and respective capabilities’. As Carazo comments, ‘this brings a new dimension to the CBDRRC principle. ...[It] is one result of the hard-fought compromise reached by the parties regarding differentiation’.²⁸

4. Response to the Urgent Threat

P.16 Recital 4: Recognizing the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge.

²⁵ See further, Hugh Breakey, ‘Five short words and a moral Reckoning: The Paris regime’s CMA- APA equity stocktake process’ in Vesselin Popovski, *The Implementation of the Paris Agreement on Climate Change* (Routledge, 2019), 104-125.

²⁶ See Mi, Z., Liao, H., Coffman, D. *et al.* Assessment of equity principles for international climate policy based on an integrated assessment model. *Nat Hazards* 95, 309–323.

²⁷ ‘U.S.- China Joint Announcement on Climate Change’ <https://obamawhitehouse.archives.gov/the-press-office/2014/11/11/us-china-joint-announcement-climate-change> accessed 4 March 2020.

²⁸ Carazo (n 9) 111.

P.17 It is significant to note that the Agreement’s preamble carries a heightened sense of urgency compared with the Preambles of the Convention and the Kyoto Protocol. The Convention’s Preamble acknowledges that ‘change in the Earth’s climate and its adverse effects are a common concern of humankind’. It stated that the Parties to the Convention were ‘[c]oncerned that human activities have been substantially increasing the atmospheric concentrations of greenhouse gases’ and that ‘these increases enhance the natural greenhouse effect’, which in turn ‘will result on average in an additional warming of the Earth’s surface and atmosphere’ that ‘*may* adversely affect natural ecosystems and humankind (emphasis added). The only real indication of urgency is found in Article 2 of the Convention, which mentions prevention of ‘*dangerous* anthropogenic interference with the climate system’ (emphasis added). After over three decades of scientific analysis and debate from the date of the first IPCC report in 1988, the Paris Agreement recognized ‘the *urgent* need for an effective and progressive response to the urgent threat of climate change...’ (emphasis added).

P.18 In 2015, the introductory paragraphs in *Transforming our World* recognized the need to take ‘urgent action on climate change, so that it can support the needs of the present and future generations,’²⁹ and this is in turn reflected in Sustainable Development Goal 13: ‘Take urgent action to combat climate change and its impacts’. However, this Goal came with an asterisked proviso recognising the UNFCCC’s primary role in issues of climate change in the context of the SDGs.³⁰

P.19 Since the Convention’s conclusion and adoption in 1992, both scientific data and lived experience has increased the International Community’s awareness and knowledge of the harmful environmental, economic, and social ramifications of climate change. As succinctly stated at the outset of the 2006 Stern Report: ‘The scientific evidence is now overwhelming: climate change presents very serious global risks, and it demands an urgent global response’;³¹ ‘Climate change threatens the basic elements of life for people around the world - access to water, food production, health, and use of land and the environment’.³²

P.20 One question is, what constitutes a threat, and what level of urgency is contemplated? Further, how serious need it be before action is taken? A clue is found in article 7(2) of the Paris Agreement, where the parties recognize that adaptation at all levels ‘is a key component of and makes a contribution to the long-term global response to climate change to protect people, livelihoods and ecosystems, taking into account the urgent and immediate needs of those developing country Parties that are particularly vulnerable to the adverse effects of climate change’. That provision, notably, mentions urgent need in the context of developing countries that are *particularly* vulnerable; whilst it does not exclude other countries, the implication seems clear that the idea of urgency should be especially taken into account with respect to the specified countries. Further, urgent *need* is of course different from urgent *threat*, although it could be argued that an identified urgent need contemplates a threat, or is as a result of a particular threat.

²⁹ Preamble to *Transforming our World* (n 30).

³⁰ ‘...[T]hroughout the negotiations on the SDGs, some delegates proposed integrating climate change issues into the other SDGs, rather than having a “stand-alone goal.” Ultimately, those who argued that an agenda for the 21st Century must feature climate action as a central focus prevailed, but the asterisk deferred to the UNFCCC role in driving change’: *SDG 13 Update: Joining Up NDC and SDG Planning* <http://sdg.iisd.org/commentary/policy-briefs/sdg-13-update-joining-up-ndc-and-sdg-planning/> accessed 18 March 2020.

³¹ N Stern, *The Stern Review: The Economics of Climate Change* (Cambridge University Press 2006) Executive Summary, 1.

³² *Ibid*, 6.

P.21 The Convention’s Preamble made it clear that there was a great deal of uncertainty in ‘predictions of climate change’ and that global warming ‘may adversely affect natural ecosystems and humankind; in the 2015 Paris Agreement, the position was expressed in a way that leaves no room for any such uncertainty. The clear recognition of the urgency associated with responding effectively to the threat of climate change is also reflected in the preambular paragraphs of Decision 1/CP.21 (Adoption of the Paris Agreement),³³ where the Parties recognize ‘that climate change represents an urgent and potentially irreversible threat to human societies and the planet’.

P.22 However, in the five years since the Agreement was negotiated, many analysts around the world have become much more vocal concerning the existential crisis represented by the effects of climate change as well as increasingly rapid biodiversity loss. In the light of reports since 2015, ‘urgent threat’ may now not be a sufficiently robust phrase, and perhaps that the descriptor ‘existential threat’ is more appropriate, although the majority of Parties would be likely to eschew such description for political reasons. But for some countries, especially low-lying atoll countries,³⁴ the very continuation of their *existence* is indeed in doubt, with their populations no longer be able to live in their territories, and subject involuntary or forced migration.³⁵ Would a much higher level of urgency have been incorporated in the Preamble given the state of knowledge in 2020 in the light of the IPCC’s reports since 2015? If the Paris Agreement were to be drafted today, in the light of the increasing alarm on the part of scientists, economists, policymakers and others, the widespread declarations of climate emergency by governments, universities and NGOs, that the sense of urgency might possibly be heightened, with much stronger language employed.

P.23 Finally, to bolster such arguments, the principle of contemporaneity³⁶ might well be invoked, especially where national obligations are being tested in the courts with respect to the interpretation of the level of urgency required to achieve drastic reductions in greenhouse gases. Under this principle it could be argued that as time passes, much more drastic measures could be expected by governments and where necessary, ordered by the courts, as occurred in the *Urgenda Case* in the Netherlands.³⁷

a. Effective and Progressive Response

P.24 The question of what constitutes an effective and progressive response to the urgent threat of climate change has several parts. An ‘effective’ response conjures up practical actions

³³ FCCC/CP/2015/10/Add.1, 29 January 2016.

³⁴ ‘From an AOSIS perspective, climate change poses an existential threat associated with the loss and damage they are likely to suffer’; see Timothée Ourbakl and Alexandre K. Magnan *The Paris Agreement and climate change negotiations: Small Islands, big players*, *Reg Environ Change* (2018) 18:2201–2207, 2204; also, ‘*An Existential Threat: How Climate Change is Impacting the Atoll Countries*’ *Asian Development Bank 9 December 2019 (video)* <https://www.adb.org/news/videos/existential-threat-how-climate-change-impacting-atoll-countries>, accessed 23 February 2020.

³⁵ See eg, Oli Brown *Migration and Climate Change*, International Organization for Migration, 2008; Guy J. Abel, Michael Brottrager, Jesus Crespo Cuaresma, Raya Muttarak, ‘Climate, conflict and forced migration’ *Global Environmental Change*, *Global Environmental Change*, Vol 54, January 2019, 239-249.

³⁶ Weeramantry, P. International Court of Justice, *Gabčíkovo-Nagymaros Project (Hungary/Slovakia)* case <https://www.icj-cij.org/en/case/92>, 113-115, accessed 29 February 2020; and see Sands and Peel (n XXX) 109.

