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ASIAN-AFRICAN LEGAL CONSULTATIVE ORGANIZATION

ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

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I. Introduction

A. Background

1. Since the 1970s the issues pertaining to environment and sustainable development have constituted an important element of the work programme of AALCO.[1] The proposal to peruse the topic of development of international law relating to human environment was placed on the Organization's agenda by the Government of India at the Fifteenth Annual Session, which took place in 1974 in Tokyo.

2. Since then, it has been deliberated under heads such as Environmental Law, Environment Protection, Transboundary Movement of Hazardous Wastes, Preparation for the United Nations Conference on Environment and Development (UNCED), United Nations Conference on Environment and Development: Follow-up and Environment and Sustainable Development (2003 onwards). Relevant contemporary developments had guided the course of deliberations on the topic at various Annual Sessions.

3. In this context, a significant step has been the adoption of the *Statement of General Principles of International Law* by the Thirty-First Annual Session of the Organization held in 1992 in Islamabad, Pakistan. This statement, *inter alia*, recognized that the "environment is the common concern of mankind and that the environment and development are intrinsically and inextricably linked". Furthermore, to address environmental concerns it advocated the adoption of the principle of common but differentiated responsibility (CBDR) and declared that the application and enforcement of environmental standards by the developing countries shall be in accordance with their respective capabilities and responsibilities.

4. After the United Nations Conference on Environment and Development (UNCED), 1992, the Organization firstly promoted the ratification of the three Rio Conventions namely, *the United Nations Framework Convention on Climate Change*, 1992 (UNFCCC); *Convention on Biological Diversity*, 1992 (CBD); and *the United Nations Convention to*

[1] For a detailed study see: Wafik Zaher Kamil, "Protection of Environment: Contribution of the Asian-African Legal Consultative Organization to the Development of International Environmental Law", *AALCO Quarterly Bulletin*, vol. 1, 2005, pp. 1-26

Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, 1994 (UNCCD). Subsequent to the entry into force of these three Conventions, the focus of the deliberations in AALCO has been on the relevant legal developments taking place within the Conference of the Parties of those international regimes. In addition, the Organization has also considered the work of the United Nations Environment Programme (UNEP) and the Commission on Sustainable Development (CSD).

5. The topic has also been addressed in at least three special meetings, namely, on "Effective Means of Implementation, Enforcement and Dispute Settlement", (Accra, Thirty-Eighth Annual Session, 1999), "Environment and Sustainable Development" (Nairobi, Forty-Fourth Annual Session, 2005) and "Environment and Sustainable Development" (Dar es Salam, Forty-Ninth Annual Session, 2010).

6. In 2010, in Dar es Salaam, the United Republic of Tanzania, the deliberations in the Special Meeting on "Environment and Sustainable Development" were held in conjunction with the Forty-Ninth Annual Session of AALCO. The meeting took place in two working sessions, namely: Building Momentum towards Cancun Climate Change Negotiations; and the Revised African Convention on the Conservation of Nature and Natural Resources and the Draft International Covenant on Environment and Development. There were extensive discussions between the panelists of the Working Sessions and the delegates of the Member States. At the meeting, the Organization also entered into cooperation agreement with the International Council of Environmental Law (ICEL) to facilitate collaboration on endeavors relating to environment and sustainable development.

7. Further, the topic was discussed at the Fiftieth Annual Session in 2011 (Colombo), Fifty-First Annual Session in 2012 (Abuja), Fifty-Second Annual Session in 2013 (New Delhi (HQ), Fifty-Third Annual Session in 2014 (Tehran), and Fifty-Fourth Annual Session in 2015 (Beijing). It was emphasized during the Beijing Session that evidence shows that some of the most adverse effects of climate change will be in developing countries, where populations are most vulnerable and least likely to easily adapt to climate change, and that climate change will affect the potential for development in these countries. Some synergies already exist between climate change policies and the

sustainable development agenda in developing countries, such as energy efficiency, renewable energy, transport and sustainable land-use policies.

8. The interactions between environment and development are complex, and it is important to seek ways and means for achieving sustainability in all human activities aimed at such development. With this understanding, two issues of immense contemporary relevance, described hereafter, have been identified for focussed deliberation at the Sixtieth Annual Session of AALCO.

B. Topics for Focussed Deliberation

a. Transboundary Air Pollution with Specific Reference to Sand & Dust Storms (SDS) and Haze Pollution

b. Conservation and sustainable use of BBNJ

9. The issue of Haze Pollution and Sand & Dust Storms (SDS) is one of the most pressing challenges of transboundary pollution being faced today by the international community. Many AALCO Member States are familiar with this environmental hazard and have been at the forefront of tackling this problem through appropriate legal and diplomatic tools. While Haze Pollution and Sand & Dust Storms (SDS) has never featured in AALCO's brief's as a topic of discussion in the past, the Secretariat is of the opinion that the time is apt for the Secretariat to broaden the agenda item of 'Environment and Sustainable Development' to address the grave hazards posed by this problem. The inclusion of this issue is timely because of the renewed challenges being faced and the need to share appropriate legal and policy perspectives by AALCO Member States in light of their experience and practice dealing with the problem of Haze pollution and Sand & Dust Storms.

10. It may also be noted that the United Nations has been at the forefront of addressing this issue and regional efforts notably by the ASEAN have been underway as well. In this regard, the Secretariat is of the view that the issue may be given adequate emphasis by AALCO in the best interest of facilitating deeper engagement and AALCO Member States

may be provided with an opportunity to express their positions with the aim of effectively dealing with the challenges posed on this front.

11. It should also be noted that such a discussion can also possibly create a common position on the need to address threats posed by transboundary pollution at a more general level and the Afro-Asian region could emerge as a potential regional catalyst in fostering the evolution of global legal principles in this regard.

12. In order to adequately respond to the rapidly evolving challenges in international law, AALCO has remained steadfast in its efforts to decipher and facilitate deliberations on nascent issues on the law of the seas, and to enable the perusal of interlink of the law of the sea with other concerns, e.g., those pertaining to the environment and the question of sustainable development. In recent times, AALCO has almost exclusively dealt with the issue of marine biodiversity in its briefs on the agenda item the Law of the Sea. AALCO has sought to play an active role in encouraging its Member States to participate in the negotiations on a new international legally binding instrument (ILBI) under the United Nations Convention on the Law of the Sea (UNCLOS) on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ). It would be the third UNCLOS implementing agreement.[2]

13. AALCO has been cognizant of the pertinence of BBNJ, and successfully facilitated deliberation at the *UMT- AALCO Legal Expert Meeting on the Law of the Sea* under the topic *"Marine Biodiversity Within and Beyond National Jurisdiction: Legal Issues and Challenges"* on 24 August 2015, which added more clarity to and promoted a more concrete understanding of key issues among Member States. In pursuance of the mandate received from the resolution adopted on the Law of the Sea at the Fifty-Fourth Annual Session, the Secretariat had prepared a Special Study entitled "*Marine Biodiversity beyond National Jurisdiction: An Asian-African Perspective*". The delegation of the Kingdom of Thailand[3] emphasised that AALCO ought to continue facilitating the discussion on the topic.

[2] The implementing agreements of the UNCLOS, *viz.*, the 1994 Agreement relating to the implementation of Part XI of UNCLOS and the 1995 United Nations Fish Stocks Agreement entered into force on 28 July 1996 and on 11 December 2001 respectively. Together with the UNCLOS, these agreements set up a comprehensive legal framework for the regulation of a wide range of activities in the oceans

[3] *Id.* at 51

14. The timeliness of the topic "conservation and sustainable use of BBNJ" accrues from the steady broadening of the spectrum of threats to marine resources and biodiversity from established and emerging anthropogenic uses[4] in the vast areas of the ocean beyond national jurisdiction (ABNJ).[5] The threats include pollution (in all its forms), overfishing and intensified aquaculture, shipping and expansion of global maritime trade, deep seabed mining, ocean warming, ocean acidification, and numerous emerging uses of the oceans, which include bio prospecting, geo-engineering, energy development, and climate change mitigation efforts, such as seabed sequestration of carbon dioxide and ocean fertilisation, among others.[6] Realization has dawned on the international community that these threats call for improving the conservation and sustainable use of the ocean through international law. In view of the exclusive focus on this topic in deliberating on the Law of the Sea agenda item during the recent Annual Sessions of AALCO, it appears that the topic could be better addressed within the ambit of the agenda item Environment and Sustainable Development. This would ensure that the topic is glimpsed through the prism of sustainable development.

15. The relevance of the topic to the AALCO Member States is affirmed by their participation in the sessions of the Intergovernmental Conference on the ILBI under the UNCLOS on the conservation and sustainable use of BBNJ (IGC). Inclusion of this topic as an item for focussed deliberation under the agenda item Environment and Sustainable Development in the Sixtieth Annual Session of AALCO presents to AALCO the opportunity, *firstly*, to be a forum for inspiring debates and discussions on the treaty-making process under the UNCLOS from an Asian-African perspective by inviting its constituent Member States to share their legal and socio-political views on the topic; *secondly*, to facilitate deliberation on the nexus of the topic with the attainment of Sustainable Development Goals (SDGs), particularly SDG 14.

