



ILA Guidelines for Sustainable Natural Resources Management for Development

Marie-Claire Cordonier Segger^{3,4} · Nico J. Schrijver^{1,2}

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Introductory Note

On 13 December 2020, the 79th Conference of the International Law Association (ILA) adopted by consensus the ‘ILA Guidelines for Sustainable Natural Resources Management for Development’ (Resolution 2020/4). This resolution was passed at the conclusion of its Kyoto session, which in view of COVID-19 constraints took place virtually for the first time in history. The ILA Sustainable Natural Resources Guidelines had been prepared by the ILA Committee on the Role of International Law in the Sustainable Natural Resources Management for Development, in which Professor Marie-Claire Cordonier Segger (Canada) and Professor Nico Schrijver (the Netherlands) served as Rapporteur and Chairperson, respectively. This Committee was established in November 2012, building on a distinguished history of ILA enquiry into international law on sustainable development and with a traditional focus on the developmental dimensions. The ILA Committee engaged 49 legal expert members from over 30 countries from six continents, and over eight years met in collaborative working sessions in Leiden (2015), Montreal (2017), Cambridge (2018), Athens (2019) and Lugano (2020, in hybrid form).¹

¹ The final report of the Committee as well as its previous biannual reports can be consulted under ‘Committees’ at www.ila-hq.org. The Chair and Rapporteur gratefully recognize the contributions of the experts from the Committee, particularly the editorial group including Prof. Ilaria Espa (Italy), Dr. Alexandra Harrington (Colombia), Cairo Robb (UK), Dr. Fabiano de Andrade Correa (Brazil), Prof. Emmanuella Doussis (Greece) and Dr. Nadia Sanchez Castillo-Winkels (Chile/the Netherlands), as well as from the team of dedicated legal researchers from the University of Victoria, Canada, including Ellen Campbell and Courtenay Jacklin, and from the University of Cambridge, including Freedom-Kai Phillips, Chantalle Byron, Yanela Ntloko, Ra’chel Thorpe-Blair, Fabiana Piccoli Araujo Sanchez, David Gayle, Tejas Rao, Beth Pasfield and Timothy Arvan.

✉ Nico J. Schrijver
n.j.schrijver@law.leidenuniv.nl
Marie-Claire Cordonier Segger
mccs2@cam.ac.uk

- ¹ Leiden University, Leiden, The Netherlands
- ² Board of Editors NILR, The Hague, The Netherlands
- ³ University of Waterloo, Waterloo, Canada
- ⁴ Cambridge University, Cambridge, UK

Global concern about sustainable natural resource management is increasing significantly. In response, the field of international law on sustainable development has been rapidly evolving. The Committee adopted a broad notion of ‘natural resources’. Systematic deliberations focused on: (1) global natural resources that have been recognised as common concerns or the common heritage of humankind, such as celestial bodies, the atmosphere and a stable climate system, biological diversity and ecological systems, and the ocean and its mineral and living resources; (2) regional and transboundary natural resources of global importance such as forests and landscapes, rivers and freshwater ecosystems, and migratory species; and (3) national natural resources of global relevance such as forests and landscapes, land and soil, mineral commodities, including precious minerals, and sustainable energy. The experts on the ILA Committee considered instances in which commitments to the sustainable management of natural resources for development have been enshrined in international treaty law, reflected in the practices of States and international organizations and in the decisions of international courts and tribunals, and increasingly operationalized in international ‘soft law’ goals, standards and guidelines in relation to different resources, taking into consideration selected national level developments where relevant.

Three principal pillars formed the Work Programme of this ILA Committee:

(i) The study and analysis of the contents, legal status and application of the principles and rules of international law related to the sustainable management of natural resources at the international and national levels, as well as an assessment of the practice of States, and international organizations in this field;

(ii) An examination of the relationship between the evolving international law in the field of sustainable development and the principle of the sustainable use of natural resources, particularly analysis of:

- a. the status of the obligation of States to use natural resources in a manner that is sustainable, including issues such as the obligation to undertake impact assessments of plans and projects that might affect sustainable development, transboundary resources management, the sharing of resources in the world interest and taking into account the interests and needs of future generations;
- b. innovative instruments to support sustainable use of natural resources and their status and implementation in international and national law, including measures within regional trade and investment agreements and multilateral economic treaties;
- c. the relationship between natural resource management and the enjoyment of human and peoples’ rights;
- d. decisions of international courts and tribunals on matters related to natural resource management.

(iii) The study of national and international approaches to the regulation of natural resources in developing countries and the impact of such approaches on the sustainable use of natural resources and on the evolution of international law in this field.

In essence, the ILA Committee’s work has demonstrated that the world’s natural resources, once seen as national and subject to permanent sovereignty, are now increasingly recognized as eliciting common global, regional, transboundary and national

concerns, thereby challenging international law to provide more coherent and effective cooperative regimes for sustainable management. Tensions can exist with regard to certain nationally-based resources, however myriad rules and standards now define, guide and direct State practice, providing a roadmap for the progressive development of international law on the sustainable management of natural resources for development.

In the view of the ILA Committee, international law has the potential to shape the principles, regulatory frameworks, institutions, standards and incentives for natural resource management on multiple local, national, regional and global levels. After a thorough review, the Committee's findings suggest that international law both reflects and also serves as a critical catalyst for the design, adoption, and implementation of sustainable natural resource management and resolution of disputes in relation to the use of natural resources. Global natural resources which have been recognised as common concerns or the common heritage of humankind crucially require increased collective commitment and compliance with the international law and practices reflected in the newly adopted ILA Sustainable Natural Resources Guidelines. Regional and transboundary natural resources of global importance are also greatly at risk, and their sustainability depends on the crafting, implementation and enforcement of effective and collaborative international legal regimes. Further, the sustainable management of national natural resources of global relevance can be greatly facilitated by international law. Indeed, international law and non-binding international and national instruments such as standards and guidelines function as a baseline for States and other actors involved in natural resource management, shaping operating environments in which sustainable development will either be fostered, or frustrated.

In assessing the role of international law in this context, it is crucial to take into account how concepts of sovereignty and territory are evolving to accommodate new scientific understanding of interrelated ecological systems and conditions, whereby notions of custodial sovereignty may offer useful insights. The Committee's work has established that sovereignty, of key importance to international law from its inception, is becoming both more fluid and more qualified in the face of shared responsibilities for the sustainable use of transboundary, regional, and global international natural resources, and collaborative regimes for management. The Committee has identified tensions in the context of nationally-based natural resources, and has considered how international legal regimes may offer options to reconcile key concerns, avoiding or reducing the potential for conflict between and within States over resource use, as well as defusing potential clashes between resource conservation and exploitation goals.

Natural resources are also essential to advance nearly all 17 Sustainable Development Goals, and many of their 169 targets, from poverty elimination, to ending hunger, to access to water and energy, to combating climate change and promoting peace, justice and security.² The Committee noted that international natural resources management systems could make a vital contribution to the achievement of the Sustainable Development Goals and the 2030 Agenda worldwide, but also

² See *Transforming Our World: The 2030 Agenda for Sustainable Development*, UN Doc. A/RES/70/1, 25 September 2015, which includes the 17 global Sustainable Development Goals (SDGs).

that how these regimes are governed will be crucial for their implementation and enforcement. The Committee's work highlights a number of governance mechanisms, ranging from formalized compliance mechanisms to informal industrial and sectoral oversight procedures, which implement essential tools for sustainable natural resources management and the sustainable use of natural resources.

These Guidelines reflect both established international law, including *lex lata* rules of treaty law that are binding on the Parties as well as customary rules, and also many norms that are still *lex ferenda*, with a view to future directions in law-making.

The Guidelines are organized in three parts. The First Part (I) presents, sector by sector in a non-exhaustive survey, certain guidelines for the sustainable management of global, regional, transboundary and national natural resources, covering: (1) global natural resources such as celestial bodies, the atmosphere and a stable climate system, biological diversity and ecological systems, and the ocean and its mineral and living resources; (2) regional and transboundary natural resources of global importance such as forests and landscapes, rivers and freshwater ecosystems, and migratory species; and (3) national natural resources of global relevance such as forests and landscapes, land and soil, mineral commodities, including precious minerals, and sustainable energy. The Second Part (II) addresses trends and innovations in international legal instruments and approaches in sustainable natural resources management for development, with a non-exhaustive selection covering trends from: (1) human rights approaches; (2) economic instruments; (3) environment and sustainable development cooperation including scientific collaboration, financing mechanisms, monitoring, reporting and verification, and public participation and access to information and justice; and (4) peacebuilding and post-conflict instruments, including secure land and water access. This Part also covers (5) innovative techniques and requirements in international instruments on the sustainable management of natural resources for development, with special attention to: (a) sustainable resources management through transparency and stakeholder engagement, (b) equitable benefit-sharing from sustainable natural resources management, (c) legal indicators of effectiveness for sustainable natural resources management, and (d) control of illicit flows for sustainable natural resources management. The Part further covers a brief, non-exhaustive update on (6) sustainable natural resources management in international dispute settlement. Finally, in the Third Part (III), explanatory notes are provided for the interpretation and application of the 2020 ILA Guidelines on the Role of International Law in Sustainable Natural Resources Management for Development.

These ILA Kyoto Sustainable Natural Resources Guidelines build on and contribute important insights to earlier key normative standards of the ILA, including the ILA Seoul Declaration on the Progressive Development of Principles of Public International Law relating to a New International Economic Order, published in 33 *NILR* (1986), pp. 326–333 and the ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development, published in 49 *NILR* (2002), pp. 299–305.

Appendix

INTERNATIONAL LAW ASSOCIATION

KYOTO CONFERENCE (2020)

RESOLUTION No. 4 /2020

THE ROLE OF INTERNATIONAL LAW IN SUSTAINABLE NATURAL RESOURCES MANAGEMENT FOR DEVELOPMENT

The 79th Conference of the International Law Association held in Kyoto, Japan, 29th November to 13th December 2020;

TAKING INTO ACCOUNT with gratitude the ILA 2002 New Delhi Declaration;¹ the ILA 2012 Sofia Guiding Statements;² the final Report of the ILA Committee on the Legal Principles Relating to Climate Change;³ the Reports of the UN Special Rapporteur on Human Rights and the Environment;⁴ the IUCN Draft Covenant on Environment and Development;⁵ the UNEP Decision and Global Report on the Environment and the Rule of Law;⁶ the work of the World Bank on governance and the rule of law;⁷ the ILC Draft Principles on the Protection of the Environment in Relation to Armed Conflicts;⁸ and the FAO/UNEP Legislative approaches to sustainable agriculture and natural resources governance,⁹ among other important findings,

¹ International Law Association, 'ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development' (New Delhi Conference, New Delhi, 2002). Also published as UN Doc. A/57/329, 31 August 2002, in both English and French. See N Schrijver, ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development (2002) 49:2 *Netherlands International Law Review* 299-305. doi:10.1017/S0165070X00000528 and his Hague Academy course, 'The Evolution of Sustainable Development in International Law: Inception, Meaning and Status' (2007) 329 *Recueil des cours* 217-412. See also MC Cordonier Segger and A Khalifan, *Sustainable Development Law: Principles, Practices and Prospects* (OUP 2004).

² International Law Association, 'ILA Sofia Guiding Statements on the Judicial Elaboration of the 2002 New Delhi Declaration of Principles of International Law Relating to Sustainable Development' (Sofia Conference, Sofia, 2012); Also see MC Cordonier Segger and CG Weeramantry (eds), *Sustainable Justice: Reconciling Economic, Social and Environmental Law* (Martinus Nijhoff / Brill 2005).

³ International Law Association, 'Legal Principles Relating to Climate Change' (Washington Conference, Washington, 2014) <<https://ssrn.com/abstract=2461556>> accessed 8 November 2020.

⁴ JH Knox, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Framework Principles* (24 January 2018) United Nations Human Rights Council, A/HRC/37/59.

<<https://ssrn.com/abstract=3148450>> accessed 8 November 2020.

⁵ IUCN, Draft International Covenant on Environment and Development - Implementing Sustainable Development - Fifth Edition: Updated Text (4th Revision) (IUCN, 2015).

⁶ UNEP Governing Body (2013), *Advancing Justice, Governance and Law for Environmental Sustainability* Decision 27/9 <<https://www.unenvironment.org/explore-topics/environmental-rights-and-governance/what-we-do/promoting-environmental-rule-law-0>> accessed 8 November 2020; UNEP (2019) *Environmental Rule of Law: First Global Report* ISBN: 978-92-807-3742-4 <<https://www.unenvironment.org/resources/assessment/environmental-rule-law-first-global-report>> accessed 8 November 2020.

⁷ World Bank Group, World Bank Group Strategy for Fragility, Conflict and Violence 2020-2025; World Bank Group, World Development Report 2017: Governance and the Law; World Bank Group, Strengthening Governance, Tackling Corruption: the World Bank Group's Updated Strategy and Implementation Plan (World Bank Group, 2012); H Cisse, NR Madhava Menon, MC Cordonier Segger & VO Nmechelle (eds), World Bank Legal Review 5 Fostering Development through Opportunity, Inclusion and Equity (World Bank Group, 2014).

⁸ For the text of the draft principles, see ILC, 'Report of the International Law Commission on the Work of its 71st Session' (29 April- 7 June and 8 July-9 August 2019) UN Doc A/74/10 [211]-[15] <<https://undocs.org/en/A/74/10>> accessed 8 November 2020.