³⁷ *Urgenda Foundation v The State of the Netherlands*, (2015) HA ZA 13-1396) C/09/456689, District Court, The Hague; and *The State of the Netherlands (Ministry of Economic Affairs and Climate Policy) and Stichting Urgenda* ECLI:NL:PHR:2019:1026, Supreme Court of the Netherlands.

that address the climate change threat expeditiously and comprehensively. How effectiveness might be judged would depend on the particular circumstances: with respect to mitigation, one might obviously expect drastic cuts to greenhouse gas emissions, while with respect to adaptation, actions which address the physical, economic, social and cultural effects of sea-level rise the warming of the atmosphere and the oceans. Clearly, an effective response to any urgent threat is necessary, especially when the threat is now recognised as existential.

P.25 A ‘progressive’ response can also be related to the emerging principle of progression as depicted in Article 3 of the Paris Agreement.³⁸ It is also associated with the concept of highest possible ambition in Article 4 (3): ‘Each Party’s successive nationally determined contribution will represent a progression beyond the Party’s then current nationally determined contribution and reflect its highest possible ambition ...’.³⁹

b. The Best Available Scientific Knowledge

P.26 As an initial point, the successive reports of the broadly-based Intergovernmental Panel on Climate Change (IPCC) might be said to represent the ‘best available science’ with regard to the wide range of issues raised by climate change and its effects. An indication of the process of using the best available science, are the IPCC refinements to the guidelines for assessing national greenhouse gas inventories.⁴⁰ While there may be political concerns with regard to the manner in which IPCC reports and particular issues are characterised and portrayed, the most fundamental IPCC finding, that scientific evidence for warming of the climate system is unequivocal is virtually impossible to refute.⁴¹

P.27 Some analysts, however, attempt to undermine the findings of the IPCC and other scientific bodies. For example, Hanekamp and Bergkamp take a negative view of the idea of ‘best available science’ in the Paris Agreement. They comment: ‘[A]lthough the Paris Agreement entertains the concept of science-based policy-making, its ability to ensure that policies are accurately informed by science is severely hampered. The Agreement’s unspecified concept of ‘best available science’ allows policy-makers to pursue politically expedient policies supported by climate model projections to their liking’.⁴² However, as Klein at al indicate, policy-making is of course left to the parties. Since its inception, the IPCC

³⁸ Christina Voigt and Felipe Ferreira, “Dynamic Differentiation”: The Principles of CBDR-RC, Progression and Highest Possible Ambition in the Paris Agreement’ *Transnational Environmental Law*, Vol 5, October 2016, pp. 285-303.

³⁹ Voigt and Ferreira (n 30); see Chapters 3 and 4, this volume.

⁴⁰ AP5 (2014), *Global Warming of 1.5°C* (2018), *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories*. <https://www.ipcc.ch/report/2019-refinement-to-the-2006-ipcc-guidelines-for-national-greenhouse-gas-inventories/> accessed 29 February 2020.

⁴¹ J. Cook, et al, "Consensus on consensus: a synthesis of consensus estimates on human-caused global warming," *Environmental Research Letters* Vol. 11 No. 4, (13 April 2016); see also National Aeronautics and Space Administration ‘Scientific Consensus: Earth’s Climate is Warming’ <https://climate.nasa.gov/scientific-consensus/> accessed 29 February 2020.

⁴² Jaap C. Hanekamp and Lucas Bergkamp, ‘The “Best Available Science” and the Paris Agreement on Climate Change’ *European Journal of Risk Regulation*, Vol 7 (1) 2016, pp. 42-48; a further sceptical view is put by Lucas Bergkamp in. ‘Adjudicating scientific disputes in climate science: the limits of judicial competence and the risks of taking sides’ [2015] 3 *Env. Liability* 80-102; he argues: ‘An assumption that any statement in an IPCC report, in particular the “Summary for Policy-makers”, represents consensus science is unwarranted; a statement may be political, rather than scientific, it may reflect a value judgment, or it may be supported by no more than a minority of scientists. Hence, caution is required. Courts should also be aware that consensus science, which is invoked by policy advocates only if it supports their cause, is not a reliable guide, because it may reflect science power politics, ‘group think,’ political pressure, or be biased for other reasons’.

assessments have refrained from policy prescription. All IPCC reports are prepared instead to serve as a scientific basis - yet a maximally robust one - for policy-making. They strive for utmost policy relevance while avoiding the recommendation of particular policies. The result is a clear division of labour between the IPCC and UNFCCC, leaving actual policy choices to the UNFCCC.⁴³

P.28 References to using ‘best available scientific knowledge’ or ‘best available science’ are found in several places in the Agreement, coupled with other aims. For example, Article 4 states: ‘In order to achieve the long-term temperature goal ... to undertake rapid reductions thereafter in accordance with best available science; Article 7 provides: ‘adaptation action should be based on and guided by the best available science’, and Article 14 calls for: taking stock of progress ‘in the light of equity and the best available science’. This reflects the same concern as found in the Convention, where Article 1(2)(d) requires that the adequacy of ‘national policies and corresponding measures on the mitigation of climate change and progress to those ends must be reviewed ‘in the light of the best available scientific information and assessment on climate change and its impacts, as well as relevant technical, social and economic information...’.

P.29 Article 4(2)(c) of the Agreement similarly specifies that when calculating emissions by sources and removals by sinks of greenhouse gases the ‘best available scientific knowledge’ should be taken into account. This was already recognized in the Kyoto Protocol. Article 9 requires the ‘Conference of the Parties to periodically review this Protocol in the light of the best available scientific information and assessments on climate change and its impacts, as well as relevant technical, social and economic information’.

5. Specific Needs and Special Circumstances of Developing Country Parties

P.30 Recital 5: Also, recognizing the specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, as provided for in the Convention.

P.31 The specific needs and special circumstances of people in developing countries have been recognised from the earliest reports of the IPCC, as well as being recognised in the 1992 Convention (Article 4 (8), (9) and (10), and the Kyoto Protocol of 1997, Article 2 (3). They have also been the subject of comprehensive analyses by academic researchers as well as institutions⁴⁴ and international organizations.⁴⁵ Many of these concerns are related to the practical implications of sea-level rise, increases in atmospheric temperature and knock-on effect in terms of food and water security, the loss of livelihoods and the loss or degradation of human settlements, involuntary displacement, all of which inevitably raise human rights dimensions.

a. Particularly Vulnerable

⁴³ Andreas Fischlin, ‘Scientific and Political Drivers for the Paris Agreement’, in Klein et al (n 10) 4.

⁴⁴ For Asia and the Pacific island region see Asian Development bank, *A Region at Risk: The Human Dimensions of Climate Change in Asia and the Pacific*, 2017 <https://www.adb.org/publications/region-at-risk-climate-change> accessed 29 February 2020.

⁴⁵ International Bar Association, *Presidential Task Force on Climate Change Justice and Human Rights, Achieving Justice and Human Rights in an Era of Climate Change Disruption*, Climate Change Justice and Human Rights Task Force Report, 2014.

