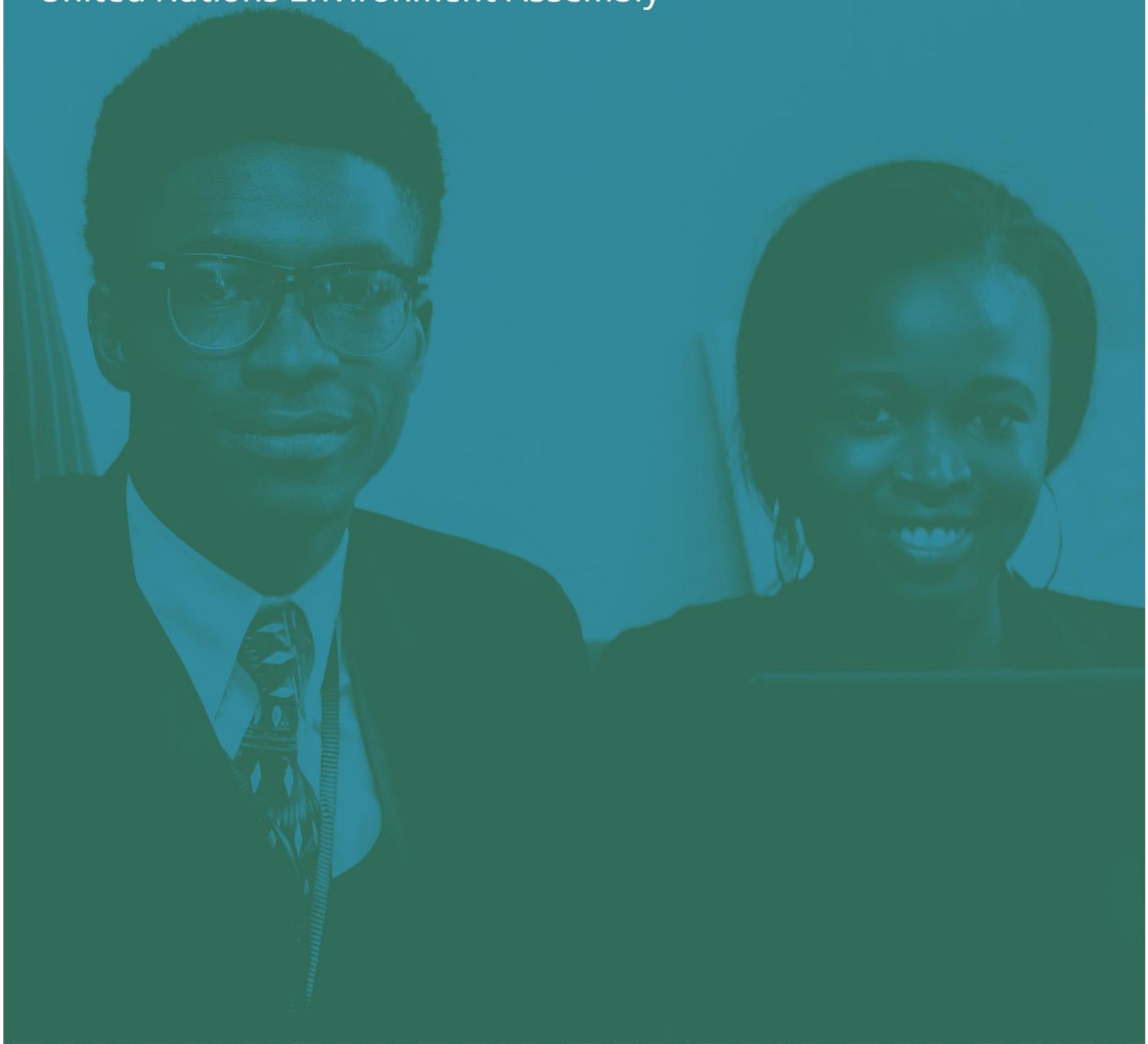
LAGOS MODEL UNITED NATIONS '20

Background Guide

United Nations Environment Assembly



UNEA

Background Guide: United Nations Environment Assembly.

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LMUN 2020: The Fifth Session.

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Letter from the USG

Dear Delegates,

It is my distinct pleasure to welcome you all to the Lagos Model United Nations Conference (LMUN) 2020, the Fifth session. This conference for the past four years has aimed to create a forum of opportunities for self-discovery, development of certain skills such as; teamwork, public speaking, negotiation and solving global issues. During LMUN, delegates are encouraged to put aside all forms of personal peculiarities with a view to improving the quality of the world through the outcome of the various issues that will be discussed in committees.

The staff for the United Nations Educational, Scientific and Cultural Organization are; **Rafiat Temitura Shittu** (Under-Secretary-General), **Adewunmi Lydia Yesidé** (Chair), **Oluwadara Openiyi** (Vice-Chair), **Fawaz Haroun** (Researcher) and **Usman Umeymah Salihat** (Researcher).

Rafiat is currently a 500 level law student at the University of Lagos. She was a delegate in LMUN 2016 and 2017. She went on to serve as the Rapporteur and Researcher of the General Assembly and Commission on the Status of Women, respectively, in LMUN 2018 and as the Vice-Chair of UNICEF in LMUN 2019. She was also a delegate at the 2019 National Model United Nations New York, where she won a position paper award as a member of award-winning Outstanding Delegation from the University of Lagos. She was also a delegate at the 2017 National Model United Nations, Washington DC. **Yesidé** is a 500 level Law student at the University of Lagos. She served as a delegate at the LMUN 2018, and was awarded the Distinguished Delegate of UNEA. Also in 2018, she was a delegate and permanent representative of the delegation from University of Lagos at the American Model United Nations in Chicago, USA. She also served as the Vice Chair of AU-ECOSOCC at the LMUN 2019. **Oluwadara** is a 400 level law student at the University of Lagos. She was a delegate at the LMUN 2018, and was awarded the Outstanding Delegate of UNEA. Later that year, she served as a delegate at the Cambridge International MUN. She has also served as a researcher at LMUN 2019. **Fawaz** is a 400 law student at the University of Lagos with an interest in international law, sustainable development and the environment. This has led him towards writing and to participate in multiple moot competitions. Now, he serves as a researcher on the UNEA with the hope of further improving his knowledge of his interests**. Salihat** is a 300 level law student at the University of Lagos. She is passionate about women's, children's and environmental rights. She participated in the LMUN 2019 and won the honourable mention award for the UN-Women Committee. She has also participated in Nitimun 2019 serving as the chair for her committee, the Peacebuilding Committee

The topics to be discussed by the committee at this year's conference are:

I. The Role of Youth and Children in Combating Climate Change
II. The Impact of Pollution on Marine Life

Delegates are reminded that this background guide is not to serve as a replacement of the research to be done by individual delegates, but instead is to serve as an introduction to the topic(s) to be discussed, that will guide their understanding of the various topics. Delegates are encouraged to conduct their research beyond the background guides and make use of the Annotated Bibliography and Bibliography which has been provided for further research.

In order to further prepare for the conference, each delegate or delegation is to submit a Position Paper on the date communicated upon registration, in accordance with the position paper guide.

Other essential documents that will aid preparation for the conference, has been provided for delegates on the LMUN website – www.lmun.ng.

If you have any questions or concerns regarding your preparation for the committee or the Conference itself, please contact me at - usgdevelopment@lmun.ng or the committee at - unea@lmun.ng.

We look forward to seeing you at LMUN 2020 Conference, the Fifth Session.

Rafiat Shittu
USG Development Department, LMUN 2020

Abbreviations

ACE	Action for Climate Empowerment
AFS	Agrifood System
AMCEN	African Ministerial Conference on the Environment
APPS	Act to Prevent Pollution from Ships
AYF	ACE Youth Forum
CCE	Climate Change Education
CCEE	Climate Change and Environmental Education
COP23	23rd United Nations Climate Change Conference
COY	Conference of Youth
CRC	Convention on the Rights of the Child
CSD	Commission on Sustainable Development
CSO	Civil Society Organisation
ECOSOC	Economic and Social Council
EFA	Education for All
ESD	Education on Sustainable Development
EU	European Union
FAO	Food and Agriculture Organisation
FTE	Full Time Equivalent
GDP	Gross Domestic Product
GEO	Global Environmental Outlook
GREET	Global Renewable Energy Education and Training
IAC	Inter-Agency Committee
IFAD	International Fund for Agricultural Development and Cultural Organisation
IGO	Intergovernmental Organisation
ILO	International Labour Organisation
IMO	International Maritime Organisation
IPCC	Intergovernmental Panel on Climate Change
ITU	International Telecommunications Union
MARPOL	The International Convention for the Prevention of Pollution from Ships
MPPRCA	Marine Plastic Pollution Research and Control Act
NGO	Non-Governmental Organisation
ONHCR	Convention on the Rights of the Child
OSPAR	The Convention for the Protection of the Marine Environment of the North-Atlantic Sea
RIO+20	United Nations Conference on Sustainable Development
RUFIN	Rural Finance Institution Building Programme
SIDS	Small Island Developing States
SDG	Sustainable Development Goal
SPA	Shore Protection Act of 1988
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on the Law of the Seas
UNDP	United Nations Development Programme
UNEA	United Nations Environmental Assembly