⁹ FAO & UNEP, *Legislative Approaches to Sustainable Agriculture and Natural Resources Governance*. FAO Legislative

CONSIDERING that, in accordance with international law, all States have the sovereign right to manage their own natural resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause significant damage to the environment of other States or of areas beyond the limits of national jurisdiction,

EMPHASIZING that States are under a duty to manage natural resources, including natural resources within their own territory or jurisdiction, in a rational, sustainable and safe way so as to contribute to the development of their peoples, with particular regard for the rights of Indigenous peoples, and to the conservation and sustainable use of natural resources and the protection of the environment, including ecosystems,

FURTHER EMPHASIZING that States must take into account the needs of future generations in determining the rate of use of natural resources, and that all relevant actors (including States and other stakeholders) are under a duty to avoid wasteful use of natural resources, promote waste minimization policies, and to implement the principle of sustainable use of natural resources,

RECALLING that the protection, preservation and enhancement of the natural environment requires global cooperation, and particularly that the change in the Earth's climate and its adverse effects, and the conservation of biological diversity, are the common concern of humankind, that the resources of the Moon and other celestial bodies and of the seabed, ocean floor and subsoil thereof beyond the limits of national jurisdiction are the common heritage of humankind, and that the peaceful exploration and use of outer space is of common interest to all humankind,

RECOGNIZING that the principle of sustainable use of natural resources is intertwined with the principle of equity and eradication of poverty, including intra- and inter-generational equity and the right to development; the principle of common but differentiated responsibilities and capabilities; the principle of a precautionary approach to human health, natural resources and ecosystems; the principle of public participation and access to information and to justice; the principle of good governance; and the principle of integration and interrelationship, in particular in relation to human rights and social, economic and environmental objectives, and necessitates cooperation and action at all levels, in internal and external relations and involving all actors to ensure sustainable consumption and production patterns,

NOTING the existence of myriad binding multilateral, regional and bilateral treaties which directly ensure or relate to the sustainable management of natural resources for development, including those which are considered universal and reflect *erga omnes partes* obligations, as well as those reflecting *lex ferenda* principles of international law, as mentioned below,

RECOGNIZING that the role of international law in sustainable management of natural resources has changed over time, and can differ depending on the state of international collaboration with regards to the particular resource, the nature and location of the specific resource involved, the renewable or non-renewable character of the resource, the interdependence of ecological systems which sustain the resource, the best available science and technology, distributive justice, substantive equality and benefit-sharing considerations, and other important factors,

RECOGNIZING that advances in scientific understanding underscore the interconnectedness of environmental, animal and human health and well-being, and highlight hitherto unacknowledged or underacknowledged interconnections in the atmosphere-land-water-

Study No. 114 (FAO/UNEP, 2020) <<https://www.unenvironment.org/resources/publication/legislative-approaches-sustainable-agriculture-and-natural-resources>> accessed 8 November 2020.

biodiversity nexus, as well as the need to respect ecological limits and planetary boundaries to avoid tipping points and reduce risks to society and nature,

TAKING into account the work of independent scientists and scientific bodies, including but not limited to the Intergovernmental Panel on Climate Change (IPCC), the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the UNCCD Science-Policy Interface (SPI), the Intergovernmental Technical Panel on Soils (ITPS), and the World Ocean Assessment (WOA), and the importance of work being done at the science-policy interface, including in relation to ‘nature-based solutions,’

ACKNOWLEDGING also the increasing interest in systems thinking, including the ecosystem approach, as well as traditional and Indigenous knowledge and State practice and scholarship advocating ecocentric approaches in law,

RECOGNIZING the importance of effective governance and sustainable peace, including in conflict and post- conflict situations, and that sustainable natural resources management prioritizes equity and the interests of, and benefits for, all persons, including local communities and Indigenous peoples, and future generations, and ensures free, informed and meaningful participation in decision-making,

NOTING that care is required to ensure that even well-intentioned sustainable development policies are not enshrined in legislation in such a manner as to create perverse incentives that risk resulting in unsustainable natural resource use, including unsustainable land use or land use change or other forms of maladaptation,

ACKNOWLEDGING in the light of the above that the conservation and use of natural resources, which may be viewed as global, regional, transboundary or national resources based on their spatial attributes, raises cooperation and distributional issues of global relevance,

HIGHLIGHTING that the natural resources in each of these categories have been the subject of both hard and ‘soft’ rules of international law, including many binding international, regional and bilateral treaties, the principles of international law on sustainable development and, over time, related codes of practice between States, and have been considered by international courts and tribunals;

DOES HEREBY:

1. **REAFFIRM** the 2002 New Delhi Declaration of Principles of International Law Relating to Sustainable Development,
2. **REAFFIRM** the 2012 Sofia Guiding Statements on the Judicial Elaboration of the 2002 New Delhi Declaration of Principles of International Law Relating to Sustainable Development,
3. **ADOPT** the **2020 ILA Guidelines on the Role of International Law in Sustainable Natural Resources Management for Development**, as annexed to this Resolution, which in accordance with the principles of international law on sustainable development, and supported by myriad international legal instruments, are found to be defining and guiding the sustainable management of natural resources in the world today, and also providing a roadmap for the progressive development of international law on the sustainable management of natural resources for development.
4. **RECOMMENDS** to the Executive Council that the Committee, having completed its mandate, be dissolved.

ANNEX I

INTERNATIONAL LAW ASSOCIATION

KYOTO CONFERENCE (2020)

2020 ILA GUIDELINES ON THE ROLE OF INTERNATIONAL LAW IN SUSTAINABLE NATURAL RESOURCES MANAGEMENT FOR DEVELOPMENT

In accordance with the principles of international law on sustainable development, and supported by myriad international legal instruments, these 2020 ILA Guidelines on the Role of International Law in Sustainable Natural Resources Management for Development are found to be defining and guiding the sustainable management of natural resources in the world today, and also providing a roadmap for the progressive development of international law on the sustainable management of natural resources for development.

These Guidelines reflect both established international law, including *lex lata* rules of treaty law that are binding on the Parties to key instruments and also customary rules, and also many norms that are still *lex ferenda*, with a view to future law. They are organized in three parts.

The First Part (I) presents, sector by sector in a non-exhaustive survey, certain guidelines for the sustainable management of global, regional, transboundary and national natural resources, covering: (1) global natural resources such as celestial bodies, the atmosphere and a stable climate system, biological diversity and ecological systems, and the ocean and its mineral and living resources; (2) regional and transboundary natural resources of global importance such as forests and landscapes as regional and transboundary natural resources, rivers and freshwater ecosystems as regional and transboundary natural resources, and migratory species as regional and transboundary natural resources; and (3) national natural resources of global relevance such as forests and landscapes, land and soil, mineral commodities, including precious minerals and sustainable energy.

The Second Part (II) addresses trends and innovations in international legal instruments and approaches in sustainable natural resources management for development, with a non-exhaustive selection covering: (4) trends from international human rights, economic, environmental, peacebuilding and post-conflict instruments related to the sustainable use of natural resources for development including human rights approaches; economic instruments; environment and sustainable development cooperation including scientific collaboration, financing mechanisms, monitoring, reporting and verification, and public participation and access to information and justice; also peacebuilding and post-conflict instruments; and secure land and water access. This Part also covers (5) innovative techniques and requirements in international instruments on sustainable management of natural resources for development, with a non-exhaustive selection including: sustainable resources management through transparency and stakeholder engagement, equitable benefit-sharing from sustainable natural resources management, legal indicators of effectiveness for sustainable natural resources management, and control of illicit flows for sustainable natural resources management. The Part further covers a brief, non-exhaustive update on (6) sustainable natural resources management in international dispute settlement.

Finally, in the Third Part (III), notes are provided for the interpretation and application of the 2020 ILA Guidelines on the Role of International Law in Sustainable Natural Resources Management for Development.

I. GUIDELINES FOR SUSTAINABLE MANAGEMENT OF GLOBAL, REGIONAL, TRANSBOUNDARY AND NATIONAL NATURAL RESOURCES

1. Global Natural Resources

1.1 Celestial Bodies

1.1.1 Outer space, including the Moon and other celestial bodies, is recognized as being the province of all humankind and its exploration and use for peaceful purposes the common interest of all humankind. The resources of the Moon and other celestial bodies are conferred the status of common heritage of humankind under the *Moon Treaty*, which envisaged a regime of non-appropriation and joint management.¹⁰ This system of non-appropriation and joint management is intended to address natural resources found in outer space, including their exploration and exploitation, as well as spaces of cultural heritage in space.

1.1.2 Several key treaties, instruments and standards offer important insights in the evolving role of international law in the sustainable management of celestial bodies.¹¹ International law promotes more sustainable management of celestial bodies by establishing several key norms. States should not take unilateral action regarding the exploitation of natural resources located on celestial bodies. Nor may States allow the use and deployment of satellites or other objects into space if they are likely to disintegrate and cause space junk, which can harm celestial and planetary resources as well as Earth itself. At the same time, international law requires that States must comply with the international regulatory system created under the jurisdiction of the *International Telecommunication Union* with regard to the launching and placement of satellites and celestial communications tools. Furthermore, the principle of equitable benefit forms part of the rules governing the sustainable management of outer space and celestial bodies.

1.2 The Atmosphere and a Stable Climate System

1.2.1 The atmosphere inextricably links States and individuals and cannot be contained by a border. Change in the Earth's climate and its adverse effects are recognized as a common concern of humankind.¹²

1.2.2 An important body of treaties, instruments and standards highlight the evolving role of international law in the sustainable management of the atmosphere and a stable climate system.¹³

¹⁰ *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space including the Moon and Other Celestial Bodies* (adopted 19 December 1966, entered into force 10 October 1967) RES (XXI) 2222 (Outer Space Treaty), art 2; *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies* (adopted on 18 December 1979, entered into force on 11 July 1984) 1363 UNTS 3 (Moon Agreement), art 11. The latter has however only been ratified by 18 States.

¹¹ In order to assess the evolving role of international law in the sustainable management of celestial bodies, the Committee surveyed the *Constitution and Convention of the International Telecommunication Union* (adopted on 22 December 1992, entered into force on 1 July 1994) 1825 UNTS 331/1825 UNTS 390; the Outer Space Treaty *supra* note 10; Moon Agreement *supra* note 10, arts 7(1) and 11(7); and the *Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space*, endorsed with UN GA Res. 62/217 of 22 December 2007.

¹² *United Nations Framework Convention on Climate Change* (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107 (UNFCCC) Preamble.

¹³ In order to assess the evolving role of international law in the sustainable management of the global atmosphere and a stable climate system, the Committee surveyed the global UNFCCC *supra* note 12, arts 2, 3.1, 3.4, 4.1(g), and 4.1(h); *Paris Agreement* (adopted 12 December 2015, entered into force 4 November 2016) UN Doc FCCC/CP/2015/L.9/Rev.1, 55 ILM 743, art 2.1; *Vienna Convention on the Protection of the Ozone Layer* (adopted 22 March 1985, entered into force 22 September 1988) 1513 UNTC 293 Preamble, arts 2(1), 2(2)(a), and 2(2)(b) and protocols; FAO, *Revised World Soil Charter* (adopted at 39th Session of the FAO Conference, 6-13 June 2015; FAO 2015); FAO, *Voluntary Guidelines on Sustainable Soil Management* (FAO 2017) (VGSSM); FAO, *Voluntary Guidelines on the Responsible Governance of Tenure of Land*,

International law regulates the anthropogenic emissions of greenhouse gases (GHG) to achieve a stabilization of GHG concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system and promotes sustainable management of this resource by establishing several key norms. Specifically, States have committed to holding temperature increases to well below 2°C above pre-industrial levels, and to pursue efforts to limit temperature increases to 1.5°C above pre-industrial levels. States recognize that this requires global peaking of GHG emissions as soon as possible, rapid and sustained reductions thereafter in order to achieve a balance of anthropogenic emissions by sources and removals by sinks around 2050 (so called ‘carbon neutrality’ or ‘net zero emissions’).¹⁴ In order to reach this goal, States shall undertake domestic legal and policy measures to reduce GHG emissions. In this context, States should also take action to conserve and enhance GHG sinks and reservoirs, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems, including soils, wetlands, peatlands and mangroves, which pose risks of releasing GHGs on a significant scale when disturbed or not managed sustainably. Under the *United Nations Framework Convention on Climate Change* (UNFCCC) and the *Paris Agreement*, States must put forward progressive Nationally Determined Contributions (NDCs) every five years, which are to reflect their highest possible ambition, and need to report on the progress on implementation and achievement of their NDCs. Several international law instruments have established that States shall be subject to oversight committee review in instances of alleged failures to meet their treaty-based obligations, for example the Paris Agreement Implementation and Compliance Committee.