P.32 The countries recognized as particularly vulnerable to the adverse effects of climate change, according to Article 4(8) of the Convention are: those that include small islands or are small islands countries; those with low-lying coastal areas; with arid and semi-arid areas, forested areas and areas liable to forest decay; those with areas prone to natural disasters; or with areas liable to drought and desertification; those with areas of high urban atmospheric pollution; those with fragile ecosystems, including mountainous ecosystems; those whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products; and land-locked and transit countries.⁴⁶

P.33 While examples can be drawn from all areas of the world, perhaps the most graphic illustrations of the effect of sea-level rise as a result of climate change is demonstrated by small, low-lying island countries, particularly atoll countries, such as those in the Pacific region. As stated by ‘...in respect to sea level rise what we are seeing today in terms of marine hazards and flooding is absolutely consistent with the sea level rise science of projected impacts, and projections out to 2100 look disastrous for inhabited atoll islands even at the very lowest end of the models. It is an increasingly inconvenient truth that affords atoll nations little time to act’.⁴⁷

P.34 The impacts of sea-level rise and storm surges has been the basis for several attempts by individuals to bring legal actions with respect to migration to other countries. The case of *Teitiota v Chief Executive Ministry of Business, Innovation and Employment*,⁴⁸ provides an example of some of the legal difficulties faced by those impacted by climate change. Mr Teitiota, who was a national of the Pacific atoll State of Kiribati, had come to New Zealand with his wife on a temporary permit. He applied to stay permanently in New Zealand, but was rejected. He then applied for refugee and/or protected person status to a Refugee and Protection Officer under New Zealand immigration, but was unsuccessful. His eventual appeal to the Court of Appeal was based on a claim of ‘entitlement to be recognized as a refugee on the basis of changes to his environment in Kiribati caused by sea-level-rise associated with climate change’ under the 1951 Refugee Convention or New Zealand’s protected person jurisdiction’, but that also failed.⁴⁹

P.35 Mr Tietiota then applied to the UN Human Rights Committee⁵⁰ under the 1966 Covenant on Civil and Political Rights, claiming that New Zealand had ‘violated his right to

⁴⁶ See further discussion in Chapter 1 on Article 1.

⁴⁷ Secretariat of the Pacific Community ‘Atoll nations unite against the exceptional and existential threat caused by climate change’ 15 May 2019 <https://www.spc.int/updates/blog/2019/05/atoll-nations-unite-against-the-exceptional-and-existential-threat-caused-by> accessed 4 March 2020.

⁴⁸ New Zealand Court of Appeal NZCA 173.

⁴⁹ The Court recognized however: ‘No-one should read this judgment as downplaying the importance of climate change. It is a major and growing concern for the international community. The point this judgment makes is that climate change and its effect on countries like Kiribati is not appropriately addressed under the Refugee Convention.’ New Zealand Court of Appeal, NZCA 173 [14]; see also Dimitra Manou, Andrew Baldwin, Dug Cubie, Anja Mihr, Teresa Thorp *Climate Change, Migration and Human Rights: Law and Policy Perspectives*, (Routledge 2017) 66 and Ben Boer, ‘Climate Change and Human Rights in the Asia-Pacific: A Fragmented Approach’ in Ottavio Querico and Mouloud Boumghar, *Climate Change and Human Rights: An International and Comparative Law Perspective* (Routledge, 2016).

⁵⁰ The OHCHR noted: ‘The ruling marks the first decision by a UN human rights treaty body on a complaint by an individual seeking asylum protection from the effects of climate change’ Historic UN Human Rights case opens door to climate change asylum claims <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25482&LangID=E> accessed 6

life under the Covenant, by removing him to Kiribati in September 2015'. The Committee determined that although Mr Tietiota's right to life was not violated under Article 6(1) of the Covenant, it nevertheless accepted 'the author's claim that sea level rise is likely to render the Republic of Kiribati uninhabitable'. It also stated that 'without robust national and international efforts, the effects of climate change in receiving states may expose individuals to a violation of their rights under articles 6 or 7 of the Covenant, thereby triggering the non-refoulement obligations of sending states. Furthermore, given that the risk of an entire country becoming submerged under water is such an extreme risk, the conditions of life in such a country may become incompatible with the right to life with dignity before the risk is realized'.⁵¹

b. Specific Needs

P.36 'Specific needs' under Recital 5 can further be taken to include taking full account of the 'specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology' pursuant to Article 4(9) of the Convention.

6. Least Developed Countries and Technology

P.37 Recital 6: Taking full account of the specific needs and special situations of the least developed countries with regard to funding and transfer of technology.

P.38 This Recital replicates the exact words of Article 4(9) of the Convention. The Convention and the Agreement place least developed countries in an even more special position than the developing countries referred to in Recital 5. This while all least developed countries are all developing countries, they attract various considerations that set them apart. For example, under the Convention these considerations include being able to make their initial communications with regard to the nationally determined commitments at their discretion (Article 12(5)). Under Paris Agreement Article 4(6), least developed countries, together with small island developing States (with which they are often linked in the Agreement) 'may prepare and communicate strategies, plans and actions for low greenhouse gas emissions development *reflecting their special circumstances*' (emphasis added).

a. Funding

P.39 With regard to finance, Article 9 of the Agreement provides that scaled-up financial resources should aim to achieve a balance between adaptation and mitigation, taking into account country-driven strategies, and the priorities and needs of developing country Parties. These especially include those that are particularly vulnerable to the adverse effects of climate change and have significant capacity constraints, such as the least developed countries and small island developing States, considering the need for public and grant-based resources for adaptation.

7. Recognizing Impacts of Response Measures

P.40 Recital 7: Recognizing that Parties may be affected not only by climate change, but also by the impacts of the measures taken in response to it.

March 2020; 'Views adopted by the Committee under article 5(4) of the Optional Protocol, concerning communication No. 2728/2016' CCPR/C/127/D/2728/2016.

⁵¹ 'Views adopted by the Committee (n 43) para 9.11.

P.41 An awareness of the issue of responses to climate change is found in the Convention itself, with its Preamble stressing the need for comprehensive response strategies that should be coordinated with social and economic development in an integrated way to avoiding adverse impacts on that development, bearing in mind the needs of developing countries concerning economic growth and poverty eradication.⁵²

P.42 With respect to Recital 7, Bodansky et al observe that while trade issues are not addressed in the Paris agreement, this recital provides a ‘toehold’ for a discussion on climate policies and trade, pointing to Article 4.15 of the agreement, where the parties ‘shall take into consideration...the concerns of parties with economies most affected by the impacts of response measures, especially developing country parties.’⁵³

P.43 In their work on the impacts of response measures, Marcu and Stoefs indicate that the ‘impacts of the implementation of response measures’ is understood as ‘the unintended, negative cross-border effects of any climate change policy...’. Those impacts ‘can be social, economic or environmental, and this brings a strong connection to sustainable development’.⁵⁴ They point out that response measures were seen as an essential factor in coming to a new agreement and that the measures should take the interests of both developing and developed countries into account.⁵⁵

8. Intrinsic Relationship

P.44 Recital 8: Emphasizing the intrinsic relationship that climate change actions, responses and impacts have with equitable access to sustainable development and eradication of poverty.

P.45 This recital concerns the inherent links between climate change, sustainable development and poverty. These links were recognised in the IPCC’s Fifth Assessment Report in 2014, where it stated that, based on scientific research, ‘changes in climate have caused impacts on natural and human systems on all continents and across the oceans’.⁵⁶ It provided the following explanation:

Impacts generally refer to effects on lives, livelihoods, health, ecosystems, economies, societies, cultures, services, and infrastructure due to the interaction of climate changes or hazardous climate events occurring within a specific time period and the vulnerability of an exposed society or system. Impacts are also referred to as consequences and outcomes. The impacts of climate change on

⁵² Preamble to the Convention; see also Article 4(1)(g) and (h) and Article 4(8) with respect to commitments of developed countries.

⁵³ Bodansky et al (n 15) 348.

⁵⁴ Andrei Marcu and Wijnand Stoefs, *The Role of Response Measures in Ensuring the Sustainable Transition to a Low-GHG Economy*, International Centre for Trade and Sustainable Development 2017, 5.

⁵⁵ Ibid, 6.