UNEP	United Nations Environmental Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
UN-HABITAT	United Nations Human Settlements Programme
UNICEF	United Nations Children's Fund
UNITAR	United Nations Institute for Training and Research
UNO	United Nations Organisation
USGS	United States Geological Survey
WHO	World Health Organisation
WPAY	World Programme of Action for Youth
YDP	Youth Delegate Programme
YLCCC	Youth Leadership Camp for Climate Change
YMCA	Young Men's Christian Association
YOUNGO	Youth NGOs

Committee Overview

Introduction

The United Nations (UN) Environmental Assembly (UNEA) is the highest decision-making body worldwide as regards matters pertaining to the environment.[1] It is a program and fund of the UN that ensures international, regional, and local coordination for environmental issues, and it also ensures that various other UN entities take environmental impacts into account when executing their missions.[2] UN Environment Program (UNEP) reports to the General Assembly and the Economic and Social Council (ECOSOC).[3]

The UNEP was created at the recommendation of the 1972 UN Conference on Human Environment in Stockholm, Sweden.[4] Six months later, the General Assembly adopted *Resolution 2997 (XXVII)* (1972) on the "Institutional and financial arrangements for international environmental cooperation," which established UNEP as the official body concerned with environmental issues within the UN.[5] Ever since, UNEP has played a significant role in coordinating environmental policies across various UN agencies.[6] UNEP helped in the planning and execution of the UN Conference on Environment and Development (UNCED) in 1992, which led to the adoption of the *Rio Declaration on Environment and Development* (1992) as well as *Agenda 21* (1992).[7] These landmark agreements provided further guidance and renewed support for UNEP's "catalytic role" in international cooperation on environmental protection.[8] UNCED marked a turning point for international collaboration to preserve biodiversity and the climate, with the *Convention on Biological Diversity* (CBD) and the *UN Framework Convention on Climate Change* (UNFCCC) opened for signature at the summit and the *Convention to Combat Desertification* (1994) adopted in its aftermath.[9]

In June 2012, 20 years after the adoption of the *Rio Declaration*, the UN Conference on Sustainable Development (Rio+20) called for the creation of UNEA to better execute the mandate of UNEP and place environmental issues in the same standing as health, security, and economics. It was created as a result of an attempt by world leaders to improve the UN Environment, and the desire was expressed at the UN Conference on Sustainability Development.[10]

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[1] UN, "Delivering on the 2030 Agenda".
[2] New Zealand Ministry of Foreign Affairs and Trade, United Nations Handbook 2017-18, 2017, p. 256.
[3] *Ibid*., p. 257.
[4] UN Conference on the Human Environment, Report of the UN Conference on the Human Environment (A/CONF.48/14/Rev.1). Chapter I: Declaration of the UN Conference on the Human Environment, 1972.
[5] General Assembly, Institutional and financial arrangements for international environmental co-operation (A/RES/2997(XXVII)), 1972.
[6] New Zealand Ministry of Foreign Affairs and Trade, United Nations Handbook 2017-18, 2017, pp. 256-257.
[7] UNEP, Four Decades of Environmental Leadership.
[8] UNEP, The First 40 Years: A Narrative by Stanley Johnson, 2012, pp. 137-139.
[9] Convention on Biological Diversity, The Rio Conventions.
[10] UNEA and Governing Council.

UNEA meets every two years, and during its meetings, UNEA develops key international environmental policies and laws. So far, UNEA has had four sessions, with the theme of the last session being "innovative solutions for environmental challenges and sustainable consumption production" and with the session spanning 11-15 March 2019.[11] The purpose of UNEA is to welcome a new era with sustainable development and the environment at the core. UNEA encourages cooperation on the international, regional and national levels, working with both states and other organisations alike for the realization of its purpose.[12] Furthermore, UNEA reports to the General Assembly and ECOSOC.

The UNEP was initially created through a recommendation in Stockholm, Sweden in 1972.[13] UNEP became an official body through the General Assembly's adoption of *Resolution 2997 (XXVII)* in 1972.[14] UNEP was one of the bodies in charge of the planning and execution of the UN Conference on Environment and Development (UNCED) in 1992, which led to the adoption of *the Rio Declaration on Environment and Development (1992)* and *Agenda 21* (1992).[15] The mission of the UNEP is to co-operate with nations, organizations and individuals to improve the lives of people as much as possible without compromising that of the future generations.[16] The work of the UNEP includes seven key areas: climate change, disasters and conflicts, ecosystem management, environmental governance, chemicals and waste, resource efficiency and environment under review.[17]

UNEA was created to improve and protect the environment while raising its importance level to the same standing as health, security and economics.[18] UNEA was formally established in 2013 through the adoption of *Resolution 67/251* (2013) on "Change of the designation of the Governing Council of the United Nations Environment Programme". It has undertaken multiple projects and continues to undertake projects, to protect and improve the environment.

Governance, Structure and Membership

UNEA replaced the former Governing Council of 58 members that was overseeing UNEP from its inception until 2013.[19] Comprised of all Member States, UNEA meets biennially to set the global environmental agenda and to discuss emerging challenges.[20] The UNEP Secretariat is responsible for supporting UNEA and consists of a rotating President, three

[11] UN, 4th Session, UN Environment Assembly.
[12] New Zealand Ministry of Foreign Affairs and Trade, *United Nations Handbook* 2017-18, 2017, p. 256.
[13] UN Conference on Human Environment, Report of the UN Conference on the Human Environment (A/CONF.48/14 Rev. 4), Chapter 1: Declaration of the UN Conference on the Human Environment, 1972.
[14] General Assembly, Institutional and financial arrangements for international environmental cooperation (A/RES/2997(XXVII)), 1972.
[15] UN Environment, *Four Decades of Environmental Leadership.*
[16] UN Environment, "Why does UN Environment Matter".
[17] UN Environment, "What do we do?"
[18] General Assembly, *The Future We Want* (A/RES/66/288), 2012, p. 18.
[19] General Assembly, Institutional and financial arrangements for international environmental co-operation (A/RES/2997(XXVII)), 1972.
[20] UNEP, About the UN Environment Assembly.

Vice-Presidents, and the Rapporteur.[21] The Committee of Permanent Representatives, which meets at least four times a year, is a permanent subsidiary body of UNEA that prepares its meetings, monitors the implementation of its decisions, and provides advice to UNEP between the sessions of UNEA.[22]

Upon the creation of UNEA in 2013, it was envisaged to be the "world's parliament on environmental issues".[23] UNEA succeeded the governing council of the UNEP. It began with 58-member states, and currently has a total of 193 members, who meet biennially to discuss environmental challenges of the world and to proffer solutions to these challenges.[24] The leadership of UNEA is composed of a Bureau, headed by a President. This Bureau is called UNEA Bureau and is made up of ten Ministers of Environment who serve for a term of 2 years each.[25]

UNEA also has an intergovernmental body known as the Committee of Permanent Representatives. This Committee accounts for 118 members of UNEA and meets quarterly, led by a five-member Bureau, elected for a period of two years. The Committee is responsible for the preparation of the agenda of UNEA, provision of advice on policy matters and preparations of decisions for adoption by UNEA, as well as overseeing their implementation.

The headquarters of UNEA is located in Nairobi, Kenya but it has six branches across the globe that deal with regional and local environmental challenges.[26] These regional offices table areas of concerns and ideas before UNEA for a wider and critical examination and possible implementations.

Furthermore, UNEA is primarily funded by three sources. The first is the UN Regular Budget which covers international conferences and special mission work. The second is financial support and contributions from Member States, which is the core source for flexible funds, and the third being "earmarked contributions" voluntarily given by Member States towards the implementation of certain projects. These voluntary contributions make up 95% of the UNEP's income.[27]

Mandate, Functions and Powers

The UNEP was founded in June 1972, upon the adoption *of General Assembly Resolution 2997 (XXVII)*.[28] It was created stemming from the decisions made at the UN Conference on

[21] General Assembly, Change of the designation of the Governing Council of the United Nations Environment Programme (A/67/784), 2013.
[22] UNEP, Committee of Permanent Representatives: Overview.
[23] Former Executive Director UNEP, Achim Steiner.
24 UN Environment, About the UN Environment Assembly.
25 Governance of The United Nations Environment Assembly.
26 UN Environment, Civil Society Engagement.
27 UN Environment, Funding Facts.
28 General Assembly, Institutional and financial arrangements for international environmental co-operation (A/RES/2997(XXVII)), 1972.