1.2.3 Further, States seeking to engage in the promotion and use of renewable energies should do so in a way that is sustainable and reduces GHG emissions into the atmosphere, as well as avoid the further degradation of biodiversity. Importantly, States may fulfil such obligations in a flexible and cost-effective way, also in keeping with the principle of sustainable development and the principle of common but differentiated responsibilities and capabilities, in the light of different national circumstances, and make use of domestic and international transfer or trading mechanisms to this end (e.g. International Emission Trading, Joint Implementation, Clean Development Mechanism or the new international carbon credit mechanism established by Article 6 of the *Paris Agreement*, which is still to be implemented). This requires coordination between international climate change regimes and international economic regimes, such as the international

Fisheries and Forests in the Context of National Food Security (FAO 2012) (VGGT); *Convention Concerning Indigenous and Tribal Peoples in Independent Countries* (adopted 27 June 1989, entered into force 5 September 1991) 72 ILO Official Bull. 59, 28 ILM 1382 (ILO No. 169) (CCITPIC); *United Nations Declaration on the Rights of Indigenous Peoples* (adopted 2 October 2007) A/RES/61.295 (UNDRIP) Preamble; *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas* (adopted 28 September 2018) A/HRC/RES/29/12 (UNDROP), art 18(3); *United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa* (adopted 14 October 1994, entered into force 26 December 1996) 1954 UNTS 3 (UNCCD); *Convention on Wetlands of International Importance especially as Waterfowl Habitat* (adopted 2 February 1971, entered into force 21 December 1975) 996 UNTS 245 (Ramsar Convention) Preamble; *United Nations Convention on the Law of the Sea* (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3 (UNCLOS); *Statute of the International Renewable Energy Agency* (Conference on the Establishment of the International Renewable Energy Agency, Bonn, 26 January 2009) (IRENA); *Stockholm Convention on Persistent Organic Pollutants* (adopted 22 May 2001, entered into force 17 May 2004) 2256 UNTS 119, art 1 (Stockholm Convention); *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, (adopted 22 March 1989, entered into force 5 May 1992) 1673 UNTS 57 (Basel Convention) and the *Protocol on the Control of Marine Transboundary Movements and Disposal of Hazardous Wastes and Other Wastes* (adopted 17 March 1998) 2417 UNTS 261; *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides*, (adopted 10 September 1998, entered into force 24 February 2004) 39973 (Rotterdam Convention); *Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa* (adopted 30 January 1991, entered into force 22 April 1998) 2101 UNTS 177 (Bamako Convention); and *Minamata Convention on Mercury* (adopted 10 October 2013, entered into force 16 August 2017) 55 ILM 582 (Minamata Convention); as well as regional instruments such the *Energy Charter Treaty* (adopted 17 December 1994) 2080 UNTS 95; *Convention on Environmental Impact Assessment in a Transboundary Context* (adopted 25 February 1991, entered into force 10 September 1997) 1989 UNTS 309 (Espoo Convention); and *Protocol on Strategic Environmental Assessment* (adopted 21 May 2003, entered into force 11 July 2010) 2685 UNTS 140 (Kiev Protocol on SEAs).

¹⁴ *Paris Agreement supra* note 13, arts 2.1 and 4.1.

trade and investment regime, with a view to ensure mutual supportiveness. Procedures, including impact assessments and safeguarding mechanisms, must be put in place to avoid the risk of GHG emission leakage and maladaptation, double counting or other perverse incentives leading to unsustainable natural resource use, including unsustainable land use or land use change.

1.3 Biological Diversity and Ecological Systems

1.3.1 Biodiversity plays an important role in maintaining the life-sustaining systems of the biosphere, and its conservation is a common concern of humankind.¹⁵ International, regional and global cooperation among States and stakeholders, including intergovernmental organizations, civil society and the private sector, is essential for the conservation of biodiversity and the sustainable use of its components. Several key treaties, instruments and standards offer important insights in the evolving role of international law in the sustainable use of global biodiversity and ecological systems.¹⁶ International law regulates human activities affecting biodiversity and ecological systems to promote the conservation and sustainable use of these resources, as well as the fair and equitable benefit-sharing from the utilization of genetic resources, by establishing several key norms. States have sovereign rights over their own biological and genetic resources, and are responsible for conserving biodiversity and for sustainably using its components. States are encouraged, as far as possible and as appropriate, to cooperate with other States, directly or, where appropriate, through competent international organizations, in respect of areas beyond national jurisdiction and on other matters of mutual interest, for conservation and sustainable use.

1.3.2 States should uphold the targets adopted and requirements identified for the protection of biodiversity and ecological systems found in the treaty regimes, associated protocols and other

¹⁵ *Convention on Biological Diversity* (adopted 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79 (CBD) Preamble.

¹⁶ In order to assess the evolving role of international law in the sustainable management of global biodiversity and ecological systems, the Committee surveyed the CBD *supra* note 15, Preamble and art 2 and its *Cartagena Protocol on Biosafety to the Convention on Biological Diversity* (23 December 2003) 2236 UNTS A-30619 (Cartagena Protocol) and *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity* (29 October 2010) 3009 UNTS A-30619 (Nagoya Protocol); UNCCD *supra* note 13; UNFCCC *supra* note 12, Preamble, arts 2, 3, and 4(1)(d); *Paris Agreement supra* note 13, Preamble and arts 7(2), 7(9)(c), and 7(9)(e); CCITPIC *supra* note 13; Ramsar Convention *supra* note 13, Preamble, arts 3(1) and 4; *Convention on the Law of the Non-Navigational Uses of International Watercourses* (adopted 21 May 1997, entered into force 17 August 2014) (2017) 36 ILM 700 (New York Convention); *Convention on the Protection and Use of Transboundary Watercourses and International Lakes* (adopted 17 March 1992, entered into force 6 October 1996) 1936 UNTS 269 (Helsinki Convention); *Convention on the International Trade in Endangered Species of Wild Fauna and Flora* (adopted 2 March 1973, entered into force 1 July 1975) 993 UNTS 243 (CITES) Preamble; *International Tropical Timber Agreement* (adopted 27 January 2006, entered into force 7 December 2011) UN Doc TD/TIMBER.3/12 (ITTA 2006); *Convention on the Conservation of Migratory Species of Wild Animals* (adopted 23 June 1979, entered into force 1 November 1983) 1651 UNTS 333 (CMS); FAO *International Treaty on Plant Genetic Resources for Food and Agriculture* (adopted 3 November 2001, entered into force 29 June 2004) 2400 UNTS 303 (ITPGRFA); UNDRIP *supra* note 13, arts 29 and 31; UNDROP *supra* note 13; the UN General Assembly Resolutions on Permanent Sovereignty over Natural Resources (14 December 1962, UNGA Resolution 1803 (XVII) and 25 November 1966, UNGA Resolution 2158 (XXI)); *Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity* (Montréal 2004); United Nations Conference on Trade and Development, *BioTrade Principles and Criteria* (New York and Geneva 2007) UNCTAD/DITC/TED/2007/4; and the *Revised World Soil Charter supra* note 13; VGSSM *supra* note 13; VGGT *supra* note 13; as well as regional instruments such as the *Revised African Convention on the Conservation of Nature and Natural Resources* (adopted March 11 July 2003, entered into force 23 July 2016) 77 AU Treaties 0029 (Maputo Convention); *Convention for the Conservation of the Biodiversity and the Protection of Priority Wilderness Areas in Central America* (adopted 5 June 1992, entered into force 20 December 1994); *South African Development Community Protocol on Forestry* (adopted 3 October 2002, entered into force 17 July 2009) (SADC Protocol on Forestry), Preamble and arts 2 and 3; and the *Protocol on the Implementation of the Alpine Convention of 1991 in the Domain of Soil Conservation* (adopted 16 October 1998, entered into force 18 December 2002) OJ L337 22.12.2005 29 (Alpine Soil Protocol). *Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution* (adopted 24 April 1978, entered into force 1 July 1979) 1140 UNTS 133 (Kuwait Regional Convention); *Protocol concerning Marine Pollution resulting from Exploration and Exploitation of the Continental Shelf* (adopted 29 March 1989, entered into force 17 February 1990) 2065 UNTS 68.

related instruments. States shall, in accordance with their conditions and capabilities, develop national strategies, action plans or programmes for the conservation and sustainable use of biodiversity, or adapt existing strategies, plans or programmes for this purpose. In accordance with their conditions and capabilities, States shall also integrate, as far as possible and as appropriate, conservation and sustainable use into relevant sectoral or cross-sectoral plans, programmes and policies. In this context, States should conserve biodiversity and sustainably use its components, both above and below ground, terrestrial and marine, and use an ecosystems approach.

1.3.3 Noting that *in-situ* conservation is a fundamental requirement for the conservation of biological diversity, States must, as far possible and as appropriate, establish a system of protected areas or areas where special measures need to be taken to conserve biodiversity; regulate or manage biological resources important for the conservation of biodiversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use; promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas; rehabilitate and restore degraded ecosystems and promote the recovery of threatened species through the development and implementation of plans or other management strategies; establish or maintain means to regulate, manage or control the risks associated with living modified organisms that are likely to have adverse environmental impacts that could affect conservation and sustainable use; prevent the introduction of, control or eradicate invasive alien species which threaten ecosystems, habitats or species; develop or maintain necessary laws and/or regulations for the protection of threatened species and populations; adopt measures for the recovery and rehabilitation of threatened species and for their reintroduction into their natural habitats; and regulate or manage processes and categories of activities determined to have significant adverse effects on biodiversity.

1.3.4 States should integrate consideration of the conservation and sustainable use of biological resources into national decision-making; adopt measures on the use of biological resources to avoid or minimize adverse impacts on biodiversity; protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use; support local populations to develop and implement remedial action in degraded areas; and encourage cooperation between governmental authorities and the private sector in developing methods for sustainable use. States should also introduce Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA) or Sustainability Impact Assessment (SIA) procedures for projects that are likely to have significant adverse effects on biodiversity in order to avoid or minimize such effects, and allow for public participation. Finally, States must take appropriate legislative, administrative or policy measures for fair and equitable benefit sharing from the utilization of genetic resources with the providing country. Benefits should be shared with Indigenous peoples and local communities where they have the right to grant access to genetic resources under national law.

1.3.5 Beyond these requirements, States shall report on their activities, including those relating to protection of biodiversity and ecological systems. In conjunction with this, some international law instruments establish that States shall be subject to oversight committee review in instances of alleged failures to meet their treaty-based obligations, such as *the Convention on International Trade in Endangered Species of Flora and Fauna* (CITES), while others are based on the duty to cooperate, such as *the Convention on Biological Diversity* (CBD) or *the Convention on Migratory Species* (CMS), out of recognition *inter alia* of the different capabilities of States in enacting and enforcing implementing laws and policies. Additionally, States are encouraged to establish specialized collaborative regimes for the protection of particular migratory terrestrial or marine species and ecosystems, such as the CMS and the *UN Convention on the Law of the Sea* (UNCLOS) *Straddling Stocks Agreement*.

1.4 The Ocean, and its Mineral and Living Resources

1.4.1 The natural resources of the global ocean and its ocean basins are subject to overarching duties of conservation and cooperation. Mineral resources of the ‘Area’ (the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction) are recognized as common heritage.¹⁷ Marine biodiversity conservation is recognized as a common concern of humankind.¹⁸ Although oceans physically straddle international and national jurisdictions, their ecological connectivity makes them truly global resources. This is reflected in the existing instruments that address oceans as global resources, listed below, and in the current progressive development of international law and policy which is in the process of integrating the traditional law of the sea with science-based international environmental law, especially with respect to conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction (ABNJ).

1.4.2 In order to assess the evolving role of international law in the sustainable management of the global ocean, a collection of key treaties, instruments, and standards offers important insights.¹⁹ International law regulates oceans to promote more sustainable management of these resources by establishing several key norms. States must respect the *res communis* nature of high seas resources; extraction of seabed minerals in areas beyond national jurisdiction is subject to international oversight. Under international treaty law and jurisprudence, States are required to undertake a number of activities – such as conservation, precaution, due diligence, ELAs and best environmental practices – to ensure sustainable management of oceans as natural resources. States should also apply concerted management and conservation of migratory fish stocks found within their territorial waters so as to protect them as an international resource rather than classify as them as purely domestic resources. Further, flag States are required to ensure that the vessels sailing under their jurisdiction follow sustainable management and conservation practices for fishing living resources found in international waters. Ocean governance also requires full and ambitious implementation of the UNFCCC and *Paris Agreement*.

¹⁷ UNCLOS *supra* note 13, Preamble and Part XI s 2 art 136.

¹⁸ CBD *supra* note 15, Preamble and art 2.

¹⁹ In order to assess the evolving role of international law in the sustainable management of global oceans, the Committee surveyed the treaties such as the CBD *supra* note 15 and its Cartagena Protocol *supra* note 16 and Nagoya Protocol *supra* note 16; CITES *supra* note 16; and UNCLOS *supra* note 13. The Committee also surveyed the *Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks* (adopted 4 August 1995, entered into force 11 December 2001) 2167 UNTS 3 (Straddling Stocks Agreement); *Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas* (adopted 24 November 1993, entered into force 24 April 2003) 221 UNTS 91; *Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982* (adopted 28 July 1994, entered into force 16 November 1994) 1836 UNTS 3 (Agreement Relating to Part XI of the Law of the Sea Convention); *International Convention for the Prevention of Marine Pollution from Ships* (adopted 2 November 1973, entered into force 2 October 1983) 1522 UNTS 3 (MARPOL 73/78); *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter* (adopted 29 December 1972, entered into force 30 August 1975) 1046 UNTS 120 (London Convention); *Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter* (adopted 7 November 1996, entered into force 24 March 2006) (1997) 36 ILM 7 (Protocol to the London Convention); UNFCCC *supra* note 12, art 4(1)(d); *Paris Agreement supra* note 13; the *Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* (adopted 22 November 2009, entered into force 5 June 2016) (2009) 55 ILM 1159 (PSMA); the *Code of Conduct for Responsible Fisheries* (1995), and the *FAO Voluntary Guidelines for Flag State Performance* (2015) <<http://www.fao.org/3/a-i4577t.pdf>>; UNGA Res 72/249 (24 December 2017) UN Doc A/RES/72/249 (UNGA Resolution 72/249); and the relevant decisions of international courts and tribunals including the International Tribunal on the Law of the Sea.

2. Regional and Transboundary Natural Resources of Global Importance

2.1 Forests and Landscapes as Regional and Transboundary Natural Resources

2.1.1 Forests and landscapes are of global relevance for the atmosphere and a stable climate system, and for the conservation and sustainable use of biodiversity. Forests and landscapes, including wetlands and coastal areas, can be considered as regional or transboundary resources, located across States, bisected by State borders, but still functioning ecologically as a unified system. In this way, while forming part of the territory of a sovereign State, these resources have an additional impact and importance beyond national boundaries, and actions taken regarding them at the State level will have repercussions throughout a broader area. This is reflected in existing international law and policy instruments, as well as regional law instruments and policy mechanisms that address forests and landscapes.