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[4]H. Scheiber (2011), "Economic Uses of the Oceans and the Impacts on Marine Environments: Past Trends and Challenges Ahead", in D. Vidas and P. J. Schei (eds.), *The World Ocean in Globalisation: Climate Change, Sustainable Fisheries, Biodiversity, Shipping, Regional Issues*, Leiden: Martinus Nijhoff, 65-97, 65-66

[5]Herein, areas beyond national jurisdiction (ABNJ) refers to all those areas of the high seas water column seawards of the outer limit of coastal States' Exclusive Economic Zones (EEZs) and all those areas of the seabed beyond the edge of coastal States' continental margins

[6]Kristine Dalaker Kraabel (2019), "The BBNJ PrepCom and Institutional Arrangements: The Hype about the Hybrid Approach" in Myron H. Nordquist and John Norton Moore (eds.), *The Marine Environment and United Nations Sustainable Development Goal 14*, Centre for Oceans Law and Policy: Brill Nijhoff, 137-172, 140-41

Transboundary Air Pollution with Specific Reference to Sand & Dust Storms (SDS) and Haze Pollution

I. International Legal Dimensions of Transboundary Air Pollution

a. Introduction

16. Transboundary air pollution is one of the most pressing environmental challenges facing the international community today. While its origins may be local or small-scale, its impact is regional and global. As per the World Health Organization (WHO), air pollution is the contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere.[7] Major sources of air pollution include forest fires, automobiles, industrial establishments and domestic household combustion appliances all of which play a part in polluting the environment.[8] Harmful emissions that are serious public health concerns include carbon monoxide, nitrogen dioxide, sulphur dioxide and particulate matter.[9] These are medically recognized to cause serious respiratory and other ailments in humans and other living creatures and are major causes of mortality.[10] In addition to health, the deleterious impact that air pollution has on the climate and ecosystems generally is being noted with due seriousness.[11] Needless to mention, air pollution constitutes a major health hazard for all living creatures and the need to combat this crisis with appropriate diplomatic and legal tools is increasingly being recognized by the international community given its transboundary and global nature and the disproportionate impact on developing countries.[12]

b. Customary International Law framework for tackling Transboundary Air Pollution

i. Trail Smelter Arbitration (1941) and the doctrine of State Responsibility

17. The trail smelter arbitration is the oldest and leading international case on the question of State Responsibility for transboundary pollution. It remains the only case in

[7] Air Pollution,< https://www.who.int/health-topics/air-pollution#tab=tab_1> accessed 18 July 2022
[8] *Supra* n. 7
[9] *Supra* n. 7
[10] *Supra* n. 7
[11] *Supra* n. 7
[12] *Supra* n. 7

international law that specifically addresses the question of transboundary pollution from a substantive perspective.[13] In this case, the smelter located in British Columbia, Canada emitted sulphur dioxide resulting in damage to the American state of Washington between 1925 and 1937. This lead to the United States suing Canada with an injunction against further air pollution by Trail Smelter. The legal issue in this case was whether a State (Canada in this case) owed legal responsibility to another State (USA in this case) to protect against harmful acts by individuals from within its jurisdiction at all times?

18. It was held that a State is responsible to protect other States against harmful acts by individuals from within its jurisdiction at all times. Significantly, it was held that no State has the right to use or permit the use of its territory in a manner so as to cause injury in a manner contrary to the principles of international law.[14] This case for the first time established the doctrine of State Responsibility in the realm of customary international environmental law and more specifically in the case of transboundary air pollution by establishing the 'no harm' rule.

ii. Principle 21 of the 1972 Stockholm Declaration

19. The ruling of the trail smelter arbitration also known as the prevention principle, the only one of its kind on transboundary air pollution was subsequently incorporated in many soft law documents, like the 1972 Stockholm Declaration. Principle 21 of the 1972 Stockholm Declaration provides as follows:

> "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the ***responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction***". (emphasis added)

[13] Noah D. Hall, Transboundary Pollution: Harmonizing International and Domestic Law, 40 U. MICH. J. L. REFORM 681 (2007). Available at: <https://repository.law.umich.edu/mjlr/vol40/iss4/2>, from <https://repository.law.umich.edu/cgi/viewcontent.cgi?article=1320&context=mjlr> accessed 18 July 2022

[14] Reports of International Arbitral Awards, Trail Smelter Case (United States, Canada) <https://legal.un.org/riaa/cases/vol_III/1905-1982.pdf> accessed 18 July 2022

20. While there does exist a controversy as to the exact responsibility imposed by Principle 21 on States, it is clear and universally accepted that States have an obligation to take due care and caution to ensure that their activities within their jurisdiction do not have an adverse impact on areas outside their control.

iii. Principle 2 of the 1992 Rio Declaration

21. In similar vein, Principle 2 of the 1992 Rio Declaration provides that "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

22. The interesting aspect of Principle 2 of the 1992 Rio Declaration and what distinguishes it from Principle 21 of the Stockholm Declaration is that it incorporates the concept of 'development'. The interests of developing States is safeguarded in this regard and their sovereign right to exploit resources goes hand in hand with their development priorities.

23. Principle 21 has three components, namely the sovereign right of States to exploit their natural resources for their own purposes, the duty not to cause harm to the environment of other States ('no harm') and the duty not to cause harm to the environment beyond national jurisdiction. Each of these three aspects has to be in accordance with the Charter of the United Nations and the principles of international law. Likewise, the duty to prevent transboundary harm was confirmed by the ICJ in its advisory opinion on the *Legality of the Threat or Use of Nuclear Weapons*[15] and affirmed by the UN General Assembly in Resolution 2995.[16]

[15] Legality of the Threat or Use of Nuclear Weapons, <legal.un.org/ilc/texts/instruments/english/commentaries/9_7_2001.pdf> accessed 29 July 2022

[16] UNGA Resolution 2995, Co-operation between Slates in the field of the environment, <file:///C:/Users/abraham.AALCO/Downloads/A_RES_2995(XXVII)-EN.pdf> accessed 29 July 2022

c. Multilateral Environmental Agreements and Transboundary Air Pollution

i. Convention on Long-Range Transboundary Air Pollution, 1979

24. The Convention on Long-Range Transboundary Air Pollution, 1979 was the first regional treaty entered into for the purposes of dealing with transboundary air pollution. The Convention, which laid down general principles of international cooperation for air pollution abatement, came into force in 1983 and laid down general principles of cooperation for air pollution. Since the Convention came into force, the sweep has been increased to cover ground-level ozone, heavy metals and particulate matter and persistent organic pollutants.[17]

25. The Convention defines air pollution as " …the introduction by man, directly or indirectly, of substances or energy into the air resulting in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems and material property and impair or interfere with amenities and other legitimate uses of the environment…"[18]

26. Similarly, long-range transboundary air pollution is defined as "air pollution whose physical origin is situated wholly or in part within the area under the national jurisdiction of one State and which has adverse effects in the area under the jurisdiction of another State at such a distance that it is not generally possible to distinguish the contribution of individual emission sources or groups of sources".[19]

27. The Convention has been widely hailed as a substantial contribution in the fight against transboundary pollution. Its institutional framework creating a strong framework for intergovernmental cooperation is a sound example for potential regional initiatives in this regard.[20]

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[17] UNECE Convention on Long-Range Transboundary Air Pollution, <https://www.genevaenvironmentnetwork.org/environment-geneva/organizations/unece-convention-on-long-range-transboundary-air-pollution/> accessed18 July 2022

[18] Article 1 (a) 1979 Convention on Long-range Transboundary Air Pollution, <https://unece.org/sites/default/files/2021-05/1979%20CLRTAP.e.pdf> accessed 29 July 2022

[19] Article 1 (b) 1979 Convention on Long-range Transboundary Air Pollution, <https://unece.org/sites/default/files/2021-05/1979%20CLRTAP.e.pdf> accessed 29 July 2022

[20] *Supra* n. 19

ii. Vienna Convention for the Protection of the Ozone Layer, 1985

28. The Vienna Convention for the Protection of the Ozone Layer, 1985 is a framework convention that lays out principles pertaining to the protection of the ozone layer by Member States.[21] As a transboundary environmental concern, the Vienna Convention was the first convention that sought to create a legal framework for preventing the depletion of the ozone layer and in doing so established the edifice for the Montreal Protocol that would mandate States to take action for the protection of the ozone layer. The aim of the Convention was to facilitate cooperation among States to protect the ozone layer from all kinds of harms underscoring the importance of supporting transboundary cooperation in matters pertaining to air pollution.

iii. Montreal Protocol, 1987

29. The Montreal Protocol on Substances that Deplete the Ozone Layer, 1987 is a multilateral environmental agreement that regulates 100 man-made chemicals referred to as ozone depleting substances (ODS).[22] ODS have the potential of damaging the stratospheric ozone layer, which is the protective shield that safeguards humans from harmful ultraviolet radiation from the Sun.[23] The Protocol was adopted on 15 September 1987 and remains the only UN treaty to have been ratified by all 198 UN Member States.[24]

30. The Montreal Protocol has created a differential responsibility regime for developed and developing countries and all State parties have specific responsibilities relating to the phasing out of different ODS, control of ODS trade, national licensing systems to control ODS, annual reporting requirements among other aspects.[25] While the regime has imposed differential responsibilities for developed and developing countries, the targets are binding, measurable and time-oriented.[26] The ozone depleting substances regulated by the Montreal Protocol are listed in Annexes A (CFCs, halons), B (other fully

[21] The Vienna Convention for the Protection of the Ozone Layer, <https://ozone.unep.org/treaties/vienna-convention> accessed 19 July 2022
[22] The Montreal Protocol, <https://www.unep.org/ozonaction/who-we-are/about-montreal-protocol> accessed 19 July 2022
[23] Supra n. 22
[24] *Supra* n. 22
[25] *Supra* n. 22
[26] *Supra* n. 22

halogenated CFCs, carbon tetrachloride, methyl chloroform), C (HCFCs), E (methyl bromide) and F (HFCs) of the Protocol.[27]

31. The Meeting of the Parties is the governing framework of the Protocol, which meets annually along with the Open-Ended Working Group and the Ozone Secretariat based at the United Nations Environment Programme (UNEP) headquarters at Nairobi, the Republic of Kenya, assists the parties in implementing the Protocol.[28] The Montreal Protocol is regarded as one of the most successful environmental treaties entered into on account of its global acceptance and serves as a model for other treaties given its mandate to act and safeguard the environment in the face of scientific uncertainty.

iv. UN Framework Convention on Climate Change (UNFCCC), 1992

32. The United Nations Framework Convention on Climate Change (UNFCC), 1994 is the international framework convention on the issue of climate change. It came into force on 21 March 1994 and has 197 State Parties.[29] The objective of the Convention is to prevent harmful and dangerous human interference with the climate system. One of the most significant aspects of the treaty is that it binds Member States to safeguard human safety even in the face of scientific uncertainty. The Convention aims to stabilize greenhouse gas concentrations "at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system".[30] It states that "such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner".[31]

33. The purpose of a framework convention is to first acknowledge the existence of a problem or a threat and pursuant, thereto, to agree to commit to joint action without necessarily undertaking substantive obligations. As scientific and other information on the subject grows, the framework convention is supplemented by protocol and amendments

[27] *Supra* n. 22
[28] *Supra* n. 22
[29] United Nations Climate Change, <https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change> accessed 19 July 2022
[30] *Infra* n. 31
[31] What is the United Nations Framework Convention on Climate Change? <https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change> accessed 19 July 2022

that impose substantive obligations on the parties. This was precisely the objective of the UNFCC.