Sustainable Development, also referred to as *RIO+20.*[29] The establishment of UNEA was the culmination of decades of international efforts and aimed at creating a coherent system of international environmental governance. The UNEP is the coordinating body for the UN's environmental activities. It has played a significant role in identifying and analysing global environmental problems, developing regional and international environmental programs and conventions, and promoting environmental science and information. Among its most important tasks is assisting developing countries in implementing environmentally sound policies and practices. Since 1997, in response to the environmental requirements of *Agenda 21*, UNEP has also published its Global Environment Outlook (GEO), a comprehensive report on the global state of the environment. Its headquarters are in Nairobi, Kenya.[30]

UNEP's activities cover a wide range of issues regarding the atmosphere, marine and terrestrial ecosystems, environmental governance and green economy. It has played a significant role in developing international environmental conventions, promoting environmental science and information and illustrating the way those can be implemented in conjunction with policy, working on the development and implementation of policy with national governments, regional institutions in conjunction with environmental non-governmental organizations (NGOs).[31]

The initial expansion of UNEP's mandate came after the 1992 Rio summit, which outlined a list of priority areas for its future work and called for the program to gain "access to greater expertise and provision of adequate financial resources" as well as closer collaboration with the rest of the UN system to fulfil these new tasks.[32] However, the concurrent creation of the Commission on Sustainable Development (CSD) in New York threatened to sideline the Nairobi-based UNEP in practice.[33] On the occasion of its 25th anniversary, the Governing Council of UNEP held an extensive discussion on the future role of the program that resulted in the adoption of the *Nairobi Declaration on the Role and Mandate of the UNEP* (1997).[34] With a view to the special session of the General Assembly later that year that was scheduled to review the implementation of Agenda 21, the declaration represented a call to governments and the UN system to acknowledge UNEP's leadership role.[35] The General Assembly endorsed the Nairobi Declaration and reaffirmed that "UNEP is to be the leading global environmental authority that sets the global environmental agenda".[36]

29 United Nations Environment Programme – Established.
30 Environment and Society Portal – UNEP Established.
31 United Nations Environmental Programme: An Assessment - Mark Allan, Gray (1990) 20(2): 43-49.
32 UNCED, Agenda 21, 1992, para. 38.21-38.23.
33 UNEP, The First 40 Years: A Narrative by Stanley Johnson, 2012, pp. 137-141.
34 UNEP Governing Council, Proceedings of the Governing Council at its Nineteenth Session (UNEP/GC.19/34), pp. 52-56.
35 UNEP, The First 40 Years: A Narrative by Stanley Johnson, 2012, p. 155.
36 General Assembly, Programme for the Further Implementation of Agenda 21 (A/RES/S-19/2), 1997, para. 123.

Upon the adoption of the Nairobi Declaration at the 19th session of the UN Environment Governing Council in 1997, UN Environment realigned its core mandate to ensure a more modern and technological approach to environmental issues.[37] The new core mandate made UN Environment responsible for using the best available scientific methods and evidence to analyse global environmental trends, utilizing early warning systems, furthering the development of international environmental law and policy, monitoring and fostering Member State compliance with existing international environmental norms, strengthening its role in coordinating UN environmental activities, serving as a link between the scientific community and the UN, and providing key policy advice for UN bodies, governments, and other institutions.[38] In 2002, the Johannesburg Declaration on Sustainable Development called upon UN Environment and its partners to cooperate more closely across sustainable development initiatives for the implementation of *Agenda 21*.[39]

UNEP ensures the implementation of UNEA's agenda by promoting international cooperation on existing environmental policies, guiding the creation of new environmental policies, and using environmental awareness to help Member States and Civil Society Organisations respond to environmental threats.[40] UNEP also monitors the state of the global environment on both an international and regional scale and shares that information with interested parties.[41] Under the direction of UNEA, UNEP works to develop international environmental law and ensure the proper use of environmental information and instruments. To help achieve its mandate, UNEP can create task forces and subsidiaries to implement environmental policies.[42] However, the General Assembly or ECOSOC must approve any resolutions adopted by UNEP on environmental policy or creating new bodies.

Recent Sessions and Current Priorities

The responsibility of UNEP has further moved towards realizing environmental protection as part of an integrated vision of sustainable development as mandated with the adoption of the *2030 Agenda for Sustainable Development*(SDGs).[43] The UNEP focuses on 86 of the 169 targets contained in the 17 SDGs, which are concerned with environmental sustainability.[44] The paradigm change towards an integrated approach is reflected in the Medium-Term Strategy 2018-2021 that envisions UNEP to "provide an environmental lens

[37] Governing Council of UN Environment, Proceedings of the Governing Council at its Nineteenth Session (UNEP/GC.19/34).
[38] New Zealand Ministry of Foreign Affairs and Trade, United Nations Handbook 2017-18, 2017.
[39] World Summit on Sustainable Development, Report of the World Summit on Sustainable Development (A/CONF.199/20).
[40] UNEA, Implementation Plan towards a Pollution-Free Environment, Second Draft.
[41] UNEP, Programme Performance Report, 2016, p. 57.
[42] UN CEB, United Nations Environment Programme.
[43] General Assembly, Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1), 2015; UNEA, Delivering on the environmental dimensions of the 2030 Agenda: Information note of the Executive Director (UNEP/EA.2/INF/4), 2016.
[44] UNEA, Delivering on the environmental dimensions of the 2030 Agenda: Information note of the Executive Director (UNEP/EA.2/INF/4), 2016, p. 1.

through which to view, understand and advise on sustainable development".[45] UNEP's "Vision 2030" is thereby built on three factors, namely the benefits of sustainable natural resource use for sustainable development; the reduction of social and economic cost through improvements in environmental sustainability; and finally the increased benefits for marginalized populations as a consequence of integrating environmental considerations into development planning.[46]

Since it was launched at the second UNEA in 2016, the Sustainable Innovation Expo has become the premier platform for engaging with the private sector and has become the preferred platform for connecting new science to policy; and policy to solutions.[47] With a focus on eco-innovation and sustainable finance, the 2019 Expo, which was held from 11 to 15 March, brought together leaders from government, private sector, international organizations and civil society to support UNEA's overall theme of Innovative Solutions to Environmental Challenges and Sustainable Consumption and Production.

By virtue of the Medium-Term Strategy and its contents, the present priorities of UNEA are climate change, resilience to disasters and conflicts, healthy and productive ecosystems, environmental governance, chemicals, waste and air quality, environment under review.[48] The adoption of two biennial programmes of work and budget in the broader context of a four-year medium-term strategy will outline steps towards achieving the longer-term impact for the adoption of a flexible approach towards incorporating emerging issues and different regional outlooks in the outcome maps. These programmes of work and budget would be reviewed every two years as part of the existing programme of the work development cycle.[49] The objective for each sub-programme defines the intention, whilst the outcome maps outline the UNEP 2030 outcomes and impacts; the logical progression of outcomes to achieve the UNEP 2030 outcomes and impacts; and the outcomes to be achieved in the period 2018-2021. Impact indicators in the outcome maps explain how environmental change would be measured in 2030 and beyond, and are beyond the capacity of UNEP alone.[50]

The work of UNEP towards climate change will be organized around three results streams: climate change adaptation and resilience; mitigation and clean energy; and reducing emissions from deforestation and forest degradation in developing countries and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+). The work of UNEP on climate change is shaped by the decisions of the Conference of the Parties to the *United Nations Framework Convention on Climate Change* and complements the work of the Convention, while being guided by

[45] UNEP, Medium-Term Strategy 2018-2021, 2016, p. 2.
[46] *Ibid*., p. 12.
[47] Multi Stakeholder Dialogue During UNEA.
[48] UNEP, Medium-Term Strategy 2018-2021, 2016, p. 23.
[49] *Ibid*, p. 27.
[50] *Ibid.*

sound science, particularly from the Intergovernmental Panel on Climate Change.[51] This work will also contribute to the achievement of the Goals, specifically Goal 7 (energy) and Goal 13 (climate change).[52]

In 2016, the second session of UNEA was held on 23-27 May 2016 in Nairobi, Kenya under the theme "Delivering on the Environmental Dimension of the 2030 Agenda for Sustainable Development".[53] A total of 25 resolutions were adopted by UNEA, ranging in coverage from administrative amendments and rules of procedure to substantive decisions on biodiversity and engaging with the *2030 Agenda for Sustainable Development*.[54] In order to increase the participation of private sector and civil society stakeholders in UNEA 2, an online policy forum was used for disseminating information and holding discussions on various topics of interest.[55] All adopted resolutions relate to one or more of the seven thematic priorities of UNEP and prepare for the implementation of the Medium-Term Strategy 2018-2021.[56]

In 2019, the fourth session of UNEA held from 11th – 15th of March. The theme was "Innovative Solutions for Environmental Challenges and Sustainable Consumption and Production".[57] The session attracted about 1500 participants from 179 countries.[58] The session addressed environmental challenges related to poverty, as well as innovation and technological solutions, amongst others.[59] The outcomes of the session include twenty three resolutions on issues such as sustainability mobility, marine plastic litter and microplastics, sound management of chemicals and waste, mineral resource management, amongst others.[60]

The fifth session of UNEA (UNEA-5) is expected to take place during the last week of February 2021, in Nairobi, Kenya, as agreed during UNEA-3 in December 2017. It was decided that going forward, UNEA will convene during the last week in February unless otherwise decided by UNEA.[61]

Conclusion

UNEA is the world's highest-level decision-making body on the environment. It addresses the critical environmental challenges facing the world today. Understanding these challenges and preserving and rehabilitating our environment is at the heart of the *2030*

[51] UNEP, Medium-Term Strategy 2018-2021, 2016, p. 31.
[52] UN, About the SDGs.
[53] UNEP, The path towards UNEA 2.
[54] UNEP, Resolutions and Documents for the second session of the UN Environment Assembly.
[55] UNEP, The path towards UNEA 2.
[56] UNEP, Resolutions and Documents for the second session of the UN Environment Assembly.
[57] Global Task Force, 4th Session of the UN Environment Assembly (UNEA-4).
[58] Soroptimist International, Reflection on the Outcome of the Fourth Session of the UNEA-4.
[59] UNEA, Fourth session of the United Nations Environment Assembly.
[60] UNEA, Proceedings, Report, Ministerial Resolutions and Decisions UNEA 4.
[61] IISD: Fifth Session of UNEA.