2.1.2 In order to assess the evolving role of international law in the sustainable management of regional and transboundary forests and landscapes a collection of key treaties, instruments, and standards offers important insights.²⁰ International law regulates forests and landscapes as regional and transboundary resources to promote more sustainable management of these resources by establishing several key norms. States should create and implement national forestry management policies, strategies and practices which recognize the varied nature of interests encompassed in forests and land management, including applying the ecosystem approach, and addressing GHG emissions and removals from land use, land-use change, and forestry. States should also prevent, and restore, land and forest degradation through sustainable management practices. States should factor the need for transboundary conservation and management into their plans and strategies, and enter into consultations to implement this in practice. In addition, States should identify, protect, conserve, present and pass to future generations, natural areas of outstanding universal value from the point of view of science, conservation or natural beauty. Further, States should ensure that regulatory actions related to forestry and land use also cover private and industry actors involved in extraction, harvesting and use of these resources and associated value chains. Additionally, States may enter into voluntary agreements on forests and landscapes which further collaboration with other States, international organizations and private actors in order to undertake actions to reduce emissions from deforestation and forest degradation, conserve forest carbon stocks, sustainably manage forests, and enhance forest carbon stocks.

2.2 Rivers and Freshwater Ecosystems as Regional and Transboundary Natural Resources

2.2.1 Many rivers and freshwater ecosystems, including groundwater and aquifers, transect or even form borders and boundaries, making them a legal and societal resource of more than a particular

²⁰ In order to assess the evolving role of international law in the sustainable management of regional and transboundary forests and landscape ecosystems, the Committee surveyed the CBD *supra* note 15, Preamble, arts 5 and 6; UNFCCC *supra* note 12, art 4; *Paris Agreement supra* note 13, art 5; UNCCD *supra* note 13; ITTA 2006 *supra* note 16; Ramsar Convention *supra* note 13, art 5; the *UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage* (adopted 16 November 1972, entered into force 17 December 1975) 1037 UNTS 151 (WHC), arts 2, 4, and, 11(4); CITES *supra* note 16; CCITPIC *supra* note 13; the 'Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests' (New York 21 April 1992) UN Doc A/CONF.151/6 (NLBI); the *UN Forest Instrument* (16 February 2016) UN Doc A/RES/70/199 (UN Forest Instrument); *UN Strategic Plan for Forests 2017-2030*, adopted by UNGA (27 April 2017) UN Doc A/RES/71/285; UNDRIP *supra* note 13, art 25; UNDROP *supra* note 13; VGSSM *supra* note 13; VGGT *supra* note 13; *Revised World Soil Charter supra* note 13. The Committee also considered the work of the United Nations Forum on Forests and Collaborative Partnership on Forests; the policies of the Forest Carbon Partnership Facility; the Forest Stewardship Council; the Programme for the Endorsement of Forest Certification, and the Sustainable Forestry Initiative certification systems. Further, the Committee considered regional instruments such as the Maputo Convention *supra* note 16; the *Convention for the Conservation of the Biodiversity and the Protection of Priority Wilderness Areas in Central America supra* note 16, art 14, see also arts 11 and 12; and the Alpine Soil Protocol *supra* note 16.

State. In this way, while these bodies of water might originate in the territory of a sovereign State, as resources they have an impact and import beyond national boundaries and actions taken regarding them at the State level will have repercussions throughout a broader area. This is reflected in the existing international law and policy instruments, as well as regional law instruments and policy mechanisms, that address rivers and freshwater ecosystems.

2.2.2 In order to assess the evolving role of international law in the sustainable management of regional and transboundary rivers and freshwater ecosystems, a collection of key treaties, instruments, and standards offers important insights.²¹ International law, in addition to applicable regional law, regulates rivers and freshwater ecosystems as regional and transboundary resources to promote more sustainable management of these resources by establishing several key norms. States should ensure that there is harmonization in the legal and governance systems relating to transboundary and regional watercourses, including obligations to work together to ensure this harmonization. As part of this, States must include the duty to notify other riparian States of their development plans that may affect the rivers substantially and consult in their management of watercourse resources. Additionally, in managing transboundary and regional watercourses, States should include key sustainable development law principles, such as the no significant harm principle, the polluter pays principle and the precautionary principle, and adopting the ecosystem approach, States should include consideration of related land and soil use and management decisions, which impact water regulation and quality. When addressing the development of watercourses or wetlands directly or indirectly, States should use transboundary and domestic Environmental Impact Assessments (EIAs) or Sustainability Impact Assessments (SIAs) as tools to ensure that there is a full assessment of likely impacts, taking into account public concerns and contributions. Further, States should work together to create guidelines for the management of shared rivers and freshwater ecosystems.

2.3 Migratory Species as Regional and Transboundary Natural Resources

2.3.1 Many species are highly migratory as a matter of standard course and cross boundaries and regions, making them a legal and societal resource of more than a particular State. In this way,

²¹ In order to assess the evolving role of international law in the sustainable management of regional and transboundary rivers and freshwater ecosystems, the Committee surveyed the global New York Convention *supra* note 16; *International Covenant on Economic Social and Cultural Rights* (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 (ICESCR); Helsinki Convention *supra* note 16; *Convention on the Rights of the Child* (adopted 2 September 1990, entered into force 2 September 1990) 1577 UNTS 3 (CRC), art 24(2)(c); *Convention on Elimination of All Forms of Discrimination Against Women* (adopted 18 December 1979, entered into force 3 September 1981) 1249 UNTS 1 (CEDAW), art 14(2)(h); *Revised World Soil Charter supra* note 13; *VGSSM supra* note 13; *VGGT supra* note 13; *CCITPIC supra* note 13, as well as the *UNDRIP supra* note 13, arts 25 and 32(2); *UNDROP supra* note 13; 'Agenda 21' United Nations Conference on Environment and Development (Rio de Janeiro 3 June-14 June 1992); Johannesburg Declaration on Sustainable Development in 'Report of the World Summit on Sustainable Development' (adopted 4 September 2002) UN World Summit on Sustainable Development (Johannesburg, South Africa, 26 August-4 September 2002) UN Doc A/CONF.199/20; UNGA Res 19/2 'Programme for the Further Implementation of Agenda 21' (19 September 1997) UN Doc A/RES/S-19/2 (Programme for the Further Implementation of Agenda 21); Ramsar Convention *supra* note 13, art 5; the *Manila Declaration on Furthering the Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities* (26 January 2012) UN Doc UNEP/GPA/IGR.3/5 (Manila Declaration); and 'The Future We Want' UNGA Res 66/288 (27 July 2012). The Committee also surveyed regional instruments such as the Southern African Development Community (SADC) *Revised Protocol on Shared Watercourses in the Southern African Development Community* (Windhoek 7 August 2000), arts 2(b) and 3(7)(a) and Water Charters of the Senegal and Niger Rivers and the Lake Chad Water Basin (2000); *Statute of the River Uruguay* (1975); *Acuerdo Sobre el Acuífero Guaraní* (The Guaraní Aquifer Agreement) (adopted 2 August 2010) <<http://odd.senado.gov.py/archivos/file/Poder%20Ejecutivo%20Nro%20587.pdf>> accessed 8 November 2020 (GAA); *Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin* (adopted 5 April 1995, entered into force 5 April 1995) 2069 UNTS 3 (Mekong River Agreement); *China-Russia Agreement* (2008); Directive 2000/60/EC of the European Parliament and of the Council establishing a Framework for the Community Action in the Field of Water Policy (adopted 23 October 2000, entered into force 22 December 2000) OJ L 327 (European Union Water Framework Directive); and the Kuwait Regional Convention *supra* note 16 and *Protocol concerning Marine Pollution resulting from Exploration and Exploitation of the Continental Shelf supra* note 16.

while these species might originate in the territory of a sovereign State, as resources they have an impact and import beyond national boundaries and actions taken regarding them at the State level will have repercussions throughout a broader area. This is reflected in the existing international law and policy instruments, as well as regional and bilateral law instruments and policy mechanisms, that address straddling stocks²² and highly migratory species.²³

2.3.2 In order to assess the evolving role of international law in the sustainable management of regional and transboundary migratory species, a collection of key treaties, instruments, and standards offers important insights.²⁴ International law regulates migratory species as regional and transboundary resources to promote more sustainable management of these resources by establishing several key norms. States are required to provide for the protection, conservation and management of migratory species which traverse their territories in any form (land, air or water). States may work together to establish and implement targeted agreements for handling the migration patterns of specific migratory species with the purpose of ensuring sustainable management of the species at the national and regional levels. Further, States are required to provide special protections for endangered migratory species that traverse their territory and to ensure that they are not targeted for poaching or other illegal activities.

²² UNCLOS *supra* note 13, art 63.

²³ UNCLOS *supra* note 13, art 64 and Annex I. Also, see the Straddling Stocks Agreement *supra* note 19, which sets out principles for the conservation and management of those fish stocks and establishes that such management must be based on the precautionary approach and the best available scientific information. The Straddling Stocks Agreement elaborates on the fundamental principle, established in the UNCLOS, that States should cooperate to ensure conservation and promote the objective of the optimum utilization of fisheries resources both within and beyond the exclusive economic zone.

²⁴ In order to assess the evolving role of international law in the sustainable management of migratory species, the Committee surveyed the global CMS *supra* note 16; the CBD *supra* note 15; CITES *supra* note 16 Preamble; UNCLOS *supra* note 13, art 63; Straddling Stocks Agreement *supra* note 19; Ramsar Convention *supra* note 13, Preamble and art 2(6); and the WHC *supra* note 20. The Committee also surveyed regional instruments such as the *Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere* (adopted 12 October 1940, entered into force 30 April 1942) 161 UNTS 193; *Maputo Convention* *supra* note 16; *Convention on Conservation of Nature in the South Pacific* (adopted 12 July 1976, entered into force 26 June 1990) [1990] ATS 41 (Apia Convention); *Convention on the Conservation of European Wildlife and Natural Habitats* (adopted 19 September 1979, entered into force 1 June 1982) 1284 UNTS 209 (Berne Convention); *Protocol Concerning Protected Areas and Wild Flora and Fauna in the Eastern African Region* (adopted 21 June 1985, entered into force 30 May 1996); the *ASEAN Agreement on the Conservation of Nature and Natural Resources*; *Protocol for the Conservation and Management of Protected Marine and Coastal Areas of the South-East Pacific* (adopted 21 September 1989, entered into force 24 January 1995) *Protocol Concerning Specially Protected Areas and Wildlife in the Wider Caribbean* (adopted 18 January 1990, entered into force 18 June 2000); *Protocol on Environmental Protection to the Antarctic Treaty* (adopted 10 April 1991, entered into force 14 January 1998) 2941 UNTS 3; the *Convention for the Conservation of the Biodiversity and the Protection of Priority Wilderness Areas in Central America* *supra* note 16; *EU Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora* (Habitats Directive); *Convention for the Protection of the Marine Environment of the North-East Atlantic* (adopted 22 September 1992, entered into force 25 March 1998) 2354 UNTS 67 (OSPAR Convention); *Alpine Soil Protocol* *supra* note 16; *Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean* (adopted 10 June 1995, entered into force 21 March 2000) 2102 UNTS 181; Southern African Development Community (SADC), *Protocol on Wildlife Conservation and Law Enforcement* (adopted 18 August 1999, entered into force 30 November 2003); the *East African Community Protocol on Environment and Natural Resource Management*; *FAO, International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* (FAO 2001) (IPOA-UUF); *FAO, International Plan of Action for Conservation and Management of Sharks* (FAO 1999) (IPOA-Sharks); *FAO, International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries* (FAO 1999) (IPOA-Seabirds); the *Protocol to the Carpathian Convention on Conservation and Sustainable Use of Biological and Landscape Diversity* (adopted 19 June 2008, entered into force 28 April 2010) <<http://www.carpathianconvention.org/documents-carpathian-convention.html>>; *Arab Declaration on Environment and Development and Future Perspective* (adopted 10 September 1991) E/ESCWA/ENVHS/1992/1; and the *Arab Declaration to the World Summit on Sustainable Development* (24 October 2001) <https://www.hlm.org/img/documents/Arab_Declaration_Sustainable_Dev.pdf> accessed 8 November 2020.

3. National Natural Resources of Global Relevance

3.1 Forests and Landscapes

3.1.1 In addition to their global relevance in relation to the sustainable management of the atmosphere and a stable climate system and the conservation and sustainable use of biodiversity, as well as transboundary or regional relevance, forests and landscape ecosystems within States are still considered to play a significant role in international environmental and socioeconomic concerns. They are thus subject to international laws and policies as well as national laws and enforcement mechanisms and, increasingly, an international human rights law lens, which impacts on their sustainable management. This is reflected in existing international law and policy instruments, as well as national law instruments and policy mechanisms that address forests and landscape ecosystems.

3.1.2 In order to assess the evolving role of international law in the sustainable management of national forests and landscape ecosystems, a collection of key treaties, instruments, and standards offers important insights.²⁵ Taken together, international law, in addition to applicable domestic law, regulates forests and landscape ecosystems as national resources to promote more sustainable management of these resources by establishing several key norms. States should implement national strategies to plan for the conservation and sustainable use of forests and landscapes, including, where appropriate, facilitating changes to existing laws and rules which could hinder these efforts.