34. The UNFCC encompasses the concept of common but differentiated responsibilities in the context of climate change. What this implies is that developed countries are expected to take the lead in undertaking mitigating efforts given their access to superior technology and historic emissions while developing countries are also required to do their best in this regard.

v. Kyoto Protocol, 1997

35. The Kyoto Protocol was the first rules based structure created to implement the UNFCCC. The protocol was negotiated in Kyoto, Japan and came into force in February 2005 following the ratification of the same by Russia. The following greenhouse gases were covered by the first commitment of the Kyoto Protocol namely:

a. Carbon Dioxide (CO2);
b. Methane (CH4);
c. Nitrous oxide (N2O);
d. Hydrofluorocarbons (HFCs);
e. Perfluorocarbons (PFCs); and
f. Sulphur hexafluoride (SF6)

36. While the Kyoto Protocol does not deal with the specific issue of haze, the regulation of greenhouse gases is the main objective of the Kyoto Protocol. The Protocol recognizes the specific needs of developing countries, especially the most vulnerable among them while regulating the quantum of emissions of greenhouse gases. However, while the Kyoto Protocol is widely hailed as a major victory in the fight against global warming, critics also question the success of the Protocol on the ground that global greenhouse emissions have also seen an increase since 1997.[32] Currently, there are 192 Parties to the Kyoto Protocol.

[32] National Geographic, <https://education.nationalgeographic.org/resource/kyoto-protocol-signed> accessed 22 July 2022

37. On 8 December 2012, the Doha Amendment to the Kyoto Protocol was adopted for a second commitment period starting from 2013 and lasting till 2020. A key aspect of the Kyoto Protocol is the creation of flexible market mechanisms based on the trade of emissions permits. States are required to meet their targets through different domestic measures including market-based mechanisms like International Emissions Trading, Clean Development Mechanism (CDM) and Joint Implementation (JI).[33]

vi. Paris Agreement, 2015

38. A legally binding treaty instrument for combatting the harmful effects of climate change, the Paris Agreement was adopted by 196 Parties at COP 21 in Paris on 12 December 2015. It came into force on 4 November 2016. The Agreement aims to limit global warming to below 2 degrees and preferably 1.5 degrees Celsius when compared to pre-industrial levels. In order to achieve this goal, countries seek to achieve global peaking of greenhouse gas emissions as quickly as possible in order to realise the aim of a climate neutral world by the middle of the century. Widely hailed as a landmark agreement, the Paris Agreement is a crucial multilateral instrument that seeks to bind all States to a common commitment to neutralise climate change and adapt to its harmful consequences.

39. The Paris Agreement works on a 5-year cycle of climate action by States. By 2020, countries were expected to submit their nationally determined contributions (NDCs) which are undertakings States make to reduce their Greenhouse Gas Emissions so as to reach the goals of the Paris Agreement. In addition to the NDCs, State Parties are invited to submit 2020 long-term low greenhouse gas emission development strategies (LT-LEDS). However, unlike the NDC's the LT-LEDS are not mandatorily enforced and they play a crucial role in structuring a planned and systematic response for future emission trajectories of countries. In addition, the agreement has a strong framework for financial, technical and capacity- building support to countries who may need it.

[33] What is the Kyoto Protocol? <https://unfccc.int/kyoto_protocol> accessed 29 July 2022

d. International Environmental Law Principles for combating Transboundary Air Pollution

i. No- harm principle

40. The no-harm rule is a widely recognised principle of customary international law whereby a State is duty-bound to prevent, reduce and control the risk of environmental harm to other States.[34] Article 3 of the Convention on Biodiversity, 1992 highlights that "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction".[35]

41. Specifically, in the context of haze pollution, Article 3 of the ASEAN Agreement on Transboundary Pollution provides that "The Parties have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment and harm to human health of other States or of areas beyond the limits of national jurisdiction".[36]

ii. Principle of Good Neighbourliness

42. The principle of good neighbourliness is one of the most basic principles of international law and relations. According to Hans Kelsen, "good neighbourliness is a principle of international law which should have been included into the first chapter of

[34] Ian Brownlie in: Principles of Public International Law, 7th ed., 2008, pp.275-285; Patricia Birnie, Alan Boyle and Catherine Redgwell in: International Law and the Environment, 3rd ed., Oxford 2009, pp.143-152, <https://globalpact.informea.org/glossary/no-harm-rule> accessed 29 July 2022

[35] Article 3 of the UN Convention on Biodiversity, <https://www.cbd.int/convention/articles/?a=cbd-03> accessed 29 July 2022

[36] ASEAN Agreement on Transboundary Haze Pollution 2002, <https://www.informea.org/en/treaties/asean-agreement-transboundary-haze-pollution/text> accessed 26 July 2022

the UN Charter".[37] The Charter of the United Nations refers to the need to 'practice tolerance and live together in peace with one another as good neighbours'. Specifically, Article 74 of the UN Charter incorporates the principle of good neighbourliness as follows: "Members of the United Nations also agree that their policy in respect of the territories to which this Chapter applies, no less than in respect of their metropolitan areas, must be based on the general principle of ***good-neighbourliness***, due account being taken of the interests and well-being of the rest of the world, in social, economic, and commercial matters" (emphasis added). The Bandung Conference, which took place from 18-24 April 1955 bringing together Asian and African countries, also strengthened the principle of good neighbourliness in letter and spirit.[38]

43. While the principle may have evolved over time to have specific application in the context of international environmental law, its origins lay in the more general principles of international comity and friendly relations between States and the need to maintain peaceful and harmonious coexistence between States. In international environmental law, this principle has specifically come to mean the obligation on the part of States not to damage the environment and ensuring that their territories are not being used contrary to the rights of other States and their inhabitants and scholars regard this to be an extension of the principle of *sic utere tuo, et alienum non laedas.*[39]

iii. Precautionary Principle

44. The precautionary principle is a fundamental and universally accepted principle of international environmental law that calls for the need to take protective steps even in the absence of absolute scientific certainty. In other words, even if clear and unambiguous scientific evidence is lacking, environmental actions should not be postponed. The principle is an integral part of international environmental law and has found a place in many multilateral environmental agreements.

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[37] H. Kelsen, The Law of the United Nations: A Critical Analyses of its Fundamental Problems, London 1951, pp. 11–13

[38] Adriana Kalicka-Mikołajczyk, The Good Neighbourliness Principle in Relations Between the European Union and its Eastern European Neighbours, <http://ppuam.amu.edu.pl/uploads/PPUAM%20vol.%209/09_Kalicka-Miko%C5%82ajczyk.pdf> accessed 27 July 2022

[39] Max Valverde Soto, General Principles of International Environmental Law, <https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1069&context=ilsajournal> accessed 27 July 2022

45. The concept is important in the context of transboundary harm wherein every State is obliged to ensure that sources of pollution (air, water and others) are not left unregulated under the pretext that scientific validity of their purported harm cannot be ascertained with a fair degree of precision. Scholars who have assessed the relevance of the precautionary principle in regulating transboundary haze pollution are of the view that prevention of forest fires (which is amongst the major causes haze) requires a strong emphasis on the precautionary principle holding the principle to be of high relevance in dealing with the problem of haze pollution.[40]

iv. Duty to cooperate

46. The duty to cooperate is a fundamental principle in international environmental law having its origins in the law of shared natural resources[41]. Cooperation in its most basic essence refers to working together or engaging with one another for the pursuit of a common task, goal or objective. A duty to cooperate in this regard, connotes the existence of circumstances that require States to work together to pursue a common objective. The principle has been recognized in Principle 24 of the Stockholm Declaration and Principles 7 and 27 of the Rio Declaration.

47. Principle 24 of the Stockholm Declaration provides: "International matters concerning the protection and improvement of the environment should be handled in a cooperative spirit by all countries, big and small, on an equal footing." Cooperation through multilateral or bilateral arrangements or other appropriate means is essential to effectively control, prevent, reduce and eliminate adverse environmental effects resulting from activities conducted in all spheres, in such a way, that due account is taken of the sovereignty and interests of all States. "In addition, the International Law Commission (ILC) has recognized the duty to cooperate as a fundamental principle in the realm of State Responsibility with Article 41 of the Draft Articles on Responsibility of States for

[40] Alfajri Alfajri, Herry Wahyudi1, & Azhari Setiawan, The Post-ASEAN's Haze-Free Roadmap 2020 and Implementation of Precautionary Principle in Indonesia's Environmental Diplomacy: Riau's Perspective, BERUMPUN, International Journal of Social, Political and Humanities, <2021.AlfajriHerryWahyudiAzhariSetiawan.ThePost-ASEANsHazeFreeRoadmap2020_JurnalBERUMPUN.pdf> accessed 29 July 2022

[41] Neil Craik, The Duty to Cooperate in International Environmental Law: Constraining State Discretion through Due Respect, Yearbook of International Environmental Law, (2020), 3

Internationally Wrongful Acts providing that: "States shall cooperate to bring to an end through lawful means any serious breach within the meaning of article 40." Additionally, the duty to cooperate has been recognized by international courts and tribunals in a number of cases.[42]