Agenda for Sustainable Development.[62] The creation of UNEA represents another key step in UN Environment's mission to ensure that the work of all Member States and CSOs are environmentally sustainable and in line with international laws and norms concerning the environment.[63] The creation of an environmental entity with universal membership that oversees the world's environmental policy agenda reflects the growing importance of environmental issues and allows for an integrated approach to environmental protection and climate action through the *2030 Agenda for Sustainable Development*.[64] By combating pollution, climate change and enhancing sustainable production and consumption, UNEA is in a lead role to resolve these challenges threatening global sustainable development.[65]

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UNEP, "About UNEA". Retrieved 28 November 2019 from: http://www.unep.org/environmentassembly/about-un-environment-assembly

> *This website provides a basic overview of UNEA and its role within the UN Environment's governance structure, including its history and mandate. The resource represents an entry point for delegates to begin their research on the committee, as it provides an overview of the body's functions, as well as links to the documentation of past sessions and current thematic priorities of UNEA. It is also here that preparatory material for the upcoming session of UNEA is collected. This website should help delegates to easily distinguish between UN Environment and UNEA and understand how they are connected.*

UNEP, "Medium-Term Strategy 2018-2021" (2016). Retrieved 15 December 2019 from: http://apps.unep.org/publications/index.php?option=com_pub&task=download&file=012120_en

> *This is the next Medium-Term Strategy for UNEP, which will take effect in 2018 when the current strategy expires. The document provides a situation analysis of the state of the environment across the seven priority areas of work and briefly outlines what has been achieved through the previous strategy (more information is provided in the 2016 Programme Performance Report). This document is of particular importance for the delegates as it outlines the connection between UNEP's priority areas and the 2030 Agenda for Sustainable Development through the programs.*

[62] UNEA – About the UN Environment.
[63] UN Environment, The First 40 Years: A Narrative by Stanley Johnson, 2012, p. 155.
[64] World Summit on Sustainable Development, Report of the World Summit on Sustainable Development (A/CONF.199/20), 2002.
[65] UN Environment Assembly, Delivering on the environmental dimensions of the 2030 Agenda: Information note of the Executive Director (UNEP/EA.2/INF/4), 2016.

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> *Content of this document was delivered at the UNEA-2 (2016), where UNEP's Executive Director outlined the vision of the programme for the implementation of the 2030 Agenda. It presents a detailed overview of the links betweenUN Environment's agenda and the SDGs and suggests several overarching principles and concrete measures to ensure that the programme contributes to the success of the 2030 Agenda. Through this resource, delegates can acquire a better understanding of UN Environment's role in the 2030 Agenda, including its institutional connections within the UN system.*

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I. The Role of Youth and Children in Combating Climate Change

"It is clear and right that the children and youth of this world have a say in their future, not just because of the expected future impacts but because their creativity, ability to define and deliver answers and downright determination could make a significant difference in avoiding the worst outcomes of climate change" – **Achim Steiner, United Nations Under-Secretary-General and Executive Director of the United Nations Environment Programme.**[66]

Introduction

In the world we live in today, it is almost impossible to talk about world issues without referring to climate change and depletion of the ozone layer through anthropogenic activities. Anthropogenic activities are the operations and effects of human activities. These activities have deeply penetrated into and altered the natural and ecosystem that the question of what the future actually holds for man is frequently asked.

Climate change, also known as global warming, refers to the rise in average surface temperatures of the earth.[67] Human activities, such as the use of fossil fuels, technological resources, deforestation and unsustainable agriculture, contribute to climate change, which decreases the availability of nutritious food and clean water, and destroys ecosystems and living environments. This leads to malnutrition, ill-health and migration, rendering youth particularly vulnerable.[68] The IPCC Fifth Assessment Report concluded: "it is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century". Scientists have asserted that global temperatures will continue to rise for decades to come, due to greenhouse gases produced by human activities. The Intergovernmental Panel on Climate Change (IPCC) forecasts a global surface temperature rise of 2.5 to 10°F over the next century.[69]

In Africa, floods and droughts have led to consistent migration as an adaptation measure and over the past 20 years, more than 10 million people have been displaced owing to environmental degradation and desertification.[70] The intensification of climate change is likely to be a major factor affecting the health and safety of many youths living in these areas, especially those residing in South Asia, Central America and Small Island Developing States (SIDS).[71]

[66] Achim Steiner; United Nations Under-Secretary General and Executive Director of the United Nations Environment Programme on Youth in Action on Climate Change – 2013.
[67] Take Part: What is Climate Change?
[68] United Nations Youth, "Youth and Climate Change".
[69] NASA, "Global Climate Change: The Effects of Climate Change".
[70] UNFCCC, "Youth and Climate Change" (2010).
[71] *Ibid*.

International responses to global warming include mitigation by emissions reduction and adaptation to its effects. Various States work together on climate change under the umbrella of the *United Nations Framework Convention on Climate Change* (UNFCCC) which has near-universal membership. The ultimate goal[72] of the Convention is to "prevent dangerous anthropogenic interference with the climate system". The parties to the UNFCCC have agreed that deep cuts in emissions are required and that global warming should be limited to well below 2°C (3.6°F) as stated in the *Paris Agreement*.[73]

The importance of youth participation incombating climate change cannot be` overemphasized. According to reports from the UN,[74] 3.5 billion people living in the world are under 30, and that makes half the population. 1.8 billion of the aforementioned are either adolescents or early adults, ranging from the age of 15 to 24. The youth constitute the majority of the population in many countries and have an increasingly strong social and environmental awareness to the effects of climate change, and as such, the UN recognizes the key role that youths play to reduce those effects. The aim of discussing this topic in consideration is majorly to answer the "why, how and what" of the roles that the youths and children play in the decision making, formulation of policies, active physical participation, and use of social media in combating climate change.

International and Regional Framework

The issue of climate change did not gain widespread global popularity until the 1970s and 1980s when it came to the realization of the global community that the earth was beginning to deteriorate.[75] In 1972, the UN Conference on the Human Environment was held in Stockholm, Sweden. This conference was the foundation for modern environmentalism and the development of international frameworks for protection of the environment as before this, environmental governance was not seen as an international priority.[76] The Stockholm Conference motivated countries around the world to monitor environmental conditions and create environmental ministries and agencies.[77]

In 1985, the *Vienna Convention for the Protection of the Ozone Layer*[78] was signed by the international community, providing a framework for global reduction of the production of chlorofluorocarbons and the contribution to the depletion of the ozone layer.[79] In 1987, the Brundtland Commission Report called "Our Common Future" was published and

[72] UNFCCC, *United Nations Framework Convention on Climate Change* 1992.
[73] Decision 1/CP.16, para. 4, in UNFCCC: Cancun 2010.
[74] Medium Environment, "Role of Young People in Combating Climate Change".
[75] Global Pact Informea in partnership with United Nations Environment Program and United Nations Institute for Training and Research, "Climate Change International Legal Regime" Module 1, p. 7.
[76] Najim Adil, "Developing Countries and Global Environmental Governance: From Contestation to Participation to Engagement" (2005).
[77] John W. Meyer, David John Frank, Ann Hironaka, Evan Schofer and Nancy Brandon Tuma, "The Structuring of a World Environmental Regime" (1997).
[78] Vienna Convention for the Protection of the Ozone Layer 1985.
[79] Nolan CV and Georgios Amanatidis, "European commission research on the fluxes and effects of environmental UVB radiation" (1995) *Journal of Photochemistry and Photobiology B: Biology*.

released by the UN to discuss environment and development as a single issue. The report sought torecapture and reemphasize environmental concerns raised at the Stockholm Conference, and to formulate "innovative, concrete and realistic action proposals" to deal with them.[80]