3.1.3 States should, in particular, create and implement national strategies to reduce deforestation and forest degradation, as well as for the conservation of carbon sinks and reservoirs, sustainable management of forests, and enhancement of forest carbon stocks. They should adopt the ecosystem approach to the management of forests and wetlands, such as mangroves. In conjunction with this, States should work towards the wise use of wetlands to ensure maintenance of ecological character, through the ecosystem approach, and in the context of sustainable development. Furthermore, States should incorporate transparency and monitoring systems in their design and implementation of these strategies, including the use of reporting and verification mechanisms. In order to reduce forest-based emissions to prevent catastrophic climate change, developing States should also include actions for reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forests and enhancement of forest carbon stocks (REDD+) in their NDCs and strengthen national institutions for the implementation of REDD+ strategies; regularly assess the potential for advancing holistic, durable solutions to the intertwined issues of tropical deforestation, rural livelihoods, and food security; and review the REDD+ monitoring, verification and reporting system in national institutional frameworks and policies in order to improve the technical management of forest and landscape ecosystems.

3.1.4 Lastly, States should also promote ways to adequately control international trade in tropical timber, to prevent illicit flows of illegal timber and foster trade only from sustainably managed and legally harvested forests, and promote the sustainable management of tropical timber producing forests.

²⁵ In order to assess the evolving role of international law in the sustainable management of national forests and landscape ecosystems, the Committee surveyed the CBD *supra* note 15, art 6; the UNFCCC *supra* note 12, art 4; *Paris Agreement supra* note 13; UNCCD *supra* note 13; the ITTA 2006 *supra* note 16; Ramsar Convention *supra* note 13, art 3(1); WHC *supra* note 20, arts 2, 4, 5, and 11(4); CITES *supra* note 16 Preamble; as well as the NLBI *supra* note 20; the UN Forest Instrument *supra* note 20; UN Strategic Plan for Forests 2017-2030 *supra* note 20; *Revised World Soil Charter supra* note 13; VGSSM *supra* note 13; VGGT *supra* note 13; CCITPIC *supra* note 13; UNDRIP *supra* note 13; and UNDROP *supra* note 13. Further, the Committee examined the work of the United Nations Forum on Forests and Collaborative Partnership on Forests; the policies of the Forest Carbon Partnership Facility; the Forest Stewardship Council; the Programme for the Endorsement of Forest Certification; and Sustainable Forestry Initiative certification systems.

3.2 Land and Soil

3.2.1 In addition to their global relevance in relation to the sustainable management of the atmosphere and a stable climate system, and the conservation and sustainable use of biodiversity, as well as transboundary or regional relevance, land and soils within States still play a significant role in international environmental, societal, cultural and security concerns and are thus subject to international laws and policies as well as national laws and enforcement mechanisms. Furthermore, land and soil are increasingly viewed through an international human rights lens, which impacts on their sustainable management.²⁶ These elements are reflected in existing international law and policy instruments, as well as national law instruments and policy mechanisms that address land and soil.

3.2.2 In order to assess the evolving role of international law in the sustainable management of national land and soil, a collection of key treaties, instruments, and standards offers important insights.²⁷ Taken together, international law, in addition to applicable domestic law, regulates land and soil as national resources to promote more sustainable management of these resources by establishing several key norms.

3.2.3 Nearly all States are required to create National Biodiversity Strategies and Action Plans (NBSAPs) for the sustainable use and conservation of biodiversity resources, which should include soil biodiversity. States should take action to restore, conserve and enhance terrestrial and coastal land and soils, including wetlands, peatlands and mangroves, in their function as GHG sinks and reservoirs, as part of the global efforts to mitigate climate change, through adequate mitigation actions at national level as well as international cooperative mechanisms. States should additionally contribute to enhancing adaptive capacity, including in relation to agricultural lands and food security, and seek a high level of ambition in their NDCs under the *Paris Agreement* in order to minimize the risks and impact to land and soil resulting from the effects of climate change. States shall also combat desertification and mitigate the effects of drought in

²⁶ Of note, a 'right to land' of peasants and other people living in rural areas has been proclaimed in the *Declaration on the Rights of Peasants and Other People Living in Rural Areas*, defined as the right 'individually and/or collectively [...] to have access to, sustainably use and manage land and the water bodies, coastal seas, fisheries, pastures and forests therein, to achieve an adequate standard of living, to have a place to live in security, peace and dignity and to develop their cultures' UNDROP *supra* note 13. Further, the 66th Session of the UN Committee on Economic, Social and Cultural Rights held a general discussion on land and the *International Covenant on Economic, Social and Cultural Rights* (ICESCR) *supra* note 21 as part of an ongoing consultative process to draft a 'general comment' on this topic <<https://www.ohchr.org/EN/HRBodies/CESCR/Pages/GeneralDiscussionLand.aspx>> accessed 8 November 2020.

²⁷ In order to assess the evolving role of international law in the sustainable management of land and soil, the Committee surveyed the CBD *supra* note 15; UNFCCC *supra* note 12; *Kyoto Protocol to the United Nations Framework Convention on Climate Change* (adopted 11 December 1997, entered into force 16 February 2005) 2303 UNTS 148 (Kyoto Protocol); *Paris Agreement supra* note 13; UNCCD *supra* note 13; UNCLOS *supra* note 13, art 194; Ramsar Convention *supra* note 13, art 3(1); WHC *supra* note 20, arts 2, 4, 5, and 11(4); CEDAW *supra* note 21, art 14(2)(g); ICESCR *supra* note 21, art 11(2)(a); the Basel Convention *supra* note 13 and *Protocol on the Control of Marine Transboundary Movements and Disposal of Hazardous Wastes and Other Wastes supra* note 13; Rotterdam Convention *supra* note 13; Stockholm Convention *supra* note 13, art 7; Minamata Convention *supra* note 13; Bamako Convention *supra* note 13; the *Convention on Long-Range Transboundary Air Pollution* (adopted 13 November 1979, entered into force 16 March 1983) 1302 UNTS 217 (CLRTAP) and protocols; the *International Code of Conduct on Pesticide Management* (WHO/FAO 2014); the *Strategic Approach to International Chemicals Management* (SAICM 2006); the IUCN *World Charter for Nature* (28 October 1982) UN Doc A/RES/37/7; CCITPIC *supra* note 13; *Revised World Soil Charter supra* note 13; VGSSM *supra* note 13; VGGT *supra* note 13; UNDRIP *supra* note 13, Preamble and art 25; and UNDROP *supra* note 13; UNEP, *World Soils Policy*, UNEP 1982; and UNEP/EA.3/Res.6 *Managing Soil Pollution to Achieve Sustainable Development*. The Committee also surveyed regional instruments such as the Maputo Convention *supra* note 16; *European Soil Charter*, Ref. B(72)63, Strasbourg, June 1972, and the Committee for the activities of the Council of Europe in the field of biological and landscape diversity (CO-DBP) *Revised European Charter for the Protection and Sustainable Management of Soil* (28 May 2003) CO-DBP (2003) 10; *Alpine Soil Protocol supra* note 16; the *Escazú Regional Agreement on Access to Information, Participation and Justice in Environmental Matters in Latin America and the Caribbean* (adopted 4 March 2018) CN.195.2018 and the *Kuwait Regional Convention supra* note 16 and *Protocol concerning Marine Pollution resulting from Exploration and Exploitation of the Continental Shelf supra* note 16.

areas experiencing serious drought and/or desertification through effective National Action Plans as well as through international cooperation and partnerships, including long-term integrated strategies focusing on improved productivity of land, and the rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions. States shall strive to achieve a land degradation neutral world through setting land degradation neutrality (LDN) targets and collaboration. Further, States should designate wetlands of international significance within their territories, adopting an ecosystem approach, and identify areas of relevance under the *World Heritage Convention*.

3.2.4 States have a duty to prevent pollution of land and soils, including by chemical and other types of pollutants such as pesticides and fertilizers, or resulting from mining, and take appropriate measures to avoid the risks presented by such products or activities to human health and the environment, including through adequate legal and institutional measures at national level. They should implement regional conventions with provisions directed towards the sustainable management of soils, as well as sectorial treaties, dealing for example with water, air, protected areas and species, hazardous substances, pollution and waste, which implicitly have the objective of protecting land and soil.

3.2.5 States should recognize land as a multifaceted resource, including its economic, social, environmental, cultural and spiritual relevance, and as the basis of the livelihoods of millions of people worldwide. Further, States should recognize and respect all legitimate land tenure rights and their holders, including customary rights and other rights based on social legitimacy, safeguard legitimate tenure rights against threats and infringements, promote and facilitate the enjoyment of these rights and provide access to justice in case of their infringement, especially as secure tenure rights are key for more sustainable land and soil management. Non-state actors also have a responsibility to respect legitimate tenure rights, and States should take appropriate steps to protect against infringements and abuse of land tenure rights.

3.2.6 States should incorporate sustainable use and management of land and soil to promote food security and human nutrition as part of their agricultural, planning, and land management laws, policies and practices. States and non-state actors should promote responsible investments in land, agriculture and food systems, including through promoting the conservation and sustainable management of land and natural resources.

3.2.7 States should cooperate to implement the *Revised World Soil Charter*, as further elaborated in the *Voluntary Guidelines for Sustainable Soil Management* (VGSSM). In particular, States should pursue the overarching goal to ensure that soils are managed sustainably and that degraded soils are rehabilitated or restored, and that actions at all levels are informed by the principles of sustainable land and soil management and contribute to the achievement of a land degradation neutral world in the context of sustainable development. States should promote sustainable soil management and strive to create socio-economic and institutional conditions favourable to sustainable soil management by removal of obstacles, in particular those associated with land tenure, the rights of users, access to financial services and educational programmes, taking into account the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* (VGGT). They should participate in the development of multi-level, interdisciplinary educational and capacity-building initiatives that promote the adoption of sustainable soil management by land users; support research programs that will provide sound scientific backing for development and implementation of sustainable soil management relevant to end-users; and incorporate the principles and practices of sustainable soil management into policy guidance and legislation at all levels of government. States should develop a national soil policy, maintain a national soil information system and contribute to the development of a global soil information system, as well as developing a national institutional framework for monitoring implementation of sustainable soil

management and the overall state of soil resources.

3.3 Mineral Commodities, including Precious Minerals

3.3.1 Mineral commodities, including precious minerals, can occur in terrestrial or marine jurisdictions, in the Area and in outer space. In the two latter cases, their status of common heritage of humankind is recognized in specific regimes (see above, Sections 1.1 and 1.4). In the former case, they serve as predominantly national natural resources. However, even within this context, it is important to note that mineral commodities and precious minerals within States are still considered to play a significant role in international environmental concerns due to the risks entailed in the extraction and trade of minerals and are thus subject to international laws and policies as well as national laws and enforcement mechanisms and, increasingly, an international human rights lens also impacts on their sustainable management. This is reflected in the existing international law and policy instruments that address mineral commodities, including precious minerals, as well as in national law instruments and policy mechanisms.

3.3.2 In order to assess the evolving role of international law in the sustainable management of national mineral resources, a collection of key treaties, instruments, and standards offers important insights.²⁸ Taken together, international law, in addition to applicable domestic law, regulates mineral commodities and precious minerals as national resources to promote more sustainable management of these resources by establishing several key norms and a wide range of standards targeting the private sector engaged in extractive resources. States shall gradually reduce and, when feasible, eliminate the extraction and use of minerals when it poses serious health and environmental threats, including in relation to GHG emissions, sinks and reservoirs, and the prevention of dangerous anthropogenic interference with the climate system.

3.3.3 States may restrict trade of and investment in mineral resources for overriding conservation, health and environmental protection interests.²⁹ Where States enter into agreements with private actors in the mineral commodities and extractives industries, they should create and implement practices and principles to ensure fiscal transparency, contain bribery, corruption and money laundering, combat tax avoidance and evasion and, ultimately, seek a more equitable distribution of financial and economic benefits arising out of extractive activities, especially for what concerns artisanal mining. Further, States and private actors should work together to ensure that guidelines and recommendations for sustainable management of minerals, including precious

²⁸ In order to assess the evolving role of international law in the sustainable management of mineral commodities, including precious minerals, the Committee surveyed UNCLOS, *supra* note 13, Part XI s4(c) art 164; UNFCCC *supra* note 12, Preamble; *Paris Agreement* *supra* note 13; *Revised World Soil Charter* *supra* note 13; VGSSM *supra* note 13; VGGT *supra* note 13; the CCITPIC *supra* note 13; UNDRIP *supra* note 13; UNDROP *supra* note 13, arts 24 and 32(2); IRENA *supra* note 13; the *International Cyanide Management Code; Agreement Establishing the Multilateral Trade Organization* [World Trade Organization] (adopted 15 April 1994, entered into force 1 January 1995) 1867 UNTS 154; (1994) 33 ILM 13 (WTO Agreement); the *International Commodity Agreements; Convention on the Regulation of Antarctic Mineral Resource Activities* (adopted 2 June 1988) SATCM IV-12-10 (Wellington 1988) (CRAMRA); the *ILO Safety and Health in Mines Convention (No 176)* (adopted 22 June 1995, entered into force 5 June 1998); Minamata Convention *supra* note 13; *OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions* (adopted 17 December 1997, entered into force 15 February 1999) 2802 UNTS 225; *United Nations Convention Against Corruption* (adopted 31 October 2003, entered into force 14 December 2005) 2349 UNTS 41; the *UN Guiding Principles*; the *OECD Guidelines for Multinational Enterprises and the framework of the United Nations Conference on Trade and Development*. The Committee also considered the findings of the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development; the findings of the International Lead and Zinc Study Group; the findings of the International Nickel Study Group; the findings of the International Copper Study Group; the Kimberley Process Certification Scheme; the *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*; the framework of the *Global Acid Rock Drainage Guide*; the *Ababa Action Agenda of the Third International Conference on Financing for Development*; the *OECD/G20 Inclusive Framework on Tax Base Erosion and Profit Shifting*; and the *Naimey Declaration on Ensuring the Upholding of the African Charter in the Extractive Industries Sector*; ACHPR Res 367 *Resolution on the Protection of Sacred Sites and Territories* (LX) (2017) ACPHR Doc Res.372 (LX) 2017.