⁵⁶ IPCC, ‘Summary for Policymakers’ in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, CB Field, VR Barros, DJ Dokken, KJ Mach, MD Mastrandrea, TE Bilir, M Chatterjee, KL Ebi, YO Estrada, RC Genova, B Girma, ES Kissel, AN Levy, S MacCracken, P R Mastrandrea, and LL White, eds, Cambridge University Press, 2014) (AR5 Synthesis Report) 4, <https://www.ipcc.ch/report/ar5/wg2/> accessed 21March 2020.

geophysical systems, including floods, droughts, and sea level rise, are a subset of impacts called physical impacts.⁵⁷

P.46 The concept of sustainable development resonates throughout the climate change regime, from the 1990s onwards. This was consistent with the concentration of sustainable development thinking and analysis arising from the 1987 Brundtland Report, *Our Common Future*⁵⁸ and two of the other outcome documents of the 1992 Rio Conference on Environment and Development,⁵⁹ namely *Agenda 21*,⁶⁰ and the 1992 *Rio Declaration on Environment and Development*.⁶¹ The Convention's provisions refer to it a number of times, the most pertinent mention in this context being Article 3(4): 'The Parties have a right to, and should, promote sustainable development...'. Although it was not then qualified by 'equitable', that was arguably inherent in it by reference to Article 3(1): 'The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity'. The specific idea of 'equitable access to sustainable development' appears from the deliberations at the 2010 Cancun COP onwards.⁶²

9. Fundamental Priorities and the Adverse Impacts of Climate Change

P.47 Recital 9: Recognizing the fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change.

a. Safeguarding Food Security and Ending Hunger, and the Particular Vulnerabilities of Food Production Systems

P.48 The question of food security has become significantly more important in recent years, particularly because of the work of the United Nations Secretariat on the Convention to Combat Desertification.⁶³ The *Global Land Outlook* notes as one of its key messages:

Biodiversity loss and climate change further jeopardize the health and productivity of land: higher carbon emissions and temperatures, changing rainfall patterns, soil erosion, species loss and increased water scarcity will likely alter the suitability of vast regions for food production and human habitation.⁶⁴

P.49 The reports of the Special Rapporteur on the Right to Food have also underlined the links between food production and climate change, noting:

(1) Climate change, sustainable resource management and food security are now widely considered to be among the most complex, interdependent and urgent global policy

⁵⁷ Ibid, 5.

⁵⁸ *Our Common Future*, United Nations and Oxford University Press 1987.

⁵⁹ United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit <https://sustainabledevelopment.un.org/milestones/unced>.

⁶⁰ *Agenda 21*, United Nations 1992.

⁶¹ Rio Declaration on Environment and Development, 31 ILM 874.

⁶² See Carazo (n 9) 112 and her note 36.

⁶³ See Global Land Outlook *Global Land Outlook* (2017) Secretariat of the United Nations Convention to Combat Desertification see also. Climate change and food security. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security (FAO Rome, 2012).

⁶⁴ Global Land Outlook, *ibid*, 8.

challenges. The world's scientific community predicts that average temperatures will rise by 2° to 4°C by the end of the century, posing multiple threats to agricultural production.

(2) Climate change is already having a significant impact on approximately one billion of the world's poor. The most recent figures of the Food and Agriculture Organization of the United Nations (FAO) suggest that some 795 million people are hungry; without the implementation of serious measures to combat climate change, this figure could rise some 20 per cent by 2050.⁶⁵

10. Just Transition Imperatives

P.50 Recital 10: Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities.

P.51 An important social aspect of development addressed by the Preamble is the need of 'ensuring a just transition of the workforce and the creation of decent work and quality jobs'. While the Convention was silent in this regard, as Carazo comments, 'the concept of "just transition" had been advocated in the negotiations under the Bali Action Plan and a clause of the same wording had been included in the 2010 Cancún Agreements. It confirms the recognition of the parties that the transition towards a low-emission, climate-resilient development will involve a radical departure from the economic model of today. Parties are aware of the implications and of the potential conflict with international and national legal labour provisions'.⁶⁶

The same recognition of the need for changes in economic behaviour underpins preambular paragraph 16 on the importance of sustainable lifestyles and sustainable patterns of consumption and production. This is also one of the paragraphs in the Agreement that calls for the leadership by developed country parties.

11. Common Concern of Humankind

P.52 Recital 11: Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity,

P.53 This recital is the most comprehensive of the whole Preamble. Reiterating the acknowledgement in Recital One of the Preamble to the Convention, that climate change is a common concern of humankind, the recital makes clear that the parties respective obligations extend to a range of rights. As Carazo points out, the Paris Agreement is unique because it goes

⁶⁵ Special Rapporteur on the Right to Food, Report to the General Assembly (2015), *Impact of climate change on the right to food A/70/287*.

⁶⁶ Carazo (n 9) 113 to 114.

beyond the realms of international climate and environmental law, particularly because it refers to human rights, rights of particular groups, gender equality and intergenerational equity.⁶⁷

P.54 The use of the word ‘should’, as Carazo points out, indicates a ‘soft’ obligation not usually found in a treaty preamble, and is ‘out of the ordinary’: ‘[P]reambular paragraph 11 embodies the will of the negotiating parties that it be used as a guide for the implementation of the Agreement and, as such, breaks new ground.’⁶⁸

P.55 While ‘human rights’ are specified as a general category, the list of rights concerning health, indigenous peoples, local communities’ migrants, children, persons with disabilities and people in vulnerable situations also refer, by their nature, to specific dimensions of human rights.

P.56 It is worth noting that an earlier form of Recital 11⁶⁹ was framed rather differently than the finally agreed version (main differing passages asterisked):

Emphasizing the importance of promoting, protecting and respecting all human rights, including [to promote sustainable development, and] the rights of indigenous peoples, migrants, children, persons with disabilities and people in vulnerable situations and under occupation, as well as promoting health, gender equality and the empowerment of women, while taking into account the needs of local communities, intergenerational equity concerns, and the integrity of Mother Earth, when taking action to address climate change.

P.57 In the above quotation, the phrase ‘promoting, protecting and respecting all human rights’ is somewhat more robust than ‘respect, promote and consider their respective obligations on human rights’ found in the final preambular text. Further, omitting persons ‘under occupation’ summarily ignores the plight of those who may be further disadvantaged because they are in territories occupied, legally or illegally, by foreign powers.

P.58 As noted by a report of the Special Rapporteur on the Right to Environment: ‘[T]he Paris Agreement represents a breakthrough, in that it explicitly links human rights and climate change’⁷⁰ but notes that climate change ‘is already harming billions of people, violating human rights, exacerbating inequality and perpetuating injustice.’⁷¹ It concludes: ‘[I]n today’s global climate emergency, meeting the obligations to respect, protect and fulfil human rights could help to spur the transformative changes that are so urgently required’.⁷²

P.59 Popovski optimistically notes, in relation to the human rights aspects, that the Preamble ‘contains examples of the best-ever human rights language in international environmental law... No other treaty has ever listed in such detail the human rights of all vulnerable groups’.⁷³

⁶⁷ Carazo (n 9).

⁶⁸ Ibid, 115-116.

⁶⁹ *Earth Negotiations Bulletin*. 2015. Geneva and Bonn meetings.

⁷⁰ ‘Safe Climate: Report of the Special Rapporteur on Human Rights and the Environment’ (A/74/161) 26, <https://reliefweb.int/report/world/safe-climate-report-special-rapporteur-human-rights-and-environment-a74161> accessed 2 March 2020.

⁷¹ Ibid, 34.

⁷² Ibid, 44.

⁷³ Vesselin Popovski, *The Implementation of the Paris Agreement on Climate Change* (Routledge, 2019) 24.