The *Montreal Protocol on Substances that Deplete the Ozone Layer* entered into force on 16 September 1989 to protect and prevent the depletion of the ozone layer by reducing the production of numerous substances responsible for the depletion.[81] Due to its global adoption and implementation, it has been praised by former Secretary-General of the UN, Kofi Annan, as "perhaps the single most successful international agreement to date".[82] In 1988, the General Assembly in its *Resolution 43/53* (1988) recognized the issue of climate change as a "common concern of mankind" and established the need and urgency of the international community and Member States to act.[83]

In 1990, the General Assembly, in its *Resolution 45/212*, created a negotiating process to prepare, by an Intergovernmental Negotiating Committee, "an effective framework convention on climate change". The framework was to contain the appropriate documents, commitments and instruments as agreed upon by the committee in time to be opened for signature at the UN Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992.[84] This enormous negotiation effort led to the agreement and signing of the *United Nations Framework Convention on Climate Change* (UNFCCC). The objective of the UNFCCC is to "stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system".[85] As a framework treaty, it sets out principles for adopting national programmers for mitigating climate change, promoting sustainable management, conserving greenhouse gases and developing adaptation strategies.[86]*Article 4.1(a) of the UNFCCC* states that all parties, taking into consideration their specific national and regional development priorities, shall make available to the Conference of Parties in accordance with *Article 12*, national inventories of emissions not covered under the *Montreal Protocol.*[87]

Agenda 21,[88] a product of the UN Conference on Environment and Development held in Rio de Janeiro in 1992, is a non-binding agreement regarding sustainable development.[89] It creates an action agenda for the UN and the 21st century towards the achievement of sustainable development across national and international borders. Amidst various sections addressing other areas of global sustainable development, *Section III (25; 25.1-*

[80] World Commission on Environment and Development, "Our Common Future" (1987) Oxford University Press.
[81] UNEP Ozone Secretariat, *Adjustments to the Montreal Protocol* (Archived Version).
[82] UN, (Ozone Day) Background for the International Day for the Preservation of the Ozone Layer (16 September).
[83] Global Pact ImforMea in partnership with United Nations Environment Program and United Nations Institute for Training and Research – Climate Change International Legal Regime. Module, p. 7.
[84] United Nations Framework Convention on Climate Change, *The Human Impact on Climate Change*.
[85] Article 2 UNFCCC.
[86] CIESIN Columbia University - Climate Change: Treaties, Indicators and National Responses.
[87] General Assembly, *UN Framework Convention on Climate Change*, 1994, A/RES/48/189.
[88] UNEP: Agenda 21 (1992).
[89] ICLEIUSA, "What is Agenda 21?".

25.17) of *Agenda 21* addresses the role and importance of children and youth in sustainable development. *Section II (9)* borders on the protection of the atmosphere.[90]

Few legal frameworks address the roles of children and youth in issues that spark global concern, particularly climate change. It is important to be aware that children's participation in issues that affect them is part of their fundamental human rights. In 1989, the *Convention on Rights of the Child* (CRC) was adopted to assure children capable of forming opinions the rights to express them towards issues affecting them.[91]*Article 12 of CRC* states that the views expressed by children may add relevant perspectives and should be considered in decision and policymaking. *Article 13* provides that children also have freedom of expression, giving, receiving and imparting information and ideals of all kinds, with certain restrictions.

In 1995, through *Resolution 50/81* of the General Assembly, the World Programme of Action for Youth (WPAY) was adopted.[92] The WPAY provides framework and guidelines in ensuring global support in improving the situation of young people around the world. The WPAY covers fifteen youth priority areas inclusive of the environment, education, employment, information and communication technologies, as well as the full and effective participation of youth in decision making. On the environment, it is emphasized that young people have a special interest because they are going to inherit it. The proposals for action provided are the integration of environmental education into training programs, strengthening the participation of youth in the protection and preservation of the environment, and enhancing the role of media as a tool for widespread dissemination on environmental issues in order to raise awareness.[93] In 2007, through General Assembly *Resolution 62/126*, the UN adopted a supplement to the *Resolution 50/81* (the World Programme of Action of Youth) to the "year 2000 and beyond".[94]

On 18 December 2009, the General Assembly adopted *Resolution 64/130* towards the acceptance that issues negatively affecting the natural environment such as climate change are a major concern of youth around the world.[95] Reaffirming the World Programme of Action for Youth, the resolution provides youth-focused solutions to environmental issues. In *Article 5(a),* the need to promote environmental awareness among the youth as a result of the deterioration of the natural environment is emphasized.

The *Paris Agreement,* signed in 2015, is an agreement within the *UNFCCC* dealing with the mitigation of greenhouse gases and adaptive measures of combating climate change.[96] The goal of the *Paris Agreement* is to keep the increase in global average temperature to

[90] UNEP, The First 40 Years: A Narrative by Stanley Johnson, 2012, p. 155.
[91] UN Human Rights Office of High Commissioner, Convention on the Rights of the Child.
[92] UN, Department of Economic and Social Affairs of Youth: World Programme of Action for Youth.
[93] UN, World Programme Action for Youth.
[94] UN Environment, "Why does UN Environment Matter".
[95] General Assembly Resolution 64/130.
[96] Paris Agreement (13 December 2015), in UNFCCC, COP Report No. 21, Addenum, at 21, U.N. Doc. FCCC/CP/2015/10/Add, 1 (29 January 2016).

"well below 2 °C above pre-industrial levels; and to pursue efforts to limit the increase to 1.5 °C" thereby reducing the impacts of climate change.

Finally, in 2015, the General Assembly designed a collection of 17 global goals, known as the *Sustainable Development Goals* (SDGs)[97] to be a "blueprint to achieve better and more sustainable future for all" and to be achieved by the year 2030 as stated in the General Assembly *Resolution 70/1*.[98]SDG 13 is on Climate Action[99] and it is effected through several Targets. Target 13.2 of the SDG 13 focuses on the integration of climate change measures into national policies and strategies. Target 13.b also focuses on raising the capacity for an effective climate change-related planning in least developed countries including focusing on women, youth and marginalized communities. As greenhouse gas emissions continue to rise, countries all over the world experience first-hand the drastic effects of climate change and long-lasting changes to our climate system. It is on this premise that the UN emphasizes the need for nations to take climate action.[100] According to the UN,[101] the annual average losses from disasters resulting from climate change such as earthquakes and tsunamis[102] count in "hundreds of billions of dollars" and as such, requires an investment of $6 billion annually in disaster risk management alone.[103] Target 13.a of Goal 13 of the SDGs covers the goal of mobilization of developed-country parties in raising $100 billion annually by 2020 to address the needs of developing countries in the context of meaningful mitigation actions on climate change through the Green Climate Fund (GCF).[104]

Role of the International System

The international community recognizes the key role of children and youths in the fight against climate change, and this is evident in several youth-led programs and youth-driven mechanisms. In 2008, The UN established the UN Joint Framework Initiative on Children Youth and Climate Change.[105] Since 2008, with other youth-led and youth-focused organizations around the world, the Joint Framework Initiative has been coordinating and taking collaborative efforts to empower youth to take adaptation and mitigation efforts at combating climate change. The work of the Joint Framework Initiative is generally coordinated by the UNFCCC to promote the engagement of youth and children in inter-governmental processes on climate change and other related activities.[106] The inter-agency cooperative effort with the UNFCCC currently includes the Food and Agricultural Organization (FAO), UN Development Program (UNDP), UN Environment Program (UNEP),

[97] UN, "Sustainable Development Goals".
[98] About the Sustainable Development Goals – United Nations Sustainable Development Retrieved; Transforming our world: the 2030 Agenda for Sustainable Development. United Nations – Sustainable Development knowledge platform.
[99] UNEP, Goal 13: Climate Action.
[100] Sustainable Development Goal Fund, "Goal 13: Climate Action".
[101] *Ibid*.
[102] Other Climate Change Induced Disasters include tropical cyclones, flooding and drought.
[103] General Assembly, Institutional and financial arrangements for international environmental co-operation (A/RES/2997(XXVII)), 1972.
[104] UN Environment, "What do we do?"
[105] UNFCCC, "Youth in Action on Climate Change: Inspiration Around the World" UNFCCC Int Publication, p. 16.
[106] UN CC LEARN: UNITAR joins Inter-Agency Framework Initiative for Children, Youth and Climate Change.

UN Educational, Scientific and Cultural Organization (UNESCO), UN-HABITAT, UNITAR (UNITAR), UN Programme on Youth, the World Bank and NGOs.