48. In the context of transboundary haze pollution, the duty to cooperate is to be read closely with the duty to prevent harm. The two obligations are closely linked with each other. While the duty to prevent harm is concerned with defining the zone of territorial integrity so as to draw a line where a State's activities may not infringe upon another State's right to be free from environmental harm, the duty to cooperate is more based on the notion of balancing the self-interest of a State with the corresponding rights of others.[43] In this sense, the duty to prevent harm is an attempt to draw the line between permitted and prohibited activities while the duty to cooperate accepting that it is complicated to draw such a line seeks to lay down obligations where both States have their autonomous free space to operate subject to respecting the rights of the other.[44] The ASEAN Agreement on Transboundary Haze Pollution, 2002 is arguably the finest example of the duty to cooperate being put into practical application for the control and regulation of transboundary haze pollution at the regional level and remains a notable one for the global community.

e. International Law Commissions Engagement with Transboundary Harm and Atmospheric Pollution

49. The topic of transboundary harm has been a topic of extensive engagement for the ILC for many years. As many as three Special Rapporteurs namely, Robert Q. Quentin Baxter (1978-1984), Julio Barboza (1985-1996) and P.S. Rao (1997-2001) have worked on the topic.[45] The first Special Rapporteur, Quentin Baxter focussed his attention on

[42] MOX Plant (Ireland v United Kingdom), Provisional Measures, 3 December 2001, [2001] ITLOS Rep 95 (MOX Plant); see also Lac Lanoux Arbitration (France v Spain), [1957] 24 ILR 101 (Lac Lanoux); Pulp Mills on the River Uruguay (Argentina v Uruguay), Judgment, [2010] ICJ Rep 14 at para 77 (Pulp Mills); Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua) and Construction of a Road in Costa Rica along the San Juan River (Nicaragua v Costa Rica), Merits, [2015] ICJ Rep 665 at para 106 (Certain Activities/Road case)
[43] *Supra* n. 41
[44] *Supra* n. 41
[45] Johan G. Lammers, Prevention of Transboundary Harm from Hazardous Activities The ILC Draft Articles in Hague Yearbook of International Law Vol 14 (2001) Brill 2002

developing a methodical and sound conceptual basis for the topic and in doing so proposed several articles that sought to safeguard the territorial integrity of States to undertake activities within their sovereign purview in a manner that would not prejudice the rights of other States. Special Rapporteur Baxter sought to make a clear distinction between the regime of State Responsibility and the regime regulating Transboundary Harm. The latter regulated those activities that fell outside the purview of the State Responsibility framework.[46]

50. Special Rapporteur Julio Barboza proposed a set of 33 draft articles to the Commission in 1990 covering general provisions (Articles 1-5), principles (Articles 6-10), prevention (Articles 11-20), liability (of the State of origin) (Articles 21-27) and civil liability (Articles 28-33).[47] However, despite the same differences existing in the Commission on a range of issues and it was considered that sustained engagement with the topic was necessary to arrive at an acceptable conclusion. In this regard, at its forty-ninth session, in 1997, the Commission decided to split the topic into two parts, prevention of transboundary damage from hazardous activities and international liability in case of loss from transboundary harm arising out of hazardous activities.[48]

51. A draft of 17 articles was adopted by the ILC in 1998 on first reading, which was followed by a revised set of 19 draft articles with preamble and commentaries. The ILC adopted the revised text at its fifty-third session in 2001 and the same was recommended by the Commission for adoption as a Convention by the General Assembly. The thrust of the articles are on prevention in the backdrop of authorization and regulation of hazardous activities, which have the potential of causing a significant risk of transboundary harm. Prevention is construed as an obligation prior to the situation where significant harm or damage might possibly occur and States are required to invoke remedial or compensatory measures. The scope of the articles pertain to activities not prohibited by international law and which involve a risk of causing significant transboundary harm through their physical consequences. The focus of the articles on prevention as opposed to remedial or compensatory measures has widely been welcomed as heralding a landmark in the law

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[46] *Supra* n. 45, 1
[47] *Supra* n. 45, 2
[48] International liability for injurious consequences arising out of acts not prohibited by international law, <https://legal.un.org/ilc/summaries/9.shtml> accessed 1 August, 2022

pertaining to transboundary harm. Since the ambit of the articles includes all activities that involve the risk of causing transboundary harm through physical consequences, transboundary haze pollution comes within the scope of the articles. Article 3 of the draft articles which provides that 'the State of origin shall take all appropriate measures to prevent significant transboundary harm or at any event to minimize the risk thereof' clearly specifies the preventive obligation of States in this regard.[49]

52. States are required to 'cooperate in good faith and seek the assistance of international organizations as per Article 4. Similarly, they are required to 'take necessary legislative, administrative or other actions' such as suitable monitoring mechanisms as per Article 5. Aspects pertaining to impact assessment and assessment of risk are provided in Article 7, whereas, the need to provide the affected State with timely notification of the risk and the assessment with all relevant technical information is a requirement under Article 8. Other customary obligations include the exchange of information (Article 12), information to the public (Article 13), non-discriminatory access to the injuring state's 'judicial or other procedures to seek protection or other appropriate redress' (Article 15), emergency plan development (Article 16), notification of an emergency (Article 17), and peaceful means of dispute settlement such as negotiations, mediation, conciliation, arbitration or judicial settlement (Article 19) are provided in the draft articles.

53. The ILC's engagement with the issue of atmospheric pollution resulted in the adoption of the draft guidelines on the protection of the atmosphere in 2021. However, the draft guidelines did not include dimensions of transboundary pollution though it highlights in the preamble that atmospheric pollution and atmospheric degradation are a "common concern of humankind". The guidelines recognize that the atmosphere is a medium, through which transport and dispersion of polluting and degrading substances occurs which, involve large-scale movement of air. Additionally, "atmospheric pollution" is defined as the introduction or release by humans, directly or indirectly, into the atmosphere of substances or energy contributing to significant deleterious effects extending beyond the State of origin of such a nature as to endanger human life and health and the Earth's natural environment. Despite the same, mandate of the Special Rapporteur was to elucidate general principle of atmospheric pollution that do not touch upon specific subject matters

[49] ILC draft articles on Prevention of Transboundary Harm from Hazardous Activities, with commentaries 2001

of existing treaty mechanisms and without prejudice to accepted international environmental law principles and eschew dimensions of transboundary pollution.[50] However, the obligation of States to safeguard the atmosphere in accordance with the principles of international law is clearly elucidated in Guideline 3.[51] Thus, it can be stated that a general obligation to prevent transboundary harm contrary to the rights of other States exists on the basis of the ILC draft articles.

II. Sand & Dust Storms (SDS) and Haze Pollution

i. The International Legal and Policy Regime for tackling Sand and Dust Storms (SDS)

54. One of the most pressing and challenging global environmental problem of today is the phenomenon of Sand and Dust Storms (SDS). Known by various local names like sirocco, haboob, yellow dust, white storms, or the harmattan, SDS are a seasonal and natural phenomenon exacerbated by poor land and water management, droughts, and climate change.[52] According to the Food and Agriculture Organization (FAO), the SDS has a direct impact on as many as 151 countries of the world.[53] As per the World Health Organization (WHO) close to seven million people die from poor air quality every year globally, a sizeable portion of which could be attributed to SDS. It is estimated that in the Middle East and North Africa, about $ 13 billion in Gross Domestic Product (GDP) are lost due to SDS. SDS in the Sahara region are believed to be responsible for the spread of lethal meningitis spores across central Africa and up to 250000 people are said to contract

[50] **Guideline 2**
Scope
1. The present draft guidelines concern the protection of the atmosphere from atmospheric pollution and atmospheric degradation
2. The present draft guidelines do not deal with and are without prejudice to questions concerning the polluter-pays principle, the precautionary principle and the common but differentiated responsibilities principle
3. Nothing in the present draft guidelines affects the status of airspace under international law nor questions related to outer space, including its delimitation

[51] **Guideline 3**
Obligation to protect the atmosphere
States have the obligation to protect the atmosphere by exercising due diligence in taking appropriate measures, in accordance with applicable rules of international law, to prevent, reduce or control atmospheric pollution and atmospheric degradation

[52] Sand and Dust Storms Compendium, Key Messages, <https://www.unccd.int/sites/default/files/2022-05/1871_Book_SDS_%20Compendium_V1_0.pdf> accessed 1 August 2022

[53] Sand and Dust Storms, Food and Agricultural Organization (FAO) Website, <https://www.fao.org/land-water/land/sds/en/> accessed 1 August 2022

the disease every year primarily on account of SDS.[54] A joint study by the Georgia Institute of Technology in the USA and the Indian Institute of Technology, Madras noted that severe air pollution causes an increase in cardiovascular, respiratory and neurological disorders.[55]

55. The economic impact of SDS is increasingly being recorded in various countries with supply chain disruptions, airport and school closures and destruction of crops causing serious harm to human wellbeing. The issue of SDS has transboundary implications as dust particles can travel thousands of miles during heavy storms and in the process carry with them harmful substances like pathogens. It is estimated that close to 25 per cent of SDS globally emanate from human activities.[56] These storms cause drought and soil salinity impacting water supply and other renewable energy sources. Forest fires, extreme climatic variations, land degradation, unsustainable land and water management and drought are said to be some of the major causes of SDS. In addition, SDS are believed to have an adverse impact on aquatic ecosystems by increasing silt in water, spawning toxic algal blooms and blocking sunlight to coral reefs each of which causes significant harm to living and non-living creatures in the aquatic ecosystem.[57] SDS are also known to contribute to coral mortality and lead to hurricane formation.[58]

56. With strengthened global consensus on the need to tackle the harmful effects of SDS countries have been working to solve the problem, notwithstanding the unpredictable nature of the phenomenon. To cite a few notable examples, China has been monitoring SDS since 1950s so as to enable better predictions about the phenomenon with respect to its impact on land use.[59] The country's Great Green Wall project has reduced the frequency and intensity of SDS.[60] The Korean Meteorological Administration provides dust storm warning to certain cell phone providers, which are then communicated to

[54] Sand and Dust Storms, UNEA-2 Fact Sheet, Page 1, <https://wedocs.unep.org/bitstream/handle/20.500.11822/7608/sand.pdf?sequence=3&amp%3BisAllowed> accessed 1 August 2022

[55] Atmospheric chemistry discovery could help Indian cities clear away the haze, accessed from the website of the Royal Society of Chemistry <https://www.chemistryworld.com/news/atmospheric-chemistry-discovery-could-help-indian-cities-clear-away-the-haze/4013149.article> accessed 1 August 2022