However, Doelle⁷⁴ identifies potential limitations of the Paris Agreement, pointing to the fact that ‘gender equity, human rights, intergenerational equity and climate justice are largely limited to the Preamble of the Paris Agreement, making their full integration into the implementation of the regime less certain’.

P.60 Certainly, a close reading of Recital 11 reveals that, although the very mention of the question of human rights in the context of climate change is to be applauded, the provision is ultimately a weak and disappointing one. This point is underlined by Bodansky et al⁷⁵ who sanguinely offer three comments on the wording of Recital 11. First, they argue that the recital ‘carefully circumscribes the impact of the reference to human rights’. They note that the Preamble ‘addresses the human rights aspects only of response measures (“when taking action”), not of climate change itself.’⁷⁶ This is a central point, which they underline by reference to the advocacy of the office of the High Commissioner of Human Rights concerning obligations ‘to take affirmative measures to prevent human rights harms caused by climate change, including foreseeable long-term harms’.⁷⁷ Further, Bodansky et al argue that ‘parties “respect, promote and consider” their human rights obligations, not “respect, protect, promote and fulfil” their obligations, as the OHCHR had urged states to do’.⁷⁸ Thus rather than finding a positive set of human rights obligations which actually require actions in the recital, we see a disappointingly anodyne formulation which requires parties only to give some consideration to this aspect. Finally, Bodansky et al point out that the ‘respective obligations’ of the parties refers to existing obligations, ‘and is not intended to imply any new ones’.⁷⁹

P.61 Given the increasing recognition of the links between human rights and the environment, the question may be legitimately asked as to why these particular human rights were included, while others were not. The most fundamental right, the right to life, is notably absent, but is of course of poignant relevance given the existential threat that the effects of rapid climate change represents, not only to millions of people around the world, but also of other life forms. Along the same lines, although the right to health is included in the recital, rights concerning food⁸⁰ and water security⁸¹ are missing. With the known the effects of climate change on ecosystems, the specific areas of agriculture and grazing might also have been expected to be mentioned within the Preamble.

P.62 The list can conceivably be extended, for example to the effects of climate change on cultural heritage, both intangible and tangible. In linking human rights, intangible cultural heritage and climate change, Quirico makes the valuable point that ‘...climate change has an

⁷⁴ Meinhard Doelle, ‘The Paris Agreement: Historic Breakthrough or High Stakes Experiment?’ *Climate Law*, (2015) 6 (1– 2), quoted by Trudy Fraser, ‘A comparative architectural analysis of the 1997 Kyoto Protocol and the 2015 Paris Agreement and other ways to counter environmental “ratification fatigue”’ in Popovski, *ibid*, 48.

⁷⁵ Bodansky et al (n 15) 227.

⁷⁶ *Ibid*, 228.

⁷⁷ Bodansky et al, *ibid*, 227-228, also referring to the Office of the High Commissioner of Human Rights, ‘Understanding of human rights and climate change: submission to COP 21’ 2015.

⁷⁸ Bodansky et al, *ibid*, emphasis in original.

⁷⁹ Bodansky et al, *ibid*, indicate that, during the negotiations, states had differing views concerning the application of human rights in the context of climate change, and therefore it was considered desirable to restrict these rights to those parties that had already undertaken obligations concerning those rights.

⁸⁰ See UN Special Rapporteur on the Right to Food, Report to the General assembly on the impact of climate change on the right to food, A/70/287 (2015).

⁸¹ See Mandate of the Independent Expert on the issue of human rights obligations related to access to safe drinking water and sanitation, United Nations, Climate Change and the Human Rights to Water and Sanitation (date 2008 check) *Climate Change and Water UN-Water Policy Brief*, 2019.

impact on intangible cultural heritage, at least with regard to the rights of people is to practice and continue shared traditions.’⁸²

a. Gender Equality and Empowerment of Women

P.63 The inclusion of gender equality and empowerment of women in environmental debates can be traced back at least to 1992 with the development of *Agenda 21* which aimed to ‘ensure that gender considerations are fully integrated into all the policies, programmes and activities’⁸³ and the Rio Declaration,⁸⁴ where Principle 20 stated: ‘Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development’. These issues were not, however, reflected in the Convention itself, or in the Kyoto Protocol.⁸⁵ The debates on these issues were given emphasis only from 2014 onwards, when the Lima Work Programme on Gender established a ‘two-year programme for promoting gender balance and achieving gender-responsive climate policy by promoting gender mainstreaming and women’s participation in the climate negotiations’.⁸⁶ Although the Preamble contains a reasonably robust recognition of these matters, the operative parts of the Agreement only include passing mention. For example, Article 7 provides: ‘Parties acknowledge that adaptation action should follow a country-driven, *gender-responsive*, participatory and fully transparent approach... (emphasis added) and Article 11(2) where capacity building under the Agreement ‘should be an effective, iterative process that is participatory, cross-cutting and gender-responsive’.

b. ...the Right to Health

P.64 The impacts of climate change on enjoyment of the right to health were recognised in the Convention itself. Article 4(f) calls for actions and the use of methods to minimize adverse effects on the economy, on public health and on the quality of the environment. The issue has long been analysed, especially through the reports of the UN High Commission on Human Rights. The UNHCR recognizes that [I]nclusion of this language in the Paris Agreement reflects growing recognition of the connections between climate change and the enjoyment of human rights, including specifically the human right to health.’⁸⁷

c. ...People in Vulnerable Situations

P.65 This phrase can of course subsume the preceding categories mentioned in this recital, namely indigenous peoples, local communities, migrants, children, persons with disabilities, as well as women, as mentioned in the last phrase of the recital, but the drafters no doubt had more particular ‘situations’ in mind.

⁸² Ottavio Querico, ‘A human rights-based approach to climate change? Insights from the regulation of intangible cultural heritage’ in Federico Lenzerini and Ana Vrdoljak, *International law for common goods: normative perspectives on human rights, culture and nature* (Hart, Oxford and Portland Oregon, 2014) 383.

⁸³ *Agenda 21* (n 61) Chapter 24.11.

⁸⁴ *Rio Declaration on Environment and Development* 1992 (1992) 31 ILM 874.

⁸⁵ History of the recognition and acceptance of the need for participation in all issues concerning climate change of women is canvassed in Gender CC: Women for Climate Justice, <https://gendercc.net/genderunfccc.html> accessed 4 March 2020; see also ‘Work generating the results of COP21 and the inclusion of gender equality in the Paris Agreement’ in *Guide to the Negotiations United Nations Framework Convention on Climate Change Twenty-third Conference of the Parties (COP23) 6 to 17 November 2017* (IFDD 2017) 169-175.

⁸⁶ Decision 18/CP.20 FCCC/CP/2014/10/Add.3, 35.

⁸⁷ OHCHR ‘The impacts of climate change on enjoyment of the right to health’ <https://www.ohchr.org/EN/Issues/HRAndClimateChange/Pages/RightHealth.aspx> accessed 4 March 2020.

d. ...Children

P.66 This recital's mention of children is not repeated in other parts of the Paris Agreement. However, the issue of children and climate change relates to a range of the matters raised in the Preamble. UNICEF, the United Nations Children's Fund states in a 2019 report: 'The conditions of life on our planet have changed. The crisis of climate change, the loss of biodiversity, and the damage done to water, air and soil, now raise concerns over whether we can feed this generation of children sustainably, never mind the generations to come.'⁸⁸

P.67 However, it is noteworthy that a number of governments at COP 25 in 2019 signed the *Intergovernmental Declaration on Children, Youth and Climate Action*.⁸⁹ The Declaration recognizes that children face heightened and specific risks due to climate change, acknowledges 'the global leadership and calls of children and young people for urgent and immediate climate action, as well as their critical role as agents of change'.⁹⁰

P.68 The mention of 'intergenerational equity' in the final part of Recital 11 reinforces, by its nature, the concern of the Agreement of the human rights of children, and also, reflects the Preamble to the Convention, which recognizes that the Parties 'should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity'.