In 2009, the UNFCCC created the Youth Non-Governmental Organizations (NGOs) constituency, also known as the YOUNGO.[107] YOUNGO is an international network for youth activities in contributing to the creation of climate change policies and agreements. The role of the YOUNGO is to support and push for the engagement of youth climate change and climate issues. Their goals are carried out through facilitation of the UNFCCC Conferences for youth from various countries, including virtual participation for those who cannot be physically present, capacity building events for youth organizations and briefings with decision-makers. The overall goal is to empower the youth and give them a voice in international decisions and actions towards combating climate change. This also promotes youth participation in environmental projects at the national and international levels.[108] The YOUNGO, together with various local youth organizations, organizes the Conference of Youth (COY) every end of the year before the UN Climate Change Conference.[109] It encourages youths from all over the world who have the interest and passion for climate action in developing solutions to combat climate change.

The youth initiative has served as a forerunner for other international youth conferences for addressing climate change. In 2018, the presidency of the 23rd UN Climate Change Conference (COP 23) and YOUNGO in partnership with UN Development Program (UNDP) and the Government of Canada initiated the Action for Climate Empowerment (ACE) Youth Forum.[110] Youth delegates from 70 countries around the world gathered at the UN Campus in Germany to participate in the ACE Youth Forum (AYF) to deliberate and negotiate on the Action for Climate Empowerment.[111] The Forum provided AYF scholarships that enabled about 40 young people from the south of the globe to participate in the forum. The scholarship selection process included the evaluation of groups of over 3,330 applications from 125 different countries to brainstorm on ways to improve the involvement of youth and awareness about the need for climate action.

UNESCO, UNEP and the Youthxchange Initiative work towards supporting youth projects on sustainable lifestyles in countries around the globe.[112] Through the Youthxchange initiative, the UNEP has been able to support environmental projects in countries all over the world. The UNEP has adopted a youth strategy to engage youth in environmental activities and programmes in areas of climate action, capacity building, information gathering, environmental awareness and education, and building environmentally conscious young people. This is known as the Tunza Strategy.[113] Since 2004, over 4,500

[107] UNFCCC Int (2017): Youth Climate (YOUNGO).
[108] UNFCCC Int: Partnerships (Website).
[109] UNFCCC, Youth for Climate Action: Conference of Youth.
[110] International Institute for Sustainable Development (IISD), Ace Youth Forum (AYF) 2018.
[111] UNFCCC, Ace Youth Forum (Website).
[112] UN, "Youth and Climate Change".
[113] UNEP, Medium-Term Strategy 2018-2021, 2016, p. 27.

children and youth people have participated in the annual Tunza International Conferences covering climate change, green economy and green jobs.

In the last two decades, Climate Change and Environmental Education (CCEE) and Education for Sustainable Development (ESD) have become major tools for protecting the environment and ensuring sustainable development.[114] In 2002, the General Assembly proclaimed the UN Decade of Education for Sustainable Development (2005–2014), underscoring the indispensable role of education in achieving sustainable development. Through the Education for Sustainable Development (ESD) program, the UNESCO has pledged to help people understand the impact of global warming and to increase climate literacy among young people.[115] This is done by raising awareness about climate change and encouraging innovative teaching approaches to integrate climate change education in schools, as well as enhancing non-formal education programmes through media, networking and partnerships within the framework of Global Action Programme on Education for Sustainable Development.

The Impact of Climate Change on the Child and Youth

The impact and negative effects of climate change on the children and youth cannot be overemphasized. The number of children potentially exposed to the effect of climate change is quite alarming. According to the World Health Organization (WHO), 88% of the disease burden attributed to climate change afflicts children under the age of five.[116] Climate change in its unprecedented ways has begun to change our world. The phenomena of climate change will continue to have devastating impacts on living conditions in many parts of the world, particularly where the world's poorest and most vulnerable children live.[117] The dangers of climate change are more pronounced for young people than they are for adults. This is because they are not only more vulnerable to vector-borne diseases than adults are; they also face dangers from under-nutrition. In 2015, malaria was estimated to lead to 438,000 deaths of which more than two-thirds were children under five years. Diarrheal diseases also resulted in 530,000 deaths in 2015 alone. Currently, over half a billion children are living in areas with extremely high levels of flood occurrence and nearly 160 million live in areas of high drought severity.[118]

According to the UN Children's Fund, some of the densest child populations in the world are likely to suffer from flooding, drought and heat. These parts include the South of Asia, the Nile River basin, Pacific Islands, Small Island Developing States (SIDS), Equatorial Africa and

[114] UNICEF, Climate Change Environmental Education.
[115] UNESCO, Climate Change Education.
[116] WHO, "The World Health Report 2002" (2002) Geneva World Health Organization.
[117] UNICEF, *Unless We Act Now: The Impact of Climate Change on Children*.
[118] *Ibid*.

the Pacific Coast of Latin America.[119] In 2010, the floods in Pakistan affected more than 2.8 million children under 5 years of age. The long-term effects of flooding on children can be substantial. The 1997-1998 El Nino floods led to stressful conditions for many poor children ranging from lower language development of children to lower memory and visual-spatial thinking.[120]Action on climate change is essential to achieving the SDGs because it threatens children's survival, development, nutrition and education, all of which are rights entrenched in the Convention on Rights of the Child.[121]

Climate change may also be particularly dangerous for children and youth in rural areas and developing countries. Today, many developing countries experience a disproportionate share of extreme weather as direct effects of climate change, as they are more likely to experience them sooner than wealthier regions are. According to Rema Hanna and Paulina Oliva of Harvard University, recent research in economics tries to predict the effects of the high-frequency changes in weather and how climate change will affect children in developing countries.[122]

Developing countries which are mostly located in warmer regions and whose major source of income is agriculture will be worst hit by changes in rainfall patterns, greater weather extremes and increasing droughts and floods.[123] Change in precipitation patterns is likely to affect the quality and quantity of water supplies, therefore compounding the impact of poor water and sanitation.[124] Weather-related physical hazards, such as hurricanes and flooding, are likely to intensify, resulting in more deaths and injuries. Without action today, the costs and risks of a 5°C-6°C warming, which is a real possibility for the next century, will be equivalent to losing at least 5% of global GDP each year.[125]

Developing countries also have generally weaker institutional structures, weaker infrastructure and less adequate health systems that make mitigation of effects of climate change harder.[126] In more advanced countries, electrification and greater access to health care have greatly reduced mortality from heat.[127] This may not be the same for developing countries. Rural communities also have weaker labour and credit markets, which make it hard for families to adapt to losses that are caused by climate change. Climate change further endangers the already vulnerable health status of children in developing countries, because it exposes them to heat, infectious diseases and flood.[128] Finally, increased poverty from climate change may directly affect the child's mental wellbeing.

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[119] *Ibid*.
[120] P. Sheffield and P. Landrigan, "Global Climate Change and Children's Health: Threats and Strategies for Prevention" (2011) *Environmental Health Perspectives* 119, 291-298.
[121] See Articles 6, 24, 27, 28 and 29 of the Convention on the Rights of the Child.
[122] Rema Hanna and Paulina Oliva, "Implication of Climate Change on Children in Developing Countries".
[123] UNICEF, Climate Change and Children.
[124] *Ibid*.
[125] HM Treasury, "Stern Review: The Economics of Climate Change Summary of conclusions", London, p. vi.
[126] UNEP, Medium-Term Strategy 2018-2021, 2016, p. 27.
[127] *Ibid*.
[128] *Ibid*.

It is obvious that children and youth who find themselves in developing countries and rural communities of the world have a lot to lose and suffer from the harmful effects of global warming. This realization leads to the question, how can we temper the threat to children in developing countries?

Youths and the Use of Social Media in a Changing Climate

In the new world with scientific and technological advancement, social media has become a vivid force to be reckoned with. Social media can be very useful in empowering the youth. This is why it is no surprise that young people are beginning to use the media as a system in asserting their rights to live in an environmentally friendly and safe world. The CRC[129] explicitly states that every person who is under the age of 18 has the right to participate in the decision-making processes that directly or indirectly impact them. This is not in exclusion of the use of social media to express their views. To fulfil this right, UN Children's Fund has created Voices of Youth; a platform for young activists to offer their opinions on issues that matter to them.[130]

According to the International Telecommunications Union (ITTU), young people are almost 10 times more networked than the global population as a whole.[131] With the involvement of youth in activism through social media, there has been a substantial step up in spreading actions and solutions against climate change.

In evaluating the use of social media in combating climate change, the questions in focus are: how do media messages about climate change influence young people and how do they use the media to engage with this issue? Youth revolt is now very much alive as it is obvious that not only are climate issues now at the forefront of young people's minds, social media might just be the key to creating awareness and spurring international climate action.

Greta Thunberg, a 16-year-old from Sweden, has become a relevant and famous activist of climate action around the globe through her social media presence (Instagram) with over 2 million followers.[132] In August 2018, Thunberg started the organization of student strikes with the objective of generating social awareness about global warming.[133] By November of the same year, strikes began to be organized around the world, inspired by Thunberg. In Australia, students began to strike on Fridays, ignoring Prime Minister Scott Morrison's call for "more learning in schools and less activism".[134]

[129] Article 12, Convention on the Rights of the Child.
[130] UNICEF, Youth for Climate Action.
[131] Thales Dantas,"The Role of Young People in the Fight Against Climate Change", 2018.
[132] Social Publi, "The Fight Against Climate Change on Social Media" (2019).
[133] *Ibid*.
[134] Cable Network News (CNN), "Australian school children defy prime minister with climate strike".