²⁹ *China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum*.

minerals, are developed and implemented at the national level. This includes a reporting requirement and the establishment of governmental and industry-based oversight mechanisms, such as the Extractive Industries Transparency Initiative (EITI).

3.3.4 As noted in the African Commission's *Resolution on Illicit Flight of Capital from Africa*, African States should examine their domestic tax laws and policies in order to prevent illicit financial flows.³⁰ Similarly, as noted in the *Niamey Declaration on Ensuring the Upholding of the African Charter in the Extractive Industries Sector*,³¹ there is a lack of transparency, accountability and public participation in African extractive industries, and several steps can be taken to transform national legal and governance frameworks to address illicit financial flows. As recognized in the 2012 African Union's *Resolution on a Human Rights-Based Approach to Natural Resource Governance*,³² transparency, accountability and public participation in the extractive sector is key.³³ The three elements of transparency, accountability and public participation are intricately intertwined, and must be present for resource governance programs and policies to be effective at regional, national and local levels, and to prevent and mediate natural resource driven conflicts, States are encouraged to ensure that "transparency and accountability mechanisms are in place prior to, and during, initiatives to develop and exploit natural resources."³⁴ There is a need for full reporting on revenues collected from natural resource activities and on how such revenues have been allocated to programs, governments and communities, and to address governance secrecy or information monopolisation by advancing public availability, accessibility and accuracy of information on relevant laws, regulations and policies.

3.3.5 States should ensure that there are adequate certification and customs screening systems in place to recognize and prevent the trafficking in conflict diamonds. In this context, States should ensure that there are measures in place to enforce bans on these products where an exporting State cannot meet the internationally required standards for certification of minerals.

3.4 Sustainable Energy

3.4.1 The promotion of sustainable energy markets may be international or regional, while many of the rules governing generation of sustainable, clean energy are national, and subject to provincial, cantonal or other municipal laws and policies. This noted, both sustainable energy generation and transmission, as well as energy efficiency, have important transboundary and international environmental implications, and are thus subject to international rules and regimes, as well as domestic laws and enforcement mechanisms. This is reflected in the existing international law and policy instruments, as well as national and sub-national legal instruments and mechanisms that address sustainable energy.

3.4.2 In order to assess the evolving role of international law in the sustainable management of national energy resources, a collection of key treaties, instruments, and standards offers important insights.³⁵ Taken together, international law, in addition to applicable domestic law, regulates

³⁰ ACHPR/Res.236 (LIII) 2013.

³¹ *Resolution on the Protection of Sacred Sites and Territories supra* note 28.

³² ACHPR/Res.224 (LI) 2012.

³³ *Resolution on a Human Rights-Based Approach to Natural Resources Governance supra* note 32.

³⁴ African Union (2019) Report of the African Union Panel of the Wise on Improving the Mediation and Resolution of Natural Resource-Related Conflicts Across Africa, 5th Thematic Report of the African Union Panel of the Wise, October 2019 <<http://wedocs.unep.org/bitstream/handle/20.500.11822/31043/AUP.pdf?sequence=1&isAllowed=y>> accessed 8 November 2020.

³⁵ In order to assess the evolving role of international law in the sustainable management of clean and renewable energy, the Committee surveyed the global IRENA *supra* note 13; the UNFCCC *supra* note 12 Preamble; Kyoto Protocol *supra* note 27; Paris Agreement *supra* note 13; UNCLOS *supra* note 13; the WTO Agreement *supra* note 28. The Committee also considered a number of regional instruments including the Energy Charter Treaty *supra* note 13 and *Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects* (adopted 17 December 1994, entered into force 16 April 1998) 2081 UNTS 3 (Energy Charter Protocol on Energy Efficiency); *APC-EU Cotonou Partnership Agreement* (adopted 23 June

clean energy as a national resource to promote more sustainable management of this resource by establishing several emerging key norms. States are encouraged to use trade and investment policy instruments as leverage for stronger sustainable and renewable energy-related activities and governance systems while still ensuring they align to applicable trade and investment law obligations at the international, regional and bilateral levels. States should ensure that their domestic legal and regulatory systems for energy promote and incentivize the generation and use of sustainable and renewable energy across all sectors and the economy as a whole, and support energy citizenship. There is a need to address the interconnectedness between sustainable energy and the management of food and water resources through a nexus governance approach. There is also a need to consider activities in relation to ocean resources such as methane hydrates. States should ensure that there is transparency and oversight in the regulation and management of sustainable and renewable energy as a sector. Procedures, including impact assessments and safeguarding mechanisms, must be put in place to avoid the risk of maladaptation, for example resulting from well-intentioned policies creating perverse incentives leading to unsustainable natural resource use including unsustainable land use or land use change.

2000) 2000/483/EC; OJ EU L 209, 11 August 2005 p 27 (Cotonou Partnership Agreement); Kuwait Regional Convention *supra* note 16 and *Protocol concerning Marine Pollution resulting from Exploration and Exploitation of the Continental Shelf* *supra* note 16; the *Pan-Arab Renewable Energy Strategy 2030 of the League of Arab States*; *African Charter on Human and Peoples' Rights* (adopted 27 June 1981, entered into force 21 October 1986) (1982) 21 ILM 58 (African Charter), art 24 and the *Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights* (adopted 17 November 1988, entered into force 16 November 1999) OAS Treaty Series No 69 (1988); ICESCR *supra* note 21; as well as applicable national laws and cases, where relevant.

II. TRENDS AND INNOVATIONS IN INTERNATIONAL LEGAL INSTRUMENTS AND APPROACHES IN SUSTAINABLE NATURAL RESOURCES MANAGEMENT FOR DEVELOPMENT

4. Trends from International Human Rights, Economic, Environmental, Peacebuilding and Post-Conflict Instruments related to the Sustainable Use of Natural Resources for Development

4.1 Human Rights Approaches

4.1.1 International human rights instruments provide protection for individuals in terms of rights that are linked to the ability to access natural resources and the ability to enjoy natural resources that are not degraded, polluted or otherwise threatened. Many regional human rights conventions and national constitutions³⁶ and the UN Special Rapporteur on Human Rights and the Environment have highlighted human rights linkages to other global agendas including climate change and biodiversity. The majority of human rights treaties contain reporting requirements that obligate States to disclose their compliance with the terms of the applicable treaty. This is coupled with the creation of a designated treaty oversight mechanism, which reviews and evaluates State compliance with treaty terms and provides guidance on treaty application. Through these oversight systems, there have been innovative treaty interpretations, which have increasingly entrenched the sustainable use of natural resources, particularly in human rights law jurisprudence.

4.1.2 The application of human rights instruments by international courts and tribunals, and particularly by the regional courts, such as the Caribbean Court of Justice, European Court of Human Rights and the Inter- American Human Rights system, represents significant innovation for the protection of natural resources. Innovating by extensive and evolutive interpretation of treaties, these courts demonstrate a deeper understanding of the ways in which natural resources and human rights are linked and contribute to reaffirming, acknowledging or developing the scope of rights and duties related to the enjoyment of natural resources from hard and soft law. Among these rights and duties is the right of Indigenous peoples to enjoy the natural resources in their traditional lands as well as the right of both current and future generations to derive a benefit from the protection of natural resources confirmed by the Inter-American Court of Human Rights. Further, there is the recognition of the duty to conduct EIAs or reviews and the right of prior consultation and to free, prior and informed consent for transfers and/or exploitation of territory and natural resources. In the application of international law, courts have innovated by expanding the scope of their jurisdiction going beyond the individual rights and acknowledging these rights to communities and groups of peoples, notably Indigenous peoples. The work of the quasi-judicial jurisdiction in the application of human rights law, such as the Human Rights Committee, the Committee on the Elimination of Racial Discrimination at the international level, at regional level the Inter- American Commission on Human Rights and the African Commission on Human and Peoples' Rights, and national courts (e.g. the Colombian Constitutional Court) and arbitrations, has also played a crucial role in recognizing rights to access and enjoyment of natural resources, as well as regarding the imputation of responsibility for the violation of these rights, including putting at stake the responsibility of private corporations in international and transnational matters.

³⁶ See *African Charter on Human and Peoples' Rights* *supra* note 35; and *Arab Charter on Human Rights* (adopted 23 May 2004), art 38. Note also ongoing discussions on a "Global Pact for the Environment" which may provide a "right to an ecologically sound environment" and a "duty to care for the environment," Global Pact for the Environment, "The Pact — Content" (*Global Pact Environment*, 2020) <<https://globalpactenvironment.org/en/the-pact/content/>> accessed 8 November 2020.

4.2 Economic Instruments

4.2.1 In recent years, there has been an increasing recognition of the links between international trade and sustainable development, including in the context of continuing debates in the World Trade Organization (WTO) and the implementation of trade rules. Certain progress has been achieved in, for instance, trade negotiations on the liberalization of environmental goods and services (ESG) which aim to enhance the potential of trade to foster rather than frustrate more sustainable management of natural resources.

4.2.2 Regional and bilateral economic agreements, such as Regional Trade Agreements (RTAs), are also being adopted, integrating and accompanied by specific measures promoting sustainable development. Many such agreements include, for instance, interpretive statements, reservations or general exceptions similar or broader than those found in the *General Agreement on Tariffs and Trade* under the WTO, deployed with increasing frequency to ensure that the trade agreements do not unintentionally constrain environmental, social or sustainable development measures, such as the adoption of rules to prevent unsustainable exploitation of natural resources, to incentivize green procurement, or to provide subsidies for more sustainable development. Further, in a new generation of regional and bilateral trade and investment agreements, many States are adopting explicit provisions to avoid negative material or normative impacts arising from trade and investment liberalization, encouraging and structuring collaboration for more optimal or sustainable use of natural resources. In certain inter-regional, regional and bilateral economic agreements, Parties are adopting specific chapters on “Trade and Sustainable Development” and other relevant arrangements such as work programmes for collaboration of the Parties to implement mutual commitments on the environment or sustainable development.³⁷ Additionally, economic agreements have begun to include a number of more specialized provisions which protect the environment and natural resources, such as climate finance mechanisms, the promotion of trade in sustainable products, services or technologies, disaster risk reduction collaboration, commitments to encourage subsidies for clean and renewable energy resources or organic agriculture, the inclusion of standard setting for low-carbon development, and the use of monitoring and assessment mechanisms to review the impacts of trade agreement implementation. Further, regional and bilateral trade agreements now increasingly scrutinized through mechanisms such as environmental, human rights or sustainability impact assessments and public consultations, both during negotiations and throughout their implementation.

4.2.3 International Investment Agreements (IIAs), as well as international investment guidance, have also begun to include significant aspects of environmental protection and conservation, particularly those that relate to the sustainable management of natural resources. IIAs are increasingly incorporating commitments to promote sustainable development, and reaffirming State rights and duties to regulate in relation to sustainable development. Additionally, IIAs are including environmental, social and other sustainability concerns in their definitions and application of the scope of investment, like circumstances designations and market access and expropriation, among other points. As one example of international guidance in this area, the *Principles for Responsible Investment in Agriculture and Food Systems*, adopted by the Committee on World Food Security, promote ‘responsible investments’ that contribute to food security and nutrition, including through conservation and sustainable management of natural resources.

4.2.4 Finally, innovative economic instruments are being adopted in international agreements on sustainable development, for instance through provisions to redirect financial flows in the objectives of the *Paris Agreement* under the *United Nations Framework Convention on Climate*

³⁷ Certain Committee Members were supportive of such sustainable development measures adopted in chapters and cooperation arrangements, including those of the European Commission with developing countries, while others were critical, noting that such measures may not be subject to the treaty dispute settlement mechanisms nor envision sanctions for non-compliance.

Change, and the implementation of access and benefit-sharing arrangements under the Nagoya Protocol to the *Convention on Biological Diversity*, and should assist in realigning economic incentives with sustainable resources management imperatives.

4.3 Environment and Sustainable Development Cooperation

Scientific Collaboration

4.3.1 Treaty regimes, particularly those focused on understanding and resolving quickly changing environmental problems and related opportunities for sustainable natural resources management, often develop inter-actionally, building on the foundations of inter-governmental and also independent scientific collaboration mechanisms, such as the Intergovernmental Panel on Climate Change (IPCC), the Intergovernmental Science- Policy Platform on Biodiversity and Ecosystem Services (IPBES), the UNCCD Science-Policy Interface (SPI), the Intergovernmental Technical Panel on Soils (ITPS), and the World Ocean Assessment (WOA), to generate new and innovative solutions to persistent and emerging issues on the international scale. States and coalitions of like-minded States, and also the work of broader epistemic communities in supporting treaty negotiation and implementation, have worked to better define the contours of the principle of sustainable use to ensure sustainable natural resources management.

4.3.2 There are many developments that have occurred in the last few years to secure more sustainable management of natural resources in multilateral environmental agreements (MEAs) and other treaties on sustainable development. In transboundary problem identification and scientific collaboration, for instance, States are now coordinating international scientific scans and studies, or attempting to provide independent and relatively neutral summaries and compilations of scientific data. Often, in environmental matters, it is a question of sounding the alarm on problems. Data is shared with State decision-makers and, in certain instances, becomes the platform for States and non-State actors to reach consensus on environmental problems and work to address them together, using, for example, Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA) or Sustainability Impact Assessment (SIA) procedures. In some cases, cooperation arrangements have also supported efforts to 'fail forward' into cooperative instruments to address them.