12. Conservation and Enhancement of Sinks and Reservoirs

P.69 Recital 12: Recognizing the importance of the conservation and enhancement, as appropriate, of sinks and reservoirs of the greenhouse gases referred to in the Convention.

a. ...sinks and reservoirs

P.70 This recital relates to a basic set of requirements in the Convention with regard to the use of sinks and reservoirs as defined by Article One of the Convention, with a view, as expressed Article 4 of the Agreement, to achieving 'a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century'. The recital is closely related to the capacity of terrestrial and oceanic ecosystems, as referred to in Recital 13, to absorb and store carbon gases.

13. Ecosystem Integrity and Climate Justice

P.71 Recital 13: Noting the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, recognized by some cultures as Mother Earth, and noting the importance for some of the concept of "climate justice", when taking action to address climate change.

P.72 The term 'environmental integrity' is used several times in the Agreement, but is not specifically defined. In Article 6(1) it is coupled with the promotion of sustainable development. In Article 6(2) it is linked both with the promotion of sustainable development and the

⁸⁸ UNICEF – *The State of the World's Children 2019*, 16.

⁸⁹ Voices of Youth, <https://www.voicesofyouth.org/campaign/cop25-join-declaration-children-youth-and-climate-action> accessed 4 March 2020.

⁹⁰ *Ibid*, Declaration Preamble.

apparently unrelated notions of transparency and governance. The notion of ecosystem integrity is found in the first sentence of Principle 7 of the 1992 Rio Declaration: ‘States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth’s ecosystem.’ It can be seen as the opposite of environmental degradation, mentioned in the second sentence of Principle 7: ‘In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities.’

P.73 ‘Environmental integrity’ has been defined as ‘a complex set of concepts that describe a healthy natural system that can support essential processes’.⁹¹

P.74 Principle 4 of the IUCN World Declaration on the Environmental Rule of Law⁹² deals with the similar concept of ecosystem integrity under the heading of ‘Ecological Sustainability and Resilience’. The Principle states: ‘Legal and other measures shall be taken to protect and restore ecosystem integrity and to sustain and enhance the resilience of social-ecological systems. In the drafting of policies and legislation, and in decision-making, the maintenance of a healthy biosphere for nature and humanity should be a primary consideration’.

The concept ecosystem integrity is not restricted to the terrestrial environment, but of course also covers the marine environment. The reference to oceans in Recital 13 is a vital one, both in terms of the maintenance of marine biodiversity as well as the role of oceans in the sequestering of carbon in the context of climate change.⁹³

P.75 It is intriguing that the reference to Mother Earth, as noted above, was moved from Recital 11 to Recital 13. That is, from a recital focused on human rights to a recital focused on integrity of ecosystems and protection of biodiversity, with the apparent effect of ‘dehumanizing’ Mother Earth, removing her from a rights framework to the natural context.⁹⁴ The concept of Mother Earth is largely derived from the intrinsic and integral relationship recognised by many Indigenous peoples around the world between humans and nature, or that people and nature are one; that relationship also involves obligations to care for the natural environment as part of their culture. The concept and these obligations are recognised, for example, in the Preamble to the 2008 Ecuadorian Constitution: ‘Celebrating nature, the Pacha

⁹¹ Cymie Payne, ‘Defining the Environment’ *Environmental Protection and Transitions from Conflict to Peace: Clarifying Norms, Principles, and Practices*, Oxford Scholarship Online 2017, <https://www.oxfordscholarship.com/view/10.1093/oso/9780198784630.001.0001/oso-9780198784630-chapter-3> accessed 25 February 2020.

⁹² <https://www.iucn.org/commissions/world-commission-environmental-law/wcel-resources/environmental-rule-law>

⁹³ See K Isensee, D Herr, J Howard and S Aricò, *Blue carbon: Science developments of relevance to the UNFCCC* https://unfccc.int/sites/default/files/resource/4.4BlueCarbon_IOC.pdf and *Mitigating Climate Change Through Coastal Ecosystem Management* <https://www.thebluecarboninitiative.org/>; further, see COP23 - Progressing Faster Climate Action on Oceans - <https://unfccc.int/news/progressing-faster-climate-action-on-oceans> COP24 - Marrakech Partnership at COP24 <https://unfccc.int/sites/default/files/resource/MPGCA%20Action%20Event%20outcome%20document%20Oceans.pdf> COP25 - Climate Conference to Spur Action on the Ocean - <https://unfccc.int/news/climate-conference-to-spur-action-on-the-ocean>; see also IPCC’s Special Report in 2019, *The Ocean and Cryosphere in a Changing Climate* - <https://www.ipcc.ch/srocc/home/> accessed 25 February 2020.

⁹⁴ Carazo (n 9) 118 makes a similar point.

Mama (Mother Earth), of which we are a part and which is vital to our existence’. It is also incorporated in its substantive provisions, namely in Article 71 entitled ‘Rights of Nature’.⁹⁵

P.76 Ecosystem integrity concerning the terrestrial environment is clearly an important factor with regard to climate change. Forests and other broad scale vegetation are vital in the process of sequestration of carbon gases, as long recognised in global policy documents such as *Agenda 21*, which included a comprehensive chapter on forests, but little recognition of the relationship between forests and climate change⁹⁶ and international instruments such as the 2007 Non-legally Binding Instrument on All Types of Forests,⁹⁷ its 2002 predecessor, and the 2015 renaming of the document as the ‘United Nations Forest Instrument, which recognised ‘...the impact of climate change on forests and sustainable forest management, as well as the contribution of forests to addressing climate change’ (Preamble). From those desultory efforts in the 1990s and early 2000s, forests and forest management have become a central aspect of climate change debates, both in terms of their function as climate sinks as well as with respect to the level of greenhouse gas emissions through processes of deforestation.⁹⁸ Equally, from a low base of awareness,⁹⁹ the importance of land and soil with respect to climate change has been recognised in recent years. The 2017 *Global Land Outlook* states: Land degradation contributes to climate change and increases the vulnerability of millions of people, especially the poor, women, and children. Current management practices in the land-use sector are responsible for about 25 per cent of the world’s greenhouse gases, while land degradation is both a cause and a result of poverty. Over 1.3 billion people, mostly in the developing countries, are trapped on degrading agricultural land, exposed to climate stress, and therefore excluded from wider infrastructure and economic development.¹⁰⁰

P.77 Further, this part of the Preamble reflects ‘a growing awareness of the need to address environmental conservation as well as the cultural and practical concerns of Indigenous and local communities in the face of the threats and effects of climate change’.¹⁰¹

a. Climate Justice

P.78 The wording of this part Recital 13 appears to indicate that not all negotiating parties agreed with the idea of concept of climate justice: ‘noting the importance *for some* of the concept of “climate justice”’ (emphasis added). But this concept has in fact become increasingly significant in many jurisdictions, and is now more clearly relevant not just to ‘some’ but to a very wide range of people, governments and corporate entities, especially with

⁹⁵ Article 71: ‘Nature, or Pacha Mama, where life is reproduced and occurs, has the right to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes’. In the Preamble to the Bolivian Constitution the concept of Pacha Mama is similarly recognised.

⁹⁶ *Agenda 21* (n 61), ‘Combating Deforestation’. Chapter 11.14c contains a brief mention: ‘assessing the potential impact on forests of climatic change, as well as effects of forests on climate, and initiating in-depth studies on the carbon cycle relating to different ‘forest types to provide scientific advice and technical support’.

⁹⁷ A/RES/70/199.