Jolted by the COP24 Climate Change Conference in Poland, strikes continued in countries including Australia, Austria, Belgium, Canada, the Netherlands, Germany, Finland, Japan, the United Kingdom and the United States.[135] On 1 March 2019, 150 students from the global coordination group of youth-led strike issued an open letter in the Guardian on the issue of climate change and how "the young, are deeply concerned about our future".[136] By September 2019, millions around the world had joined to voice concerns about climate change, demanding a commitment to a solution.[137]

More children and youth have now stepped forward in using the media as a tool for addressing climate change. Haven Coleman from the United States of America, Oladosu Adenike from Nigeria, Vanessa Nakate from Uganda have dedicated their time and lives to the activism of climate action. According to Vanessa Nakate, social media connects her to activists around the world and through the social media; "Adults are listening".[138]

Advancing Youth Empowerment in the Fight against Climate Change

Youths and children currently play active roles in combating the detrimental effects of climate change. This is a current priority of the UN in general, to include youths in the drive for change. Youth Empowerment and Education areachieved through the enlightenment of youth on climate change, civil participation of youths, social and political inclusion in the issue of the climate crisis. Youth Empowerment for climate change in the most recent times is often achieved through the creation of green jobs and youth-led organizations. Green jobs are decent jobs that contribute to preserve or restore the environment.[139] The purpose of green jobs is to reduce consumption of energy and to limit greenhouse gases in line with the SDG 4 on decent jobs for Youths and SDG 13 on Climate Action.

Action for Climate Empowerment has been adopted by the UNFCCC focusing on six priority areas which include education, training, public awareness, public participation, access to information and international co-operation.[140] In 2015 at the COP 21 held in Paris, governments of the world agreed to cooperate in taking measures to enhance climate-related education, training and public awareness.

Youth empowerment towards climate actions is achieved through organizations and movements like the Young Men's Christian Association (YMCA). The YMCA is one of the largest youth-focused movements in the world.[141] The goal of the YMCA is to strengthen and scale innovative youth environment and climate change initiatives around the world to

[135] IISD: Fifth Session of the UNEA.
[136] The Guardian: Global Coordination Group of the Youth-Led Climate Strike, "Climate crisis and a betrayed generation" (2019).
[137] Katherine K. Ellis, "How social media is driving the climate change conversation" (2019) NEWS WHIP.
[138] Nature News, "Why Young Climate Activists have Captured the World's Attention".
[139] International Labour Organization, "What are Green jobs?"
[140] UNESCO and UNFCCC, "Action for climate empowerment: Guidelines for accelerating solutions through education, training and public awareness" (2016).
[141] World YMCA, *About YMCA*.

reach at least 3 million youth annually by 2022 through educational outreach, community partnerships and grassroots campaigns.[142] The YMCA is also committed to advancing global conservation and responsibility to reduce the effects of climate change through youth-led education programs and advocacy initiatives that improve environmental awareness, civic engagement and advocacy at the local, national, regional and global levels.

In 2017, the Climate Reality Project Indonesia and Youth for Climate Change Indonesia, with support from Office of the President's Special Envoy for Climate Change, launched the Youth Leadership Camp for Climate Change (YLCCC) initiative in Indonesia.[143] The YLCCC supports the implementation of the National Climate Change Learning Strategy and promotes climate change education among Indonesian youth. It also holds a youth camp, where students from all over Indonesia gather to deepen their knowledge of climate change and climate action, through workshops and field visits to reserves and national parks.

The youth led Climate Change Adaptation and Mitigation for Sustainable Development-Cameroon is giving urban youth in Cameroon the chance to recycle metal waste into energy-efficient cook stoves.[144] This addresses the city's trash problem. The project also recruits and trains urban youth to collect waste which is transformed into cooking devices they can sell, developing efficient cooking devices and thereby reducing the demand for firewood. Through this initiative, youth are empowered to attain self-employment, while all city residents benefit from less air pollution and trash.

Initiatives like UNICEF's first ever Climate Comic Contest empower youth to spread the news of climate change.[145] Sathviga Sridhar, a 21-year-old artist from India who was inspired to act on climate change after her community was hit by devastating floods, won the contest in 2017. In 2019, Malaysia's Emerson Chong made the finals of the Climate Comic Contest with his "Earth Boy".[146] UNICEF supports youth to advocate for climate change with their governments within national levels. In Mongolia for example, young people have been trained to monitor air quality, and use the data they collect to call on their government to act.

Youth Education towards Combating Climate Change

Youth education is one of the most effective tools to combat the effects of climate change and cultivate an international understanding among members of the next generation.[147] It aids young people in understanding the impact of global warming and changing their

[142] World YMCA, *Environment*.
[143] UNESCO, "Indonesian Youths press for Action on Climate Emergency".
[144] UNITAR, "Empowering Youth to Lead on Climate Change".
[145] UNICEF, "Youth for Climate Action".
[146] UNICEF, "Climate Comic Contest: Introducing Earth Boy".
[147] UN NEWS, "Young People Should have an Active Role in Combating Climate Change".

attitudes to mitigate the harmful effects.[148] On the International Youth Day 2008, Ban Ki-Moon the then Secretary-General in his address stressed that the young people who are adept at spreading new habits and technologies are well placed to contribute to the fight against climate change.[149] He further said youth should therefore be given that chance to take an active part in the decision making, from the local to international levels.

The education of youth on sustainable development, adaptation and mitigation approaches to combating climate change and decision making increases the role they take in addressing the issue. At the international level, several stakeholders such as the UNESCO, UNEP and UNICEF help schools and communities in integrating climate change education and environmental stewardship into the curricula.[150] Other incorporating components like "Save the Children" and "Action Aid" are also focused on building the skills of communities to adapt to climate change through integrating risk reduction in the education systems.

As formerly highlighted, Climate Change and Environmental Education (CCEE) and Education for Sustainable Development (ESD) have become major tools for protecting the environment and ensuring sustainable development in the last two decades.[151] Through the ESD program, the UNESCO has pledged to help people understand the impact of global warming and to increase climate literacy among young people by encouraging education in schools and non-formal methods of education through the Global Action Program.[152] Encompassing a range of different learning techniques, from early childhood development through tertiary education, ESD promotes active and participatory learning relevant to the context of sustainable development.

The UNESCO has also facilitated the launching of the Global Renewable Energy Education and Training (GREET) Programme. GREET focuses on strengthening national strengths by encouraging best practices and exchange of knowledge on the application of renewable energy resources. It also includes the organization of training programmes at different levels, field implementation of training tools and teaching materials to address the enormous need for human resource development, especially in developing countries.[153]

At the regional level, because they are the most vulnerable to the adverse effects of climate change, SIDS are beginning to aim at the reduction of greenhouse gases.[154] In 2009, the UNESCO held the International seminar on Climate Change Education in Paris with financial support from the government of Denmark. The focus of the conference was the role of education in addressing climate change with further emphasis on SIDS.[155] In

[148] UNESCO, "Climate Change Education".
[149] Youth Education Outreach Initiative, 60th Annual DPI/NGO Conference.
[150] Allison Anderson, "Combating Climate Change through Quality Education" Humphrey Fellowship Program.
[151] UNICEF, "Climate Change Environmental Education".
[152] UNESCO, "Climate Change Education".
[153] UNESCO: Energy Resources – UNESCO's Role and Contribution.
[154] UNFCCC, "Climate Change Education about, for and in SIDS".
[155] Climate Change Education for Sustainable Development, The UNESCO Climate Change Initiative.

states like Maldives and Vietnam, the development strategy has been defined to include a strategic action plan for climate change adaptation and mitigation by strengthening the role of education and enhancing the sustainability of livelihoods of their communities.

Further Research

Delegates are to put in mind, with respect to the role of youths and children in combating climate change, the following questions: What are the laws and policies put on ground by Member States that focus mainly on the role of children and youth towards adaptation and mitigation systems of climate change? How have these laws and policies been implemented and what results have they yielded? How can Member States and NGOs collaborate or form alliances with each other to integrate youths into combating climate change? What are the major hindrances to effecting policies and strategies already formulated for combating climate change? What is the national plan for SIDS who face the worst effects ofclimate change and Third World Countries as regards funding? What other media opportunities and platforms have Member States explored in climate change sensitization and information dissemination? How have Member States addressed the education of youths and children as well as empowerment to fully involve them in decision-making processes on climate issues?