[56] Sand and Dust Storms, United Nations Convention to Combat Desertification, <https://www.unccd.int/land-and-life/sand-dust-storm/overview> accessed 1 August 2022

[57] *Supra* n. 55

[58] UN Coalition to Combat Sand and Dust Storms, accessed from <https://unemg.org/our-work/emerging-issues/sand-and-dust-storms/> accessed 25 July 2022

[59] *Supra* n. 58

[60] *Supra* n. 58

individual subscribers via text messages.[61] Senegal has contributed a great deal to combating SDS by planting 12 million trees covering 40,000 hectares as part of a pan-African scheme to combat desertification in the Sahel.[62] Given the transnational nature of the problem, regional and international cooperation is imperative to deal with the SDS and its harmful impact and efforts in this direction are making sound progress.

ii. Impact of SDS on Agriculture and Food Security

57. While SDS is recognized as a natural phenomenon, it is also considered a natural hazard that has adverse consequences on agriculture and food security. As per the FAO, the agriculture sector is one of the major anthropogenic drivers of SDS – via poor land management, desertification and land degradation.[63] Primarily, scientific experts working in the area have documented that SDS causes soil erosion, wind erosion and land degradation.[64] In fact, it has been noted that SDS is a large-scale manifestation of soil and wind-erosion. While there are different impacts that SDS may have on agriculture and food security, one of the most direct impact is the loss of livestock and crops.[65] Loss of plant tissue on account of sandblasting by sand and soil particles is also a serious impact.[66] This causes loss of plant leaves causing reduced photosynthetic activity and a consequent reduction of sugars for plant reproduction, growth and the germination of either fruit, grain or fibre.[67] This loss of sugar for plant growth can also lead to prolonging plant development and increase the risk of drought by moving the moisture sensitive duration well past the rain period resulting in lower yields.[68]

58. The loss of topsoil is another direct impact of SDS. The loss of topsoil leads to soil erosion, which accelerates the speed of land degradation and is often the cause of desertification. As is well known, topsoil is the repository of the most vital nutrients like potassium and phosphorus that are essential for plant growth and any damage to the topsoil

[61] *Supra* n. 58
[62] *Supra* n. 58
[63] *Supra* n. 58
[64] R Stefanski and M V K Sivakumar 2009 IOP Conf. Ser.: Earth Environ. Sci. 7 012016, <https://iopscience.iop.org/article/10.1088/1755-1307/7/1/012016> accessed 1 August 2022
[65] *Supra* n. 64
[66] *Supra* n. 64
[67] *Supra* n. 64
[68] *Supra* n. 64

will have direct adverse consequences on agricultural growth and consequently on food security.

iii. Tackling SDS

a. Sustainable Land Management (SLM) and the role of the Food and Agriculture Organization (FAO)

59. In light of the dangers posed by SDS, combatting the problem has acquired international significance. In this regard, Sustainable Land Management (SLM) has been proposed as a useful scientific proposal to deal with the issue. One of the most significant methods of combatting SDS is the installation of windbreaks or shelterbelts. Windbreaks increase crop yields by decreasing soil erosion and reduce evapotranspiration. Windbreaks reduce the intensity of wind speed, which in turn would reduce the quantum of soil being carried away by the SDS. Scientifically, windbreaks are understood as structures that reduce wind speed and shelterbelts as trees planted for wind protection. Ideally, the windbreak should be porous and near the ground and the density of the barrier should increase logarithmically with height in accordance with the wind speed. The United Nations defines sustainable land management (SLM) as "the use of land resources, including soils, water, animals and plants, for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions".

60. SLM is based on four principles:

1. Targeted policy and institutional support, including the development of incentive mechanisms for SLM adoption and income generation at the local level;
2. Land-user-driven and participatory approaches;
3. The integrated use of natural resources on farms and at the ecosystem scale; and
4. Multilevel, multistakeholder involvement and partnerships at all levels – land users, technical experts and policy-makers.[69]

[69] Sustainable Land Management, Food and Agriculture Organization (FAO), <https://www.fao.org/land-water/land/sustainable-land-management/en/> accessed 27 July 2022

61. The International Conference on Combatting SDS that took place in Tehran, the Islamic Republic of Iran from 3-5 July 2017 recognized the significance of SLM as a method of combating SDS. The Conference recognized that unsustainable land management is a major obstacle in the fight against SDS especially in Asia and Africa. The Conference recognized that the main drivers for the rise in SDS, especially in arid and semi-arid areas, are the drastic changes in annual rainfall, temperature and droughts as the results of climate change as well as unsustainable land management and water use. To counter the threat posed by SDS, the Conference made the following policy recommendations as regards global and regional cooperation:

a. Take appropriate actions required to address the main factors at all levels causing SDS in the context of SDGs also taking into consideration the synergies among the three Rio conventions (UNFCCC, UNCCD and CBD).

b. Invite the UN system to consider initiating an inter-agency process on SDS globally.

c. Stress the need for further cooperation and capacity-building through sharing knowhow, experiences, technical expertise, boosting of technical cooperation, best practices, lessons learned.[70]

62. The Food and Agricultural Organization (FAO) has been playing a major role in dealing with problem of SDS at the global level. The Organization has been a leading promoter of SLM in this regard. As per the FAO: "SLM promotes vegetation cover to protect soils, reduce local wind speeds and increase soil stability. Sustainable management of water resources, such as the use of raised-bed/furrow irrigation techniques to substitute for flood irrigation, will keep the soil wet for longer, reducing its susceptibility to wind erosion at field level. In the livestock sector, sustainable methods of rangeland management can achieve the same ends. They include encouraging mobility to spread grazing pressures and the use of enclosures to protect certain pastures and young growing trees."[71]

[70] International Conference on Combating Sand and Dust Storms: Challenges and Practical Solutions Tehran, the Islamic Republic of Iran, 3-5 July 2017 on 28 July 2022

[71] Sand and dust storms (SDS): A transboundary issue of growing concern, Food and Agriculture Organization (FAO), <https://www.fao.org/3/cc0109en/cc0109en.pdf?> accessed 1 August 2022

63. As regards, identifying workable solutions to the problem, the FAO is of the view that implementation of sectoral contingency plans and Standard Operating Procedures (SOPs) are essential to tackling the adverse effects that SDS may have on the agriculture sector.[72] In this regard, timely and punctual dust monitoring, forecasting and early warning systems have been recommended. This is equally relevant in the field of animal husbandry, where herders will have adequate time to move animals to appropriate shelters if timely warnings of SDS are accurately given.[73] The United Nations has been the leading international voice in the fight against SDS. UNGA Resolution 73/237 adopted on 20 December 2018 on "Combatting sand and dust storms" underscore the serious impact SDS may have on the achievement of Sustainable Development Goals (SDGs).[74]

iv. The United Nations Coalition on Combatting Sand and Dust Storms (SDS)

64. The United Nations Coalition on Combatting Sand and Dust Storms was created to deal with the issue of SDS from a sustainability perspective and was launched at the Conference of Parties (**COP) 14**.[75] As per the Terms of Reference, four cross-cutting work areas are supposed to be addressed by the Coalition"

a. Facilitating Information Exchange
b. Capacity Building and Training
c. Mobilising Resources and Fundraising
d. Advocacy and Awareness Raising

[72] *Supra* n. 71
[73] *Supra* n. 71
[74] UNGA Resolution 73/237 adopted on 20 December 2018, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N18/460/95/PDF/N1846095.pdf?OpenElement>, accessed 1 August 2022
[75] The General Assembly, through its resolution 72/225, invited the Executive Director of the United Nations Environment Programme (hereafter UNEP), to consider initiating an inter-agency process to prepare a global response to sand and dust storms. This initiative was intended to create a network of relevant entities of the UN system, within their respective mandates and existing resources, and take into account UN Environment Assembly resolution 2/21 of 27 May 2016 and other relevant resolutions and decisions. The General Assembly, in its 73rd session, welcomed the intention of UNEP's ED to establish such an inter-agency network as an inter-agency framework for medium- and long-term cooperation on SDS. In response, the 24th Meeting of the EMG Senior Officials in September 2018 agreed to form a "Coalition to Combat Sand and Dust Storms" (hereafter SDS)

65. The four work areas are addressed by five crosscutting Working Groups, each of which is led by a member of the Coalition experienced in the domain.[76]
The five working groups are:

WG1 Adaptation and mitigation: UNDP and FAO

WG2 Forecasting and early warning: WMO

WG3 Health and safety: WHO

WG4 Policy and governance: UNCCD

WG5 Mediation and regional collaboration: ESCAP and ESCWA.

66. The Coalition includes UN agencies, international organizations and research entities which are united by a collective desire to promote international cooperation on SDS. In addition, there are experts who bring in technical expertise on the subject matter in addition to civil society organizations and the private sector members who are interested in the subject- matter. The Coalition is a voluntary association and not a legal entity. The Coalition has had three meetings so far. The first meeting was held by teleconference on February 14, 2019. The second meeting was held from 5-6 September 2019 in New Delhi. The third meeting was held on 2 July 2020 as an online conference. A Technical Workshop on SDS Risk Assessment Methodology preceded the third meeting on 14 November, 2019 in Hangzhou, The People's Republic of China.[77]

67. The mandate of the Coalition is as follows:

a. Promote and coordinate a collaborative UN-system response to SDS, on local, regional and global scales, ensuring unified and coherent actions are taken

b. Facilitate exchange of knowledge, data and best practices among Coalition members to promote effective and coherent action on SDS across the UN system

c. Encourage and promote collaboration on initiatives and action within the Members of the Coalition on SDS, including advocacy and funding initiatives

[76] Sand and Dust Storms Coalition, <https://www.unccd.int/land-and-life/sand-and-dust-storms/coalition> accessed 28 July 2022
[77] UN Coalition to Combat Sand and Dust Storms, UN Environment Management Group, <https://unemg.org/our-work/emerging-issues/sand-and-dust-storms/> accessed 1 August 2022

d. Facilitate dialogue and collaboration amongst affected countries and the UN system in addressing SDS issues collectively

e. Facilitate the capacity building of Member States, raise their awareness and enhance their preparedness and response to SDS in critical regions

68. Members of the coalition have agreed to a set of Key Documents to guide the Coalition's work namely, a Governance Framework, a Strategy and an Action Plan. The chair/host of the coalition changes every two years and the chair was formally transferred at the 3rd Coalition meeting in July 2020 from UNEP to FAO for the next two years. The SDS Coalition is currently under the leadership of FAO until July 2022.[78]

v. Role of the World Meteorological Organization (WMO)

69. The World Meteorological Organization (WMO) has been playing a major role in facilitating a deeper understanding of SDS at the global level as SDS is a meteorological phenomenon.[79] The World Meteorological Congress which is the WMO's top decision-making body has committed itself to improving early warnings and forecasts of sand and dust storms.[80] The WMO has continuously stressed the need for action plans at all levels- national, regional and global to combat SDS and has called for increased collaboration between various international stakeholders.