⁹⁸ UN, Department of Economic and Social Affairs: Forests ‘At COP25, UN agencies commit to turn the tide on deforestation’. <https://www.un.org/esa/forests/news/2019/12/at-cop25-un-agencies-commit-to-turn-the-tide-on-deforestation/index.html>.

⁹⁹ See Ben Boer and Ian Hannam, ‘Land degradation’ in Emma Lees and Jorge E. Viñuales (eds) *The Oxford Handbook of Comparative Environmental Law* (Oxford 2019).

¹⁰⁰ *Global Land Outlook* (2017, Secretariat of the United Nations Convention to Combat Desertification).

¹⁰¹ Ben Boer, ‘The Environment and Cultural Heritage’ in Francesco Francioni and Ana Filipa Vrdoljak (eds) *The Oxford Handbook of International Cultural Heritage Law*, (Oxford University Press, 2020) 342.

the increasing incidence of litigation concerning climate change.¹⁰² A particular focus of the litigation is on the rights of future generations,¹⁰³ and especially the rights of children.¹⁰⁴ Mayer helpfully explores four aspects of climate justice: corrective justice (focusing on the possibility of repairing harm caused by wrongful conduct), distributive justice (concerned with redistributing global ‘goods’ to ensure that all enjoy fundamental rights that human dignity is ‘duly respected’) and intergenerational justice (regarding duties of the present generations to future generations) and environmental justice (involving protection of environment for its own sake).¹⁰⁵

14. Education, Public Participation and Access to Information

P.79 Recital 14: Affirming the importance of education, training, public awareness, public participation, public access to information and cooperation at all levels on the matters addressed in this Agreement. This Recital harks back to Article 6 of the Convention, which is concerned with processes of education, training and public awareness that assist parties in carrying out the wide-ranging commitments set out in Article 4. It is closely linked to Recital 15, of the Agreement with regard to the participation of non-state actors. By the early 1990s, questions of public participation had become an important part of the environmental debate, but demands for access to information and access to justice became more prominent later in that decade, particularly in Europe, resulting in the 1997 Aarhus Convention.¹⁰⁶ Given the concerns of the Aarhus Convention it is thus curious that while the Paris Agreement mentions ‘climate justice’ in Recital 13, there is no mention in Recital 14 of its achievement in the context of public participation and access to information. Notwithstanding the lack of encouragement with respect to access to justice in the Agreement, non-state actors have needed no prompting in bringing a wide variety of legal actions relevant to achieving ‘corrective justice’ against both states and private entities concerning the burning of fossil fuels and the effects thereof.¹⁰⁷

15. Participation of Non-State Actors

P.80 Recital 15: Recognizing the importance of the engagements of all levels of government and various actors, in accordance with respective national legislations of Parties, in addressing climate change.

P.81 This recital is consistent with ‘bottom up’ approach which is a characteristic of the Paris Agreement.¹⁰⁸ It also underlines the increasing importance of non-state actor participation in

¹⁰² *The Status of Climate Change Litigation: A Global Review*, United Nations Environment Programme; Columbia University, Sabin Center for Climate Change Law <https://wedocs.unep.org/handle/20.500.11822/20767U>.

¹⁰³ Peter Lawrence, *Justice for Future Generations: Climate Change and International Law* (Edward Elgar 2015).

¹⁰⁴ In the United States, the Children’s Trust cases have drawn wide attention, with litigation occurring at federal level as well as in every state. The longest running of these cases is the *Juliana v US*, see <https://www.ourchildrenstrust.org/juliana-v-us> accessed 26 February 2020.

¹⁰⁵ Benoit Mayer, *The International Law of Climate Change* (Cambridge, 2018) 27-31.

¹⁰⁶ UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters 2161 UNTS 447 (1998); see also Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, 2018 (not yet in force).

¹⁰⁷ *The Status of Climate Change Litigation* (n 88); Children’s Trust cases (n 90).

¹⁰⁸ Yann Robiou du Pont and Malte Meinshausen ‘Warming assessment of the bottom-up Paris Agreement emissions pledges’, *Nature Communications* (2018) 9:4.

the negotiation and drafting on MEAs.¹⁰⁹ The recital also relates to Art 16(8) of the Convention, which is focused on the admission of observers to the Conference of the Parties serving as the meeting of the Parties to the Agreement. That article recognises that any body or agency, whether national or international, governmental or non-governmental, qualified in matters covered by the Agreement, having informed the secretariat of its wish to be represented ‘may be so admitted unless at least one third of the Parties present object’, subject only to the relevant rules of procedure.

P.82 Non-party stakeholders are not defined in the Agreement itself. However, Decision 1/CP.21,¹¹⁰ adopting the Agreement, includes the following in its Preamble:

Agreeing to uphold and promote regional and international cooperation in order to mobilize stronger and more ambitious climate action by all Parties and *non-Party stakeholders, including civil society, the private sector, financial institutions, cities and other subnational authorities, local communities and indigenous peoples* (emphasis added).

P.83 This represents a very broad formulation of who can be involved as non-party stakeholders. It is reinforced by paragraphs 134 to 138 in Decision 1/CP.21, where the efforts of non-party stakeholders are welcomed to address and respond to climate change, including those of civil society, the private sector, financial institutions, cities and other subnational authorities. They are invited ‘to scale up their efforts and support actions to reduce emissions and/or to build resilience and decrease vulnerability to the adverse effects of climate change and demonstrate these efforts via the Non-State Actor Zone for Climate Action platform referred to in paragraph 118’.¹¹¹

P.84 The positions of different States and groups of Parties on this issue were quite varied, from restrained to more expansive. For instance, in its submission to the ADP’s work on the draft agreement, Canada proposed that the Preamble’s recital be stated in terms that expressly recognised the role of subnational and local authorities in addressing climate change at the domestic level.¹¹² By contrast, the Least Developed Countries Group’s proposed a holistic expansion of the Preamble’s recital to emphasise the ‘need for universal and sustained action by all to respond to the urgent threat of climate change’.¹¹³ In a similar vein, the Arab Group proposed an addition to the Preamble that sought to capture both international and domestic

¹⁰⁹ See Mark Drumbl, Mark Drumbl, ‘Actors and Law-Making in International Environmental Law’ in Malgosia Fitzmaurice, David Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law* (Edward Elgar, 2010); also Ben Boer, ‘International Law-Making’ in *Research Handbook on International Law And Natural Resources*, E. Morgera, K. Kulavesi, eds, Edward Elgar, UK, 2016.

¹¹⁰ Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015. Addendum, Part two: Action taken by the Conference of the Parties at its twenty-first session FCCC/CP/2015/10/Add.1 29 January 2016.

¹¹¹ It is not just para 118 of Dec 1/CP.21 that is interesting in this respect, see also paras 119-120:

119. *Encourages* Parties to work closely with non-Party stakeholders to catalyse efforts to strengthen mitigation and adaptation action;

120. *Also encourages* non-Party stakeholders to increase their engagement in the processes referred to in paragraph 110 above and paragraph 125 below.

¹¹² Reference to be inserted.