Financing Mechanisms

4.3.3 The establishment of effective and reliable financial bodies to support activities agreed in international treaties, and therefore, also compliance, is crucial. Increasingly ambitious financial mechanisms are being established as States and others start to invest more deeply in addressing environmental problems. For instance, the Global Environment Facility has supported projects on sustainable resources use and has sought assurances that projects will not harm natural resources. Similarly, new methods of financing for clean development and renewable energy were tested in the UNFCCC through the *Kyoto Protocol*, and a sustainable development mechanism is included in the *Paris Agreement*. These funds are being set in place to implement the law, convening and facilitating the engagement of States which guide and contribute to the funds, and providing guidance to ensure adherence to agreed principles, rules and procedures.

Monitoring, Reporting and Verification

4.3.4 Transparent reporting, monitoring and verification practices have also become more common in international law, having arguably been piloted by State Parties to the treaties discussed herein. For instance, the adoption of operational information-sharing arrangements, such as regular peer-reviewed monitoring, reporting and verification (MRV) systems, public online databases, and clearinghouses for information-sharing have engaged States and non-State

actors in the international community in treaty implementation. By encouraging greater transparency in the treaty negotiation and implementation process, in part through the provision of important national information, international law and procedures have advanced. Regular submission of 'national communications' has become nearly a standard obligation for States under treaties on the environment.

Public Participation and Access to Information and Justice

4.3.5 Treaty regimes on the environment rely upon public participation and dissemination of information to generate awareness, ownership and support for their work on all levels, and to increase the availability of relevant scientific information, and the UN assists in this process. In the treaties, Parties commit to promote public participation within their decision-making regimes, for instance through the granting of Observer status to non-governmental organizations with an interest in the subject matter, encouraging multilateral engagement of stakeholders in a manner similar to the Observer status granted to ECOSOC-accredited organisations. Public access to information through technology and media is generating new potentials for meaningful public participation and engagement (e.g., UN's Papersmart online tool). International and national registries are being increasingly encouraged, serving to increase citizen knowledge and awareness of science, law and other developments related to the subject matter of international agreements. Many agencies work to provide independent, accessible information in relation to the objectives and obligations of the agreements. This public engagement in turn supports States' efforts to comply with treaty obligations, encouraging partners and stakeholders to contribute to the treaty.

4.3.6 Treaties on the environment and sustainable development support States in resolving disputes on treaty interpretation peacefully, both through the inclusion of dispute settlement and advisory opinion provisions in the accords, and through the encouragement of their appropriate use. Dispute settlement mechanisms, such as the International Court of Justice, the International Tribunal on the Law of the Sea and others, are constituted by treaty regimes. The awards and decisions of these bodies not only resolve disputes that might otherwise further degrade the contested areas, but also assist States to understand their binding obligations and principles, interpreting the treaty law with an independent and respected voice in both contentious and advisory cases. Under these treaties, partners assist States to comply with their treaty obligations, providing analysis, technical knowledge, and training, and hosting forums for judges and officials to discuss new developments in international law that affect environmental protection. There are also increasing opportunities, on a procedural and substantive level, for non-state actors, including individuals as well as groups and peoples, to rely on internationally derived law relating to the sustainable management of natural resources.

4.3.7 Generally, treaties on the environment and on sustainable development have assisted in giving normative effect to the principles that underpin sustainable management in both procedural and substantive ways.³⁸

³⁸ The Committee considered, *inter alia*, the *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters* (adopted 25 June 1998, entered into force 30 October 2001) 2161 UNTS 447 (Aarhus Convention); CLRTAP *supra* note 27 and *Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Further Reduction of Sulphur Emissions* (adopted 14 June 1994, entered into force 5 August 1998) 2030 UNTS 122; UNCLOS *supra* note 13, s 4(a) art 157; CBD *supra* note 15, Preamble and art 6 and Cartagena Protocol *supra* note 16); the UNFCCC *supra* note 12, art 4(1)(d); Kyoto Protocol *supra* note 27; *Paris Agreement supra* note 13 Preamble, arts 2(1), 12, and 15; UNCCD *supra* note 13; ITTA 2006 *supra* note 16; Espoo Convention *supra* note 13; *Vienna Convention on the Protection of the Ozone Layer supra* note 13, art 2 and *Montréal Protocol on Substances that Deplete the Ozone Layer* (adopted 16 September 1987, entered into force 1 January 1989) 1522 UNTS 28; *Stockholm Convention supra* note 13; *World Trade Organization Agreement on Sanitary and Phytosanitary Measures* (adopted 15 April 1994, entered into force 1 January 1995) 1867 UNTS 493 (SPS Agreement); *Helsinki Convention supra* note 16; *Convention on Transboundary Effects of Industrial Accidents* (adopted 17 March 1992, entered into force 19 April 2000) 2105 UNTS 457; London

4.4 Peacebuilding and Post-Conflict Instruments

4.4.1 In recent decades, the promise of international law in post-conflict contexts and environmental peacebuilding has come to the forefront, with significant developments in forums including the International Law Commission (ILC). Environmental peacebuilding has been defined as integrating natural resources and the environment in conflict prevention, mitigation, resolution, recovery, cooperation and peacebuilding. Principle 1 of the ILA New Delhi Principles sets out State responsibility “to ensure that activities within their jurisdiction or control do not cause significant damage to the environment of other States or of areas beyond the limits of national jurisdiction” and the “duty to manage natural resources, including natural resources within their own territory or jurisdiction, in a rational, sustainable and safe way so as to contribute to the development of their peoples, with particular regard for the rights of indigenous peoples, and to the conservation and sustainable use of natural resources and the protection of the environment, including ecosystems.” Sustainable use in the context of environmental peacebuilding may refer to the obligation to prevent transboundary environmental damage resulting from the use of natural resources, as well as sustainability with respect to the use of the natural resources themselves, e.g. preventing over-exploitation and ensuring sustainable livelihoods.

4.4.2 New Delhi Principle 6 notes that “good governance requires full respect for the principles of the 1992 Rio Declaration on Environment and Development.” Principle 24 of the 1992 Rio Declaration states that: “Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.” Principle 23 notes that, in situations of occupation, “The environment and natural resources of people under oppression, domination and occupation shall be protected.” In addition, Principle 25 of the Rio Declaration states that peace, development and environmental protection are interdependent and indivisible.

4.4.3 As outlined in the ILC’s analysis on this topic, the 1977 *Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques* prohibits the military or other hostile use of environmental modification techniques that have “widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party” (Article 1). In addition, Article 35 and Article 55 of the 1977 *Additional Protocol I to the 1949 Geneva Conventions* prohibit warfare that may cause “widespread, long term and severe damage to the natural environment.” The duty to not cause significant damage is also referenced in the 1998 *Rome Statute of the International Criminal Court*, which states that “intentionally launching an attack in the knowledge that such attack will cause incidental [...] widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated” constitutes a war crime (Article 8(2)(b)(iv)). In 2016, the International Criminal Court (ICC) Office of the Prosecutor issued a *Policy Paper on Case Selection and Prioritisation*, explaining “the Office will give particular consideration to prosecuting Rome Statute crimes that are committed by means of, or that result in, inter alia, the destruction of the environment, the illegal exploitation of natural resources or the illegal dispossession of land.” In addition to the work of the ILC on protection of the environment in relation to armed conflicts (see e.g. Draft principle 21 on Sustainable use of natural resources in situations of occupation), the UN Environment Assembly (UNEA) is also increasingly addressing links between conflict, peacebuilding and the environment (UNEA Res. 2/15 and 3/1). Furthermore, the Sustainable Development Goals (SDGs) aim to both mitigate fragility, corruption and environmental hazards on the one hand (e.g. SDGs 3.9, 15.7, 16.4, 15.2), and enable good governance on the other (e.g. SDG 16.7, 5.a, 2.3, 12.2, 16.8), meaning that their effective implementation could further the objectives of environmental peacebuilding.

Convention *supra* note 19 and Protocol to the London Convention *supra* note 19; and also the Kuwait Regional Convention *supra* note 16 and Protocol concerning Marine Pollution resulting from Exploration and Exploitation of the Continental Shelf *supra* note 16.

Secure Land and Water Access

4.4.4 Recognizing that access to land and natural resources are key to the lives and livelihoods of millions of people worldwide, secure land tenure, also recognition, promotion and protection of all legitimate tenure rights (as per the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* (VGGT)), including for women, along with access to water, are key to secure sustainable use of natural resources. They are vital in post-conflict situations, as lack of access to such resources can exacerbate the tensions giving rise to the conflict, and the failure to adequately address concerns in the peacebuilding process can contribute to the renewal of armed conflict. At the same time, in many States emerging from conflict, agriculture, and thus access to land, soil and water resources, plays a critical role in survival. In the context of these competing concerns, recognizing the pressing need to avoid a renewal of hostilities in order to construct a durable peace, sustainable use of land, natural resources and access to water should be addressed. While approximately half the peace agreements concluded between 1989 and 2004 referred to natural resources, nearly all major agreements from 2005 onwards contain explicit provisions. Recent examples, such as the 2016 *Peace Agreement between Colombia and the FARC-EP*, recognize the inherent necessity of including sustainable use of natural resources as a cornerstone in building post-conflict society.

5. Innovative Techniques and Requirements in International Instruments on Sustainable Management of Natural Resources for Development

5.1 Sustainable Resources Management through Transparency and Stakeholder Engagement

5.1.1 In the context of international agreements on sustainable development, reporting requirements are increasingly becoming a standard method through which the terms of the agreement are implemented and oversight is provided. Reasons for this trend include the necessity of creating a compliance assessment structure for the agreement and the requirement that the international community and stakeholders, especially civil society members at all levels, have access to information on environmental progress, further environmental and other threats, including threats to natural resources. In addition, the requirement for publicly available EIA promotes transparency and stakeholder participation, and provides an anchor for review. These forms of assessment are innovative in that they attempt to create regulatory processes regarding the sustainable use of natural resources at the national and international levels.

5.1.2 Another critical aspect of oversight in the context of international agreements on sustainable development is the focus on inclusion, transparency and the promotion of public awareness of the potential environmental and natural resource impacts of activities subject to the terms of the treaty. Included in these areas are, increasingly, efforts to foster public empowerment and engagement in the discussions and debates regarding proposed activities falling within the ambit of the agreement. By bringing the voices of individuals and civil society into a realm which was formerly reserved for national and international actors, these provisions are innovative. For example, the *Minamata Convention on Mercury*, one of the newest MEA instruments in international law, requires States to generate information on mercury stocks and mercury production in their territories, as well as to regulate the production and storage of mercury in their jurisdiction. At the same time, the *Minamata Convention* provides for significant control and oversight of mercury transportation, import and export within and between States.

5.1.3 In terms of generating transparency within certain sectors, the corporate social

responsibility initiative the Extractive Industry Transparency Initiative (EITI) serves as an example of a transnational framework for enhancing transparency in revenue flows to the governments of resource States. The EITI requires disclosure of revenue flows to the governments of resource States and disclosure of contracts, as well as the disclosure of beneficial owners of companies. By generating these forms of transparency requirements at the national and sectoral levels, governments and corporations can be held accountable to the public for their actions and decisions as well as for the financial distributions they make as a result of resources generated in this context. In addition, transparency measures such as those under the EITI structure are also intended to serve as a counterweight to the potential for companies to commit acts of bribery and/or illicit influence peddling as well as for government actors to misuse profits from the trade in and licensing of natural resources. This method of including transparency as a core element of accountability and anti-corruption is innovative as a means to promote the sustainable use of natural resources.

5.2 Equitable Benefit-Sharing from Sustainable Natural Resources Management

5.2.1 A growing number of treaties and other legal instruments refer to benefit-sharing from the use of natural resources. Benefit-sharing emerged as a manifestation of the international legal principles of equity and international cooperation, evolving at the intersection of natural resources governance and human rights law – particularly the right to development. The principle may, depending on the resource, promote procedural fairness and/or equitable outcomes in the sustainable management of natural resources. It may also require the sharing of monetary and/or non-monetary benefits, including economic, environmental, social and intrinsic benefits. It has been applied to relationships between States, within States, and between generations.

5.2.2 The application of the benefit-sharing principle varies depending on the natural resource involved, as well as its nature and location. The principle's best known expression is in the biodiversity regime, which calls for the fair and equitable sharing of the benefits resulting from the utilization of genetic resources and associated traditional knowledge held by sovereign States or their Indigenous peoples and local communities, and in the associated regime addressing plant genetic resources for food and agriculture. It is also present as a voluntary mechanism in the climate regime, namely REDD+. Furthermore, it forms part of the rules governing the sustainable management of outer space, an area of common interest, and celestial bodies, to which the common heritage of humankind is applicable. Additionally, it is being addressed in the emerging rules governing deep sea bed mining in the Area under UNCLOS, which is also the common heritage of humankind.

5.2.3 Binding commitments on equitable benefit-sharing are challenging to negotiate. For example, negotiations have been particularly complex on potential benefit-sharing from marine genetic resources in ABNJ under the oceans regime. Negotiations on intellectual property rights over genetic resources and traditional knowledge, folklore and genetic resources have not produced a treaty after nearly twenty years of negotiations. Yet, the principle will remain relevant to debates and negotiations in international fora given the economic and social inequalities between and within States recognized in the New Delhi Declaration, which will likely grow due to the global economic impact of the COVID-19 pandemic. As such, benefit-sharing may be used as an innovative requirement in future treaties and instruments addressing sustainable resources management.

5.3 Legal Indicators of Effectiveness for Sustainable Natural Resources Management

5.3.1 Assessing the effectiveness of international law related to sustainable development is an essential task, particularly in the context of sustainable use of natural resources, and yet it remains somewhat difficult to implement. In this context, the creation of legal indicators for

effectiveness of international law related to sustainable development is critical, although questions as to how to collect information and convert data into indicators and the need to avoid misuse of data remain. The innovative idea of developing and applying these legal indicators offers the chance to generate a larger system in which assessment of sustainable use of natural resources can be conducted.