70. The specific role played by the WMO as regards SDS is research, monitoring and forecasting of SDS. WMO's Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS) was launched in 2007 as a joint cross-cutting project of the World Weather Research Program (WWRP) and the Global Atmosphere Watch (GAW) Program with the aim to increase the capacity of States to deliver timely, accurate and superior quality SDS forecasts, observations, information to all stakeholders through an international research and operational partnership.[81] Currently, more than 20 organizations currently provide daily global

[78] UN Coalition on Combating Sand and Dust Storms (SDS), <https://www.fao.org/3/cc0116en/cc0116en.pdf>, accessed 1 August 2022

[79] Sand and Dust Storms, World Meteorological Organization, <https://public.wmo.int/en/our-mandate/focus-areas/environment/sand-and-dust storms#:~:text=Sand%20and%20dust%20storms%20usually,and%20many%20socio%2Deconomic%20sectors> accessed 1 August 2022

[80] WMO Acts on Sand and Dust Storms, <https://www.preventionweb.net/news/wmo-acts-sand-and-dust-storms> accessed 1August 2022

[81] *Supra* n. 80

or regional forecasts as regards SDS.[82] There are 7 global models and more than 15 regional models contributing to SDS-WAS all of which integrate and bring together relevant stakeholders in the SDS prevention and mitigation framework.[83]

vi. Regional Frameworks for combatting Haze Pollution: The case of the Association of South East Asian Nations (ASEAN)

71. Haze is an atmospheric phenomenon where smoke, dust and other dry particles obscure the clarity of the open skies.[84] It is an extreme form of air pollution comprising thick smoke.[85] Much of haze is the result of fires, which when uncontrolled emerges as smoke and rises to the atmosphere. Smoke suspended in the atmosphere is referred to as haze. Haze contributes in a significant way to global warming and has an adverse impact on all living creatures including various forms of vegetation.

72. Haze mostly occurs in peatlands and 60% of the world's tropical peatlands are located in South-East Asia covering approximately 22 million hectares.[86] Peatland is abandoned boggy land with acid grounds consisting of partly decomposed vegetable matter.[87] Peat, in its composition contains huge amounts of organic carbon and with every fire taking place on peat ground carbon that has been held up in the ground for thousands of years in released into the atmosphere.

73. The issue of transboundary haze pollution has been a recurrent issue for South-East Asia for many decades mainly on account of deforestation in the region.[88] Following the 'Great Fire of Borneo' of 1982-83 that burned an estimated 3.2 million hectares of land mostly in East Kalimantan and resulted in massive transboundary haze, the issue received attention at the regional and global levels.[89] Transboundary haze pollution, whose major cause in South-East Asia is forest fires is said to effect around half of all countries in South-East Asia. The Association of South East Asian Nations (ASEAN) defines

[82] *Supra* n. 80
[83] *Supra* n. 80
[84] Henriette Litta, Case Study One: Transboundary Haze Pollution in Regimes in Southeast Asia, An Analysis of Environmental Cooperation, 2012, 90
[85] *Supra* n. 84, 90
[86] *Supra* n. 84, 90
[87] *Supra* n. 84, 90
[88] *Supra* n. 84, 90
[89] *Infra* n. 92, 57

transboundary haze pollution as "haze pollution whose physical origin is situated wholly or in part within the area under the national jurisdiction of one Member State" Most haze episodes are reported in the months of February/March and July to October as these hot seasons are more vulnerable to land and forest fires.

74. Given this reality, it was accepted that the issue be addressed appropriately given the adverse public health and environmental harm it has had on countries in the region. Inhalation of particulate matter, which is a major constituent of haze, is known to have serious respiratory consequences for humans. The serious economic costs of transboundary haze pollution have been documented as well. Indonesia, Malaysia and Singapore in particular suffer from the harmful consequences of haze each year. A serious episode of haze was reported in June and July 2013, which lead to the affected governments declaring emergencies and calling for action to tackle this environmental hazard. Since air pollution is a transboundary issue, international efforts at curbing the problem should ideally focus on efforts taken at the regional level to deal with the problem. In this regard, the ASEAN model of dealing with haze offers a good starting point to analyse the response of the international community to this issue.

75. ASEAN as a regional body strongly embodies the concept of national sovereignty.[90] Thus, non-interference as a norm is of high importance in the Southeast Asian context. The 'Cebu Declaration on the Acceleration of the Establishment of an ASEAN Community by 2015' formalized the pillar-based structure of the ASEAN Community. The three pillars of the ASEAN Community are- the ASEAN Economic Community (AEC), the ASEAN Political Security Community (APSC) and the ASEAN Socio-Cultural Community (ASCC).[91]

76. Experts on the ASEAN region, highlight that the ASEAN Way is based on the Malay cultural practices of consultation and consensus in dealing with problems.[92] Consensus is achieved through the consultative framework motivated by the need to create a stable environment in the region. As a result, bottom-up approaches are generally preferred to

[90] *Infra* n. 92, 29
[91] Helena Varkkey, Transboundary Haze, ASEAN, and the SDGs: Normative and Structural Considerations in Sustainable Development Goals in Southeast Asia and ASEAN, National and Regional Approaches, (Brill 2018), 239
[92] Paruedee Nguitragool, *Environment Cooperation in South East Asia ASEAN's Regime for Transboundary Haze Pollution (*First Edition, Routledge Contemporary Southeast Asia Series 2011) 29

top-down approaches and the spirit of consensus pervades the operational philosophy of ASEAN at every stage of its working. Politeness, harmony, discreteness, informality and inclusiveness are some of the important features of ASEAN's engagement in issues of regional importance.[93] In concrete terms, this has meant respect for the principle of sovereign equality, non-use of force and pacific settlement of disputes, preference for regional solutions to regional problems and a commitment to the principle of non-interference.

77. It may be noted that ASEAN has a long history of engaging with issues of environment protection.[94] The ASEAN Expert Group on the Environment (AEGE) was established to implement the ASEAN Sub-Regional Environment Programme (ASEP 1) in 1977 with the support of the United Nations Environment Programme (UNEP).[95] Pursuant thereto, a series of environment agreements and soft law measures were agreed upon at the regional level. These included a Declaration on Heritage Parks and Reserves (1984), the second Declaration on the ASEAN Environment (1984), and Agreement on the Conservation of Nature and Natural Resources (1985), Sustainable Development Resolution (1987) and the Kuala Lumpur Accord on Environment and Development (1990) among others.[96]

78. Against this backdrop, the ASEAN engagement with the issue of haze pollution is regarded as a remarkable and natural progression of its historical concern for safeguarding the environment in South-East Asia. The Cooperation Plan on Transboundary Pollution, the Regional Haze Action Plan (RHAP) and the ASEAN Agreement on Transboundary Haze Pollution, 2002 are the major initiatives in this regard. At the Fourth ASEAN Summit in Singapore in January 1992, transboundary pollution and forest fires were acknowledged for the first time as major environmental concerns.[97] The same was encapsulated in the Singapore Resolution on Environment and Development and the same was also included as part of the ASEAN Functional Cooperation of the Singapore Declaration of 1992. The severity and complexity of the haze problem was further underlined by the First Informal Ministerial Meeting on the Environment in Sarawak,

[93] *Supra* n. 92, 29
[94] *Supra* n. 92, 29
[95] *Supra* n. 92, 41
[96] *Supra* n. 92, 41
[97] *Supra* n. 92, 58

Malaysia in October 1994. The environmental ministers agreed to develop a regional early warning and response system to strengthen the capacity of its Member States to deal with transboundary haze.

79. ASEAN passed the Cooperation Plan on Transboundary Pollution in June 1995, which addressed three specific areas of transboundary pollution concern, namely, transboundary atmospheric pollution, transboundary movement of hazardous waste and transboundary ship borne pollution.[98] Transboundary haze pollution was the main concern of transboundary atmospheric pollution. In September 1995, the Haze Technical Task Force (HTTF) was established at the Sixth Meeting of the ASEAN Senior Officials on Environment (ASOEN).[99]

80. ASEAN Environment Ministers commenced negotiations on the Agreement on Transboundary Haze Pollution in October 2000. At the World Conference and Exhibition on Land and Forest Fire Hazards hosted by Malaysia in June 2002, the ten ASEAN Member States signed the ASEAN Agreement on Transboundary Haze Pollution in Kuala Lumpur. Article 2 of the Agreement states the objective of the accord as preventing and monitoring 'transboundary haze pollution as a result of land and/or forest fires which should be mitigated, through concerted national efforts and intensified regional and international cooperation'.[100]

81. The agreement is comprehensive and covers diverse aspects of haze pollution. The establishment of an ASEAN Coordinating Centre for Transboundary Haze Pollution to facilitate cooperation and coordination in managing forest and land fires which are a major cause of haze pollution.[101] The Coordination Centre akin to the ASEAN Regional Centre for Biodiversity Conservation does data and information collection and analysis and engages in capacity- building though it lacks enforcement authority. There are provisions pertaining to assessment, monitoring and prevention of transboundary haze pollution in addition to scientific and technical cooperation. Immigration and customs norms for disaster relief have been simplified.[102] Technical cooperation and joint emergency