¹¹³ Submission by Angola on behalf of the Least Developed Countries Group – ‘surgical insertions’ to co-chairs’ non-paper (v5 October 2015) Preamble <https://unfccc.int/sites/default/files/adp2-11_preamble_idcs_19oct2015.pdf>; AOSIS, AOSIS ADP Contact Group - 19 October 2015, Textual Insertions https://unfccc.int/sites/default/files/aosis_ws1_revised.pdf . accessed 29 February 2020.

actors.¹¹⁴ Indonesia also recognised the need for ‘universal and sustained ambitious action by all’, but suggested further that any such response be ‘based on the best available scientific knowledge’.¹¹⁵

16. Important role of sustainable consumption and production patterns

P.85 Recital 16: Also, recognizing that sustainable lifestyles and sustainable patterns of consumption and production, with developed country Parties taking the lead, play an important role in addressing climate change. The concept of sustainable development and associated terminology such as sustainability, have a long history. That history was traced back to the early 1970s by Vice President Weeramantry in his separate opinion in the Danube Dam Case in the International Court of Justice¹¹⁶ where he stated that what he characterized as the *principle*¹¹⁷ of sustainable development ‘must hold the balance even between the environmental considerations and the developmental considerations raised’.¹¹⁸ It was first introduced into the global environmental debate by the 1980 World Conservation Strategy. It was popularized by the Brundtland Report,¹¹⁹ which defined it as: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Since that time, sustainable development has appeared in myriad policy documents and wide range of multilateral environmental agreements, including the Climate Change Convention and the Biodiversity Convention,¹²⁰ and was the central guiding concept in *Agenda 21*.¹²¹ It forms the basis for the major initiative of the Sustainable Development Goals of 2015,¹²² and is mentioned in various formulations in the Agreement. Azizi, Biermann and Kim note it is mentioned twelve times in the Agreement,¹²³ stating that the ‘politically more sensitive economic dimension of sustainable development features less prominently than the social dimension, but it does include wording similar to the Sustainable Development Goal on sustainable consumption and production’.¹²⁴ They go on to argue that “‘economic growth” as

¹¹⁴ Resolving to uphold and promote international cooperation, to enhance the implementation of the Convention and to mobilize stronger more ambitious climate action by all actors, and to mobilize stronger climate action by all’: Insertion of language proposed by Kuwait on behalf of the Arab Group https://unfccc.int/sites/default/files/arab_group_ws2.pdf accessed 29 February 2020.

¹¹⁵ Indonesia: Insertion For Elements On Agreement (Doc ADP.2015.8.InformalNote) https://unfccc.int/sites/default/files/indonesia_-_insertion_adp2.11_agreement.pdf accessed 29 February 2020; for suggestions on how to encourage participation by these groups see Freedom-Kai Phillips ‘Participation of Non-party Stakeholders under the UNFCCC: Options for Future Engagement’ CIGI Papers No. 205, December 2018, <https://www.cigionline.org/publications/participation-non-party-stakeholders-under-unfccc-options-future-engagement> accessed 3 March 2020; see also See also Tim Cadman and Tek Maraseni ‘Stakeholder perceptions of the implementation capacity of the climate change regime’ in Popovski (n xxx) 138-150.

¹¹⁶ International Court of Justice, *Gabčíkovo-Nagymaros Project (Hungary/Slovakia)* case <https://www.icj-cij.org/en/case/92>, 88-116, accessed 29 February 2020.

¹¹⁷ Other judges in the Court referred to it as a *concept*.

¹¹⁸ Weeramantry P. (n 101) 89; see also sustainable development see Justice Mensah & Sandra Ricart Casadevall, ‘Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review’, *Cogent Social Sciences*, 5:1, 1653531.

¹¹⁹ Report of World Commission on Environment and Development, Oxford University Press 1987.

¹²⁰ Convention on Biological Diversity 1992 (1760 U.N.T.S. 69).

¹²¹ *Agenda 21* (n 60).

¹²² Sustainable Development Goals <https://sustainabledevelopment.un.org/?menu=1300> accessed 29 February 2020.

¹²³ Dona Azizi, Frank Biermann and Rakhyun E. Kim ‘Policy Integration for Sustainable Development through Multilateral Environmental Agreements: An Empirical Analysis, 2007–2016’ *Global Governance* 25 (2019) 445–475, 454, (footnotes omitted).

¹²⁴ *Ibid*.

such is not associated with the cause of climate change, but remains an ultimate goal to be promoted along with “long-term global response to climate change” and “sustainable development.”¹²⁵

P.86 When ‘sustainable’ is combined with other words in the Agreement, such as ‘sustainable lifestyles’ ‘sustainable patterns of consumption and production’, in Recital 16, ‘sustainable management of forests’ (Article 5, para 2), ‘sustainable management of natural resources’ (Article 7 Para 9(e)), their point is reinforced, underlining just how broadly the sustainable development paradigm has penetrated the climate change debate.

P.87 ‘Sustainable lifestyles and sustainable patterns of consumption and production’ in Recital 16 are meant to ‘play an important role in addressing climate change’. The question is how much change in lifestyle and consumption and production patterns is required at an individual, community and national level to make a difference? No specific guidance is given in this respect in the Agreement, the Kyoto Protocol or in the Convention itself. However, the IPCC is unequivocal in stating that ‘[L]ow energy demand and low demand for land- and GHG-intensive consumption goods facilitate limiting warming to as close as possible to 1.5°C.’¹²⁶ It states with ‘high confidence’ that ‘[L]ifestyle choices lowering energy demand and the land- and GHG-intensity of food consumption can further support achievement of 1.5°C pathways’.¹²⁷ However, Welch and Southerton¹²⁸ consider that ‘nothing short of fundamental transformations of the production-consumption systems that drive emissions, and profound change in the socioeconomic system that underpins them, will be sufficient if we are to achieve anything near such targets’ [of emission reduction].¹²⁹ They argue that “[A]bsolute decoupling – in which economic growth continues but environmental impact decreases – is nowhere in sight”¹³⁰ and that it ‘is therefore imperative that the urgent transformation of whole systems of consumption and production is placed on the global climate change-policy agenda’.¹³¹

P.88 Despite the implications of Recital 15, in the light of the IPCC’s reports, the work of governments at every level and the endeavours of global and national non-government environmental organisations, the impetus for large-scale, internationally coordinated changes in terms of lifestyles and consumption and production patterns has not reached the level where all of these efforts can make a substantive and meaningful difference.

E. Conclusion

P.89 As should be clear from this chapter, the subject matter of many of the recitals of the Preamble to the Paris Agreement continue to be or will become significant drivers and points of reference in the climate change debate. It is clear that the Preamble frames the context of how the Agreement can be understood, but does not limit it. The ‘living tree’ principle of Article 31(3) of the Vienna Convention on the Law of Treaties may be particularly apt,

¹²⁵ Ibid.

¹²⁶ Intergovernmental Panel on Climate Change (IPCC). 2018. “Chapter 2: Mitigation pathways compatible with 1.5 C in the context of sustainable development.” The Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5 °C, 93–174. Geneva: IPCC <https://www.ipcc.ch/sr15/95>, accessed 29 February 2020.

¹²⁷ Ibid, 97.

¹²⁸ Daniel Welch & Dale Southerton, ‘After Paris: Transitions for Sustainable Consumption’ *Sustainability: Science, Practice and Policy* 15:1, 31-44.

¹²⁹ Ibid, 32.

¹³⁰ Ibid.

¹³¹ Ibid.

whereby we can conceive of the Paris Agreement as a living instrument capable of an evolutive interpretation,¹³² perhaps manifested most particularly by the principle of progression inherent in Article 3 and Article 4(3) of the Agreement.

P.90 Although not all of elements of the Preamble are reflected in the operative provisions of the Agreement, they nevertheless record the hopes and aspirations of the wide range of interests of Party and non-Party stakeholders. The elements may act as ambit claims for future negotiations, in line with the recently minted principle of progression. In the coming years, further refinements will be made to the interpretation of the Paris Agreement through decisions of Conferences and Meetings of the Parties, and in due course a further binding agreement with vastly increased ambitions can and should be expected.

¹³² Weeramantry P. (n 101) 114; see also Panos Merkouris, *Article 31(3)(c) VCLT and the Principle of Systemic Integration: Normative Shadows in Plato's Cave* (Brill Nijhoff, 2015) 144.