5.3.2 In this context, a potential approach to analysis could build on the existing systems in place for establishing legal indicators in other fields that link to MEAs and natural resource governance, including three measures of effectiveness: (i) legal effectiveness, which focuses on the issue of compliance; (ii) behavioural effectiveness, which focuses on the role of international law in influencing and even changing actors' behavior towards achieving the treaty's objectives; and (iii) problem-solving effectiveness, which focuses on the ability of the legal rule to solve or mitigate the problem it was designed to address.

5.4 Control of Illicit Flows for Sustainable Natural Resources Management

5.4.1 The control of illicit flows of natural resources, including flows of endangered species, wildlife, fisheries resources, timber and minerals, and the attendant human rights abuses and loss of biodiversity, is a significant element of promoting and ensuring the sustainable use of natural resources at the international and national levels. Methods of control have been crafted as national and international law, each form containing innovative elements in terms of the obligations placed on actors throughout the international and national systems involved and the ways in which these actors can be held accountable.

5.4.2 A number of States, such as the United Kingdom and France, have enacted legislation addressing and banning conflict minerals of various forms as well as the forced labor used to extract them. Further, under the Dodd Frank Act enacted by the United States and subsequent regulations enacted by the US Securities and Exchange Commission, there is an obligation for companies to disclose if they are using minerals originating in the Democratic Republic of Congo or neighboring States. Additionally, the EU has established regulations requiring that EU importers of tin, tantalum and tungsten, related ores and gold from conflict areas follow certain due diligence obligations. Perhaps the best-known binding instrument in this regard is the Kimberley Process Certification Scheme for Rough Diamonds, which establishes a series of requirements for the certification of diamonds as non-conflict diamonds and the ability to trace diamonds to the source of their extraction. Additionally, inspired by non-binding instruments such as the United Nations Guiding Principles on Business and Human Rights and the OECD Due Diligence Guidance for Responsible Mineral Supply Chains of Minerals from Conflict Affected and High-Risk Areas, States have gradually started to adopt binding legislation on the regional and national levels to address the application of disclosure and due diligence to corporate practice and regulation in the context of conflict minerals and other resources which can be yielded through illicit activities.

6. Sustainable Natural Resources Management in International Dispute Settlement

6.1 In recent years, a number of international courts and tribunals, as well as arbitral bodies and other international dispute settlement mechanisms, have addressed issues relating to sustainable management of natural resources. The decisions of these dispute settlement mechanisms demonstrate openness to the recognition of sustainable management of natural resources as a principle, if not indeed a duty, that is justiciable across a variety of jurisdictional competencies in a variety of specific contexts.

6.2 At the international level, decisions such as those issued by the International Court of Justice in the *Case Concerning the Gabčíkovo-Nagymaros Project*,³⁹ *Pulp Mills on the River Uruguay*,⁴⁰ *Whaling in the Antarctic (Australia v Japan)*,⁴¹ and *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua)*⁴² demonstrate a certain level of recognition, in international law, of the principle that shared natural resources should be managed sustainably in certain conditions. This includes the recognition of shared fishing rights in the *Pulp Mills on the River Uruguay*⁴³ case and of species such as whales in *Whaling in the Antarctic*,⁴⁴ and the sustainable use of shared natural resources in *Gabčíkovo-Nagymaros*, particularly the separate opinion of Justice Weeramantry.⁴⁵ Similar trends can be observed in the Permanent Court of Arbitration's *Abyei-Sudan* case,⁴⁶ relating to recognition and protection of Indigenous knowledge of and interests in natural resources, *Iron Rhine (Belgium v Netherlands)* case,⁴⁷ recognizing the obligation of Belgium to undertake environmental impact assessments, and *Indus Waters Arbitration (Pakistan v India)* case,⁴⁸ recognizing the importance of shared waterways and to achieve development while minimizing impacts on water flow diversion; in decisions of the International Centre for Settlement of Investment Disputes (notably *Chevron Corporation and Texaco Petroleum Corporation v Ecuador*,⁴⁹ relating to the ability of States to abrogate contracts relating to the exploitation of national oil resources, and *Gauff (Tanzania) Ltd v United Republic of Tanzania*,⁵⁰ relating to contractual obligations of a State stemming from water and sewerage contracts with foreign entities); and of the International Tribunal on the Law of the Sea in *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*,⁵¹ establishing State requirements to use the precautionary principle in the conduct of contract-based exploration for natural resources in the Area and *Request for an advisory opinion submitted by the Sub-Regional Fisheries Commission (SRFC)*, establishing flag-State responsibility to prevent, detect, report and investigate illegal, unreported and unregulated fishing, including in the EEZs of third-party States.⁵²

6.3 The latest WTO reports, in particular, show an increasing receptivity towards accommodating for sustainable natural resources management concerns, even when this entails restricting international trade, via conservation-related exceptions. In *China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum* and *China – Measures Related to the Exportation of Various Raw Materials*, WTO adjudicators have in particular recognized Members' right to design broad natural resources conservation programmes in a way that responds to their own concerns and priorities in light of the principle of sustainable development and the principle of sovereignty over natural resources.⁵³ In *US – Import Prohibition of Certain Shrimp and Shrimp*

³⁹ *Case Concerning the Gabčíkovo-Nagymaros Project (Hungary v Slovakia)* (Judgment) [1997] ICJ Rep 7.

⁴⁰ *Pulp Mills on the River Uruguay (Argentina v Uruguay)* (Judgment) [2010] ICJ Rep 14.

⁴¹ *Whaling in the Antarctic (Australia v Japan)* (Judgment) [2014] ICJ Rep 226.

⁴² *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua)* (Judgment) [2018] ICJ Rep 15. Appeal No: 205/19 (31 July 2020).

⁴³ *Pulp Mills on the River Uruguay (Argentina v Uruguay)* (Judgment) [2010] ICJ Rep 14.

⁴⁴ *Whaling in the Antarctic (Australia v Japan)* (Judgment) [2014] ICJ Rep 226.

⁴⁵ *Case Concerning the Gabčíkovo-Nagymaros Project (Hungary v Slovakia)* (Separate Opinion of Vice-President Weeramantry) [1997] ICJ Rep 7.

⁴⁶ *Abyei v Sudan*, Permanent Court of Arbitration (2009) 48 ILM 1258.

⁴⁷ *Iron Rhine Arbitration, Belgium v Netherlands*, Award, ICGJ 373 (PCA 2005).

⁴⁸ *Indus Waters Kishenganga Arbitration, Pakistan v India*, Final Award, ICGJ 478 (PCA 2013).

⁴⁹ *Chevron Corporation and Texaco Petroleum Corporation v Ecuador (II)*, PCA Case No. 2009-23 (25 January 2012).

⁵⁰ *Biwater Gauff (Tanzania) Ltd. v United Republic of Tanzania*, ICSID Case No. ARB/05/22 (24 July 2008).

⁵¹ *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*, ITLOS Case 17, Advisory Opinion (1 February 2011).

⁵² *Request for an Advisory Opinion submitted by the Sub-Regional Fisheries Commission*, ITLOS Case 21, Advisory Opinion (2 April 2015).

⁵³ WTO, *China: Measures Related to the Exportation of Various Raw Materials* – Reports of the Panels (22 February 2012) WT/DS394/R Add.1 and Corr.1, WT/DS395/R Add.1 and Corr.1 / WT/DS398/R, Add.1 and Corr.1 [7.377]-[7.381]; WTO, *China: Measures Related to the Exportation of Rare Earths, Tungsten, and Molybdenum* – Reports of the Panels (29 August 2014) WT/DS431/R and Add.1, WT/DS432/R and Add.1, and WT/DS433/R and Add.1 [7.262].

Products and US – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products (Article 21.5), they clarified that Members can legitimately pursue conservation policies for the sake of protecting both non-living and living natural resources,⁵⁴ even when they are not endangered or threatened by extinction, and even if such policies have extraterritorial effects.⁵⁵

6.4 At the regional level, key decisions have come from the *African Charter on Human and Peoples' Rights* system, Caribbean Court of Justice, European Court of Human Rights and the Inter-American Human Rights system.⁵⁶ Further, a number of quasi-judicial and other bodies have issued findings and decisions that are critical in entrenching the sustainable management of natural resources in organizational as well as international, regional and national legal practice.⁵⁷ The bodies include the World Bank Inspection Panel,⁵⁸ Inter-American Development Bank Independent Consultation and Investigation Mechanism,⁵⁹ Committee on the Elimination of Racial Discrimination,⁶⁰ Human Rights Committee,⁶¹ and multilateral environmental agreement enforcement mechanisms such as those associated with the *UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters*⁶² and the *North American Agreement on Environmental Cooperation*.⁶³

6.5 At the national level, the seminal *Minors Oposa* case from the Philippines opened a new way of thinking about the ability of current generations to assert their rights and the rights of future generations in the context of climate change and natural resources.⁶⁴ The trend has continued through to the 2019 *Urgenda* decision in the Netherlands, which saw the Supreme Court uphold a determination that the State was not complying with the obligations it had undertaken regarding climate change.⁶⁵ Since the months since *Urgenda*, a spate of similar climate litigation claims

⁵⁴ In *United States: Standards for Reformulated and Conventional Gasoline*, the WTO adjudicators have also considered that clean air qualifies as an exhaustible natural resource: WTO, *United States: Standards for Reformulated and Conventional Gasoline* – Report of Panel (20 May 1996) WT/DS2/R [6.36].

⁵⁵ WTO, *United States: Import Prohibition of Certain Shrimp and Shrimp Products* – Report of the Panel (6 November 1998), WT/DS58/AB/R [128]–[132]; WTO, *United States: Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products (Recourse to Article 21.5 of the DSU by Mexico)* – Report of the Appellate Body (3 December 2015) WT/DS381/RW and Add.1 [7.521].

⁵⁶ See *Centre for Minority Rights Development (Kenya) and Minority Rights Group International on behalf of Endorois Welfare Council v Kenya*, African Commission on Human and Peoples' Rights (Communication No 276/2003 (2010)); *Social and Economic Rights Action Centre & the Centre for Economic and Social Rights v Nigeria* (Communication No. 155/96) (2002); *Fishermen and Friends of the Sea v Environmental Management Authority and Atlantic LNG*, [2018] UKPC 24; *Depalle v France*, ECtHR (no. 34044/02) (2010); *Tatar v Romania*, ECtHR (no. 670321/01) (2009); *Mayagna (Sumo) Awas Tingi Community v Nicaragua*, IACHR Series C No 79, [2001] IACHR 9, IHRL 1462 (IACHR 2001), 31 August 2001; *Saramaka People v Suriname*, IACHR Series C No 185, IHRL 3058 (IACHR 2008), 12th August 2008.

⁵⁷ See discussions in MC Cordonier Segger with HE CJ Weeramantry (eds), *Sustainable Development in International Courts and Tribunals* (Routledge 2017).

⁵⁸ See *Cambodia - Forest Concession Management and Control Pilot Project: Request for Inspection* - Inspection Panel Report and Recommendation, Report 31862 (2005); *Chad-Cameroon Pipeline Project* - Outcome of the Inspection Panel's Investigation, Report 36569-TD (2006).

⁵⁹ See *Marena Renovables Wind Project Review*, Case No. ME-MICI002-2012 (2016); *Panama Canal Expansion Program*, Case No. PN-MICI002-2011-31 (2011).

⁶⁰ Decision 1 (68) (United States of America) (2014).

⁶¹ *Ilmari Lansman v Finland*, U.N. Doc. CCPR/C/83/D/1023/2001 (2015); *Ivan Kitok v Sweden*, Communication No. 197/1985, CCPR/C/33/D/197/1985 (1988); *Jouni E. Lansman et al. v Finland*, Communication No. 671/1995, U.N. Doc. CCPR/C/58/D/671/1995 (1996).

⁶² *Aarhus Convention Compliance Committee Case Concerning Armenia*, ACCC/C/2016/138 Armenia (2016); *Aarhus Convention Compliance Committee Case Concerning the European Union*, ACCC/M/2017/3 European Union (2018); *Aarhus Convention Compliance Committee Case Concerning France*, ACCC/C/2007/22 France (2009); *Aarhus Convention Compliance Committee Case Concerning Romania*, ACCC/C/2012/69 Romania (2015).

⁶³ *BC Salmon Farms*, SEM-12-001 (2014); *Metales y Derivados*, SEM-97-007 (1998); *Migratory Birds*, SEM-99-002 (2001); *Ontario Logging II*, SEM-04-006 (2007).

⁶⁴ *Minors Oposa v Factoran*, G.R. No. 101083 (224 SCRA 792) (1993).

⁶⁵ *Urgenda Foundation v State of the Netherlands*, ECLI:NL:HR:2019:2007 (2019).

have been brought around the world, and additional courts, such as the Irish Supreme Court, have endorsed this line of reasoning.⁶⁶

III. INTERPRETATION AND APPLICATION OF THESE GUIDELINES

7. In their interpretation and application, the 2020 ILA Guidelines on the Role of International Law in Sustainable Natural Resources Management for Development are inter-related and each of them should be read in the context of the other Guidelines provided, in the context of the 2002 New Delhi Declaration of Principles of International Law Relating to Sustainable Development, the 2012 Sofia Guiding Statements on the Judicial Elaboration of the 2002 New Delhi Declaration of Principles of International Law Relating to Sustainable Development, other relevant Resolutions of the ILA, and the international legal instruments on sustainable development mentioned herein. Nothing in these Guidelines shall be construed as prejudicing in any manner the provisions of the Charter of the United Nations and the rights of peoples under that Charter.

⁶⁶ See *Friends of the Irish Environment v The Government of Ireland, Ireland and the Attorney General*, Appeal No: 205/19 (31 July 2020).

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