[98] *Supra* n. 92, 59
[99] *Supra* n. 92, 59
[100] *Supra* n. 92, 70
[101] *Supra* n. 92, 71
[102] *Supra* n. 92, 70

response bolster the overall commitment of the agreement to ASEAN's specific commitment to dealing with the issue of transboundary haze pollution. Parties are obliged to take legislative, executive and other relevant measures to give effect to the agreement.[103] As regards monitoring, preventing and national emergency response, each State Party has the autonomy to articulate its own policies to develop policies, legislative and executive measures including SOPs for the prevention and mitigation of forest and land fires.[104]

82. In line with the overall philosophy of ASEAN to respect the sovereignty of Member States and non-interference in the internal affairs, the agreement does have an enforceable dispute settlement mechanism.[105] Article 27, which is the relevant provision in this regard states that: 'Any dispute between parties, as to the interpretation or application of, or compliance with this agreement or any protocol thereto, shall be settled amicably by consultation or negotiation'.[106] However, given the nature of haze pollution in particular and environmental disputes more generally, an amicable dispute settlement as envisaged by Article 27 is the ideal solution so as to factor the views and perspectives of the concerned States. As regards the review structure, the agreement establishes a Conference of Parties (CoP) which is the central mechanism of the agreement.[107] The CoP aims to evaluate and review the working of the agreement and ensure its seamless implementation with the power and authority to adopt relevant protocols and amendments to the treaty as may be deemed necessary by the consensus of all parties.[108]

[103] *Supra* n. 92, 70
[104] *Supra* n. 92, 71
[105] *Supra* n. 92, 71
[106] *Supra* n. 92, 71
[107] *Supra* n. 92, 71
[108] *Supra* n. 92, 71

Conservation and Sustainable Use of BBNJ

A. The Progress so far towards drafting an ILBI

83. The urgency of the issue of conservation and sustainable use of BBNJ, and the gaps in the UNCLOS to comprehensively deal with the issue had provided the stimulus towards negotiating and drafting of an ILBI for conservation and sustainable use of the BBNJ. Implementing governance structures to support an integrated system of environmental protection for ABNJ, including conservation of marine biodiversity, has always posed considerable challenges in terms of scale and consistency between the two separate trajectories of the law of the sea and international marine environmental law.[109] Moreover, modern conservation norms, such as Environmental Impact Assessment (EIA), Marine Protected Areas (MPAs), marine spatial planning and development mechanisms such as technology transfer and capacity-building are inadequately addressed in the extant legal and institutional framework for ABNJ.[110] The insufficiency in addressing the issues of nascent genesis, pertinence or awareness has been attributed to the inability to foresee their relevance at the time of adoption of the UNCLOS.[111] For example, problems that have either arisen since its ratification, such as exploitation of Marine Genetic Resources (MGRs), or worsened since the treaty's completion in 1982 and marine pollution, were not addressed.[112] These gaps were also ascribed to the fact that the provisions and definitions were not specific enough for States to be certain of the treaty's meaning at the time of the UNCLOS, such as the application of the common heritage of mankind.[113]

84. In 2017, following more than a decade of informal discussions, Member States of the United Nations decided to convene an IGC to negotiate an ILBI for the conservation and sustainable use of the BBNJ. The negotiations for an ILBI are based on a package of

[109]Robin Warner (2018), "Oceans of Opportunity and Challenge: Towards a Stronger Governance Framework for Conservation and Sustainable Use of Biodiversity in Marine Areas beyond National Jurisdiction", *Asia-Pacific Journal of Ocean Law and Policy*, 3: 157, 159

[110] D. Freestone (2009), "Modern Principles of High Seas Governance: The Legal Underpinnings", *International Environmental Policy and Law,* 39:44

[111]Tullio Scovazzi (2016), "The negotiations for a binding instrument on the conservation and sustainable use of marine biological diversity beyond national jurisdiction", *Marine Policy* 70:188-191

[112] Rachel Tiller and E. Nyman (2018), "Ocean plastics and the BBNJ treaty-is plastic frightening enough to insert itself into the BBNJ treaty, or do we need to wait for a treaty of its own?" *Journal of Environmental Studies and Sciences,* 8 (4): 411- 415

[113] Rachel Tiller *et. al.* (2019), "The once and future treaty: Towards a new regime for biodiversity in areas beyond national jurisdiction", *Marine Policy,* 99: 239- 242, 239

issues agreed in 2011, namely: MGRs, including questions on the sharing of benefits, measures such as area-based management tools (ABMTs), including MPAs, EIAs and capacity-building and the transfer of marine technology. The United Nations General Assembly (UNGA) Resolution 72/249 provided for four meetings of the IGC. The first session was convened from 4 to 17 September 2018, the second session from 25 March to 5 April 2019 and the third session from 19 to 30 August 2019. The fourth session, which was postponed by decisions 74/543 and 75/570 owing to the COVID-19 pandemic, was convened from 7 to 18 March 2022. A fifth session of the Conference is scheduled to be convened from 15 to 26 August 2022, pursuant to General Assembly decision 76/564.

B. Draft Treaty Text

85. The latest version of the draft treaty text was released on 30 May 2022.[114] This part of the brief seeks to provide an initial analysis of the draft text, focusing on general provisions, institutional arrangements, and the substantive provisions concerning the package deal elements, thereby highlighting key areas of progress or contention, and identifying some possible options for strengthening the text.

i. General Provisions and Institutional Arrangements

86. Although the Preamble mentions promotion of sustainable development, it makes only limited reference to key instruments, principles and objectives. The importance of science-based decision-making and effective enforcement is nowhere reflected. Part I comprises six articles applicable to the treaty as a whole: use of terms; objectives; scope of application; relationship to other treaties; general principles and approaches; and international cooperation.

87. There is a requirement under draft Article 4 that the instrument "…shall be interpreted and applied in a manner that [respects the competences of and] does not undermine [the effectiveness of] relevant legal instruments and frameworks and relevant global, regional, subregional and sectoral bodies…" Discussions to date have

[114] Advance, unedited version of the Draft Treaty Text, <https://www.un.org/bbnj/sites/www.un.org.bbnj/files/igc_5_-_further_revised_draft_text_final.pdf> accessed 30 May 2022

demonstrated that interpretations of what this means in practice may vary considerably,[115] and thus it would be helpful if this article included a complementary provision requiring existing agreements to be implemented in light of the treaty's objective.

88. Draft Article 6(2) obliges States Parties to promote international cooperation in "marine scientific research and in the development of marine technology". This obligation could be expanded to include cooperation on data collection and reporting. Draft Article 6 could also call specifically for cooperation on matters of enforcement.[116] An institutional structure, constituted of a Conference of the Parties, a scientific and technical body, a secretariat, and a clearing house mechanism has been envisaged. It may be relevant to assess the clearing-house mechanism established under the Convention on Biological Diversity (CBD), in order to highlight and integrate lessons learnt and key conditions for success.

ii. Package Deal Components

a. MGRs, including questions on the sharing of benefits

89. The use of MGRs was not envisaged by the drafters of UNCLOS and there is a lack of clarity on the applicable regime. Part II is composed of eight draft Articles(7-13) that seek to provide clarity and facilitate benefit-sharing. There is currently no consensus on a range of foundational provisions, as evinced from a perusal of Draft Articles 1(8), 1(9) and 8.

90. The common heritage principle is not currently included in this part, though there appears to be a "general agreement that recognition of MGRs as common heritage of mankind is not a prerequisite for the establishment of benefit-sharing obligations, nor for

[115] G. Wright *et. al.* (2018), The Long and Winding Road: negotiating a treaty for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction (No. 08), IDDRI Studies. IDDRI, Paris
[116] As in the UN Fish Stocks Agreement, Article 21

the possible inclusion of principles that could apply to ABNJ in general."[117] It is acknowledged, however, that benefits are to be shared in a fair and equitable manner.[118]

b. Measures such as ABMTs, including MPAs

91. The international community has made various commitments to establish a network of MPAs, including targets to cover a significant percentage of the ocean, but there is currently no global mechanism to establish MPAs in ABNJ or to coordinate the use of ABMTs currently available to existing management organizations.[119] Part III comprises eight draft Articles (14-21) that seek to fill this governance gap.

92. Draft Article 17*bis* provides for a list of indicative criteria (draft Annex I) for the identification of areas requiring protection through ABMTs/MPAs, emphasizing the use of the best available science, the precautionary approach/principle and the ecosystem approach. The inclusion of "feasibility" in the list of criteria appears to contradict the intent of the article, as an area's need for protection is unrelated to the feasibility of designating the necessary ABMTs/MPAs in practice. Indeed, application of the precautionary and ecosystem approaches requires particular care to be taken if an area is known to require protection but ABMTs are deemed infeasible.

93. Draft Article 18 indicates that consultations on proposals should be inclusive, transparent and open to all relevant stakeholders. The consultation period is time-bound, but it is unclear who will decide and what the timeframe will be. The draft text does not include any option that would allow States Parties to adopt interim or emergency measures while the proposal is assessed. Given that adoption of proposals may take some time, it is important that the treaty provide for such measures.

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[117] G. Wright *et. al.* (2018), The Long and Winding Road: negotiating a treaty for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction (No. 08), IDDRI Studies. IDDRI, Paris

[118] Draft Articles 11 and 11*bis*

[119] Several international organisations have established ABMTs and MPAs in ABNJ, but these are only binding on Parties, or on other States or bodies on a voluntary basis and only apply to a limited number of activities. G. Wright *et. al.* (2018), The Long and Winding Road: negotiating a treaty for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction (No. 08), IDDRI Studies. IDDRI, Paris

94. Regarding the decision-making process, at present, there appears to be no provision that would explicitly empower the COP to take measures in cases where competent bodies fail to act upon its recommendations. Without such a provision, areas designated under the BBNJ agreement could remain unprotected or unmanaged if members of the relevant bodies do not agree upon appropriate measures. It is therefore important for the COP to be entitled to take decisions binding on its own States Parties.

95. Experience with reporting and monitoring obligations in UNCLOS and other instruments suggests that obligations may not be fully implemented in the absence of clear timelines and modalities. Yet while the current draft under Draft Article 21 (1) requires States Parties to report to the COP on the implementation of ABMTs/MPAs and specifies that these reports should be made publicly available by the secretariat, there is no indication of how frequently States Parties have to produce these reports. Importantly, the draft text includes a provision that would request or require relevant legal instruments, frameworks and bodies to report to the COP on the implementation of measures that they have established.[120] It is crucial for the treaty to include such a provision as this would improve transparency by making States Parties to sectoral and regional organizations accountable for the implementation of these measures (and therefore accountable to States Parties to the BBNJ treaty that are not also party to the relevant management bodies). This would also enable the COP to act as a central platform for the discussion of the implementation of ABMTs/MPAs, thereby providing some global oversight.

c. Environmental impact assessments (EIA)

96. UNCLOS, under Articles 204-206, already includes certain provisions relevant to environmental impact assessments (EIAs), but it does not include any guidance or minimum standards, or provisions on cumulative impact assessments and strategic environmental assessments (SEAs). In its 21 draft Articles (21bis-41), Part IV aims to operationalize existing provisions (by establishing processes, thresholds and guidelines) and provide for consideration of cumulative impacts and SEAs, thereby achieving a coherent EIA framework for activities in ABNJ.

[120] Draft Article 21(5)

97. It is important to ensure conservation and sustainable use, the requirement to conduct an EIA could apply to all activities that have an impact in ABNJ (rather than limiting application to activities that actually take place in ABNJ), though consensus has not yet been reached on this point.[121] The draft text provides two alternatives for thresholds and criteria for EIAs. An EIA would be required when States or States Parties have "reasonable grounds for believing that planned activities" either "may cause substantial pollution of or significant and harmful changes" or "are likely to have more than a minor or transitory effect on" the marine environment.[122] In either case, the provision as currently drafted would place responsibility for determining whether there are such "reasonable grounds" with States Parties, in contrast to most domestic EIA legislation, which generally places such determinations in the hands of a management body).

98. The draft text includes possible articles on cumulative and transboundary impacts,[123] but it does not define the latter and there is little convergence on how such impacts should be considered in the conduct of EIAs.

99. There is currently little agreement on the effect of an assessment, i.e. whether it would be advisory only, with States ultimately deciding whether the activity may proceed, or whether the COP will be responsible for providing such authorisation. In line with conservation and sustainable use and the precautionary approach, the treaty could include an obligation to manage such activities to avoid significant adverse impacts or not to allow the activity to proceed. If the decision whether to proceed remains with the State Party, the treaty could include provisions enabling other States Parties to appeal the decision.

100. In terms of monitoring and review, the draft text provides options for a scenario in which the results of monitoring identify unforeseen adverse impacts. However, there is no agreement as to whether the State or the Scientific and Technical Body should in that case notify the COP/other States/the public, halt the activity, require the proponent to propose measures to mitigate and/or prevent those impacts or make an evaluation and decide whether the activity should continue.

[121] Draft Article 22 (3)
[122] Draft Article 24
[123] Draft Article 25

d. Capacity-building and the transfer of marine technology

101. Draft Article 44 has expounded in detail the modalities pertaining to capacity-building and transfer of marine technology, and the provision tilts towards a voluntary obligation. It is appreciable that the Draft Article provides that capacity-building and the transfer of marine technology should be a country-driven, transparent, effective, and iterative process that is participatory, cross-cutting and gender-responsive.

iii. Possible Impact of the ILBI in supporting the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

102. The importance of oceans for sustainable development is widely recognized by the international community and embodied in Chapter 17 of Agenda 21, the Johannesburg Plan of Implementation and various decisions taken by the Commission on Sustainable Development. The Millennium Ecosystem Assessment emphasizes that all humans depend on the Earth's ecosystems and the services they provide. In the Rio+20 outcome document, *The future we want*, Member States called for "holistic and integrated approaches to sustainable development that will guide humanity to live in harmony with nature and lead to efforts to restore the health and integrity of the Earth's ecosystem". In this context, it was stressed, *inter alia*, the importance of "the conservation and sustainable use of the oceans and seas and of their resources for sustainable development, including through their contributions to poverty eradication, sustained economic growth, food security and creation of sustainable livelihoods and decent work…".

103. Accordingly, the Proposal of the Open Working Group on Sustainable Development Goals submitted to the United Nations General Assembly in August 2014 contained SDG 14 which aims to "Conserve and sustainably use the oceans, seas and marine resources for sustainable development". Issues related to oceans and seas are addressed in the 10 targets under SDG 14, as well as many other related SDGs, under the 2030 Agenda for Sustainable Development, the outcome document of the United Nations summit for the adoption of the post-2015 development agenda in 2015. The role that could be played by the ILBI in promoting SDG received ardent attention in the recently held UN Ocean Conference 2022 in Lisbon.

104. Of all the Sustainable Development Goals, SDG 14 is by far the least funded, representing only 0.01% of all SDG funding, less than 2% from Green Climate Fund (GCF) and only 0.7% of Global Environmental Facility (GEF). It is important that sustainable and responsible public and private investment is attracted and sustained, including foreign direct investment through blending, guarantees and other innovative financial instruments, paying particular attention to women and youth. It is also important to realize that including appropriate provisions in the text of the BBNJ ILBI and implementing them has the potential to make a very significant contribution to meeting several SDG targets.

105. Incidentally, the UN Decade of Ocean Science for Sustainable Development (2021 to 2030) is expected to, among others, offer a new level of certainty and transparency about the state of the ocean, and bring the capacity of all countries to the level needed to sustainably manage their exclusive economic zones and the ocean beyond them, focusing on science for solutions.

C. Engagement of AALCO Member States in the Sessions of the IGC, particularly the 4th session of the IGC

106. All four sessions have perceived extensive participation from the Member States of the UN, parties to the UNCLOS, members of the specialized agencies of the UN, organizations that have received a standing invitation to participate as observers in the sessions and the work of the General Assembly, United Nations funds, programmes, bodies and offices, and other intergovernmental organizations and non-governmental organizations.

107. The Member States of AALCO and the G-77 have been well represented at the sessions.[124]32 Member States of AALCO attended the first substantive session,[125] and 36

[124]Lists of Participants, at https://undocs.org/en/A/CONF.232/2018/INF.3; <https://undocs.org/a/conf.232/2019 /inf.3/rev.2; and https://undocs.org/A/CONF.232/2019/INF/5/Rev.1>.; <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N22/307/30/PDF/N2230730.pdf?OpenElement>

[125]The first session was attended by Bangladesh, Brunei Darussalam, People's Republic of China, Cyprus, Egypt, Republic of the Gambia, Ghana, India, Indonesia, Islamic Republic of Iran, Iraq, Japan, Kenya, Lebanon, Malaysia, Mauritius, Myanmar, Nepal, Nigeria, Oman, Philippines, Republic of Korea, Saudi

Member States attended the second substantive session.[126]The third substantive session was attended by 33 Member States of AALCO.[127] The fourth substantive session was attended by 34 AALCO Member States.[128] AALCO, being an organization that has received a standing invitation to participate as an observer in the sessions and the work of the General Assembly, was represented by Dr. Roy S. Lee, Permanent Observer of AALCO to the UN at the substantive sessions.

III. Observations and Comments of the AALCO Secretariat

Observations and Comments of the AALCO Secretariat on Transboundary Air Pollution with Specific Reference to Sand & Dust Storms (SDS) and Haze Pollution

108. The issue of Sand & Dust Storms (SDS) and Haze Pollution are grave environmental concerns of a transboundary nature that require regional and global solutions. AALCO encourages Member States to develop appropriate legal and policy approaches to deal with this challenging problem. In this regard, AALCO places on record, its deep sense of appreciation to its Member States for their sustained efforts in environmental conservation and encourages Member States to specifically address the challenges posed by transboundary air pollution in the best traditions of Afro-Asian friendship and solidarity.

109. AALCO, in particular, notes and appreciates the initiatives undertaken by the ASEAN for tackling the issue of transboundary haze pollution. The ASEAN Agreement on Transboundary Haze Pollution, 2002 is a pioneering piece of international legislation that reflects the deep commitment of the ASEAN and its Member States in addressing the acute challenges posed by this environmental hazard. In this regard, AALCO calls on the international community to study and reflect more deeply on the polices, practices and

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Arabia, Sierra Leone, Singapore, South Africa, Sri Lanka, Sudan, Thailand, Türkiye, United Republic of Tanzania, Socialist Republic of Viet Nam

[126] In addition to the aforementioned Member States, Cameroon, Kuwait, Mongolia and the State of Palestine attended the second substantive session

[127]Libya, Senegal, Uganda and Yemen were the new participants in a substantive session of IGC. Brunei Darussalam, Republic of the Gambia, India, Kenya, Lebanon, Mongolia and the State of Palestine did not attend the third substantive session

[128] Pakistan is a new participant

legislative mechanisms adopted by ASEAN Member States in their effort to address challenges posed by transboundary haze pollution.

110. AALCO supports the initiatives adopted by the United Nations in tackling the challenges posed by Sand & Dust Storms (SDS). In this regard, the Secretariat shall follow the work of the United Nations, especially the United Nations Coalition on Combating Sand and Dust Storms in an attempt to further Afro-Asian engagement on this topic.

111. It is finally recommended that the relevant Member States which have developed regional initiatives in this regard share their experiences with other Member States tackling the challenges posed by SDS and haze pollution in Asia and Africa.

Observations and Comments of the AALCO Secretariat on the Conservation and Sustainable use of BBNJ

112. A fifth session of the IGC has been proposed to enable further deliberations on the draft instrument. It is urged that AALCO Member States participate in the same, and in any other session in the future, with the zeal to formulate an ambitious and robust agreement on the conservation and sustainable use of BBNJ, regardless of the number of additional sessions that might be needed. Appropriate cues might be taken from the existing instruments like the CBD and the Fish Stocks Agreement, to ensure better implementation of the objectives of the ILBI.