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> *This website provides policy framework and practical guidelines for national action and international support to improve the situation of young people around the world. The WPAY covers fifteen youth priority areas and contains proposals and action in each of these areas. This will give the delegates an idea of what the programme of action entails, the effective actions taken by governments against violation of rights and freedoms of youth, backgrounds and philosophical convictions of young people and security of all young men and women.*

UNESCO, "Climate Change Education". Retrieved on 11 December 2019 from: https://en.unesco.org/themes/education-sustainable-development/cce

> *The CCE is education that aims to address and develop effective responses to climate change. It helps learners understand the causes and consequences of climate change, prepares them to live with the impacts of climate change and empowers learners to take appropriate actions to adopt more sustainable lifestyles. The urgency and importance of putting mechanisms into place to*

combat climate change on a national and global scale cannot be overemphasized. The CCE seeks to help people understand the impact of global warming today and increase 'climate literacy', especially among young people, and aims to make education a more central part of the international response to climate change. This document highlights the CCE and its importance in combating climate change. The document will help the delegates in understanding the rationale behind the creation of the CCE and the aims and objectives to facilitate the achievement of SDG 13.

UNFCCC, "Article 2 UNFCCC" p. 9. Retrieved 1 December 2019 from: https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf

This document exposes the delegates to one of the major steps that the UN has taken in the bid to combat climate change. The United Nations Framework Convention on Climate Change (UNFCCC) is an international environmental treaty to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The framework sets non-binding limits on greenhouse gas emissions for individual countries and outlines how specific international treaties may be negotiated to specify further action towards its objective. This document will give the delegates substantial information on the meaning of climate change and related terms within the international community, the principles of the UNFCCC towards combating climate change, commitments and financial mechanisms.

UNFCCC Int (2017): Youth Climate (YOUNGO). Retrieved 9 December 2019 from: https://unfccc.int/sites/default/files/931.pdf

The official Youth Constituency to the UNFCCC which is known as the YOUNGO was formed as a constituency in 2009 and was fully confirmed in 2011 for COP17. The YOUNGO strongly believes in the inclusive nature of the Paris Agreement and the commitment to "cooperate in taking measures, as appropriate, to enhance climate change education, training, public awareness, public participation and public access to information". This document will provide delegates with the YOUNGO on ways of enhancing the implementation of the above under the Paris Agreement. This document will also analyse the mandate of the Paris Agreement, the general challenges facing effective youth engagement, financial support for youth participation and on Youth Delegate Programs (YDP).

UN Human Rights Office of the High Commissioner, "Convention on the Rights of the Child" (Website). Retrieved 4 December 2019 from: https://www.ohchr.org/en/professionalinterest/pages/crc.aspx

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II. The Impact of Pollution on Marine Life

"*We must put aside short-term national gain to prevent long-term global catastrophe. Conserving our oceans and using them sustainably is preserving life itself*" – **Antonio Guterres, Secretary-General of the United Nations**.[156]

Introduction

Oceans cover over 70% of our planet and as such are among the earth's most valuable natural resources.[157] They perform a lot of functions, one being the provision of shelter for marine life. Despite this knowledge, the oceans are still being polluted, thereby exposing marine life to harm. Today, 500 marine locations have been recorded as dead zones, globally, currently the size of the United Kingdom's surface (245,000 km²).[158] 80% of global marine pollution comes from agriculture run-offs, untreated sewage, discharge of nutrients and pesticides.[159]

The rapid increase of pollution in the water bodies across the world has become alarming. Plastics[160] which are now the most prominent form of pollution in the oceans, chemicals from industries,[161] noise from the activities on the ships[162] and household waste dumped in the oceans[163] all come together to cause pollution, thereby endangering the marine life. In terms of plastic, 8.3 million tons are discarded in the sea yearly, of which 236,000 are indigestible micro-plastics that marine creatures mistake for food.[164] It has further been established that species in the oceans are not the only ones being affected by marine pollution as the water bodies serve as a source of livelihood to all and sundry.[165] The aim of discussing this topic is to create awareness on the fact that polluting the water bodies goes deeper than just dumping waste, to advocate for the protection of our water bodies and also the conservation of the life of animals, organisms and the species in the oceans.

Marine pollution is majorly man-made as shown in its definition as thus: Marine Pollution means the introduction by man, directly or indirectly, of substances or energy into the marine environment resulting in such deleterious effects as harm to living resources,

[156] UN Oceans Conference, 2017.
[157] Natural Resources Defence Council, "Ocean Pollution: The Dirty Facts".
[158] Condor Ferries, "Marine and Oceans Pollution Statistics and Facts 2019".
[159] *Ibid*.
[160] Oceans Plastic Pollution: A Global Tragedy to our Oceans and Sea Life.
[161] National Geographic: Marine Facts and Information.
[162] Centre for Biological Diversity: Ocean Noise.
[163] Solid Waste and Marine Litter, United Nations Environment Programme in conjunction with the Caribbean Environment Programme.
[164] *Ibid*.
[165] The World Counts, "Is Your Water Clean?"

hazards to human health, hindrance to marine activities including fishing, impairment of quality for use of sea and reduction of amenities.[166]

It has been proven that 6.5 million tons of litter enter the world's oceans each year and that more than 100,000 chemicals are produced annually and these constitute a threat to the oceans as they are emitted into the atmosphere, the soil and water which spread to the ocean.[167] Recent investigation has linked marine waste to the death of a million seabirds and about 100,000 marine mammals.[168] The United States of America also records increased diffusion inputs of nitrogen and phosphorus pollution that cause harmful algae blooms, dead-zones, loss of sea grass and seabirds and marine mammals' death.[169]

However, the need to create awareness on the subject of marine pollution and the effects cannot be over emphasized. It is important to note that polluting the water bodies goes deeper than just dumping waste and it is urgent that the international community advocates for the protection of our water bodies and also the conservation of life of animals, organisms and the species in the oceans.

International and Regional Frameworks

The international and regional communities have recognized the importance of protecting and conserving the oceans from pollution through a series of laws, treaties and conventions.[170] The starting point for the observation of the role of the international system in combating marine pollution is the Sustainable Development Goals (SDGs). The *2030 Agenda for Sustainable Development Goals* created by the General Assembly under *Resolution 70/1*, highlights Goal 14 as the SDG that caters for "Life under Water". One of its major goals is to enhance the conservation and sustainable use of oceans and their resources by implementing international laws. Target 1 of goal 14 provides for the substantial reduction of marine pollution by 2025.[171]

The *United Nations Convention on the Law of the Sea* (UNCLOS)[172] is the primary framework that regulates all international laws that deal with oceans. *Article 192 of UNCLOS* details the most crucial obligation owed by every signatory state: the obligation to protect and preserve the marine environment. *Article 193 of UNCLOS* goes further; while recognizing the sovereignty of states over water bodies which fall within their territory, it provides that the exploitation of such water bodies shall conform with their duties to protect and preserve the marine environment. It also calls to attention measures which are "necessary

[166] Article 2, Barcelona Convention 1976.
[167] Facts from the World Ocean Network.
[168] Janaya Wilkins, "Plastic: The Largest Predator in our Oceans".
[169] *Ibid*.
[170] M. McConnel and E. Gold, "The Modern Law of the Sea: Framework for the Protection and Preservation of the Marine Environment" (1991) 23(1) Case Western Reserve Journal of International Law.
[171] UN: Sustainable Development Goal 14.
[172] *Convention on the Law of the Sea*, Dec. 10, 1982, 1833 U.N.T.S. 397.

to protect and preserve rare or fragile ecosystems as well as the habitat of threatened or endangered species and other forms of marine life".

Furthermore, there is the *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter* (1972), also called the *London Convention*.[173] The Convention birthed regulatory programs and prohibited the disposal of hazardous materials in the sea. In 1996, the *London Protocol* was agreed upon to improve and modernize the application of the Convention and eventually replaced it. It was enforced on 24 March 2006. The Protocol prohibits all dumping of refuse in the water bodies.

One of the leading conventions dealing with pollution from shipping activities is the *International Convention for the Prevention of Pollution from Ships*, popularly known as MARPOL.[174] The Convention details regulations aimed at preventing and minimizing pollution from ships, both accidental pollution and that from routine operations. It currently includes six technical Annexes. It provides for the prevention of pollution by oil (i.e. oil spillage) through operational measures as well as accidental discharges. The Convention further made it mandatory for all new oil tankers to have double hulls as well as existing tankers to fit double hulls.[175] It then goes on to provide for pollution by Noxious Liquid Substances in Bulk[176] and states that the discharge criteria and measures for the control of pollution by noxious liquid substances carried in bulk, some 250 substances were evaluated and included in the list appended to the Convention. The discharge of their residues is allowed only to reception facilities until certain concentrations and conditions (which vary with the category of substances) are complied with. In any case, no discharge of residues containing noxious substances is permitted within 12 miles of the nearest land.

The last three annexes to the *Convention for the Prevention of Pollution from Ships* (MARPOL) came into force in later years. They detailed as follows: to control pollution of the sea by sewage, here, the discharge of sewage into the sea is prohibited, except when the ship has in operation an approved sewage treatment plant or when the ship is discharging disinfected sewage using an approved system at a distance of more than three nautical miles from the nearest land; sewage which is not disinfected has to be discharged at a distance of more than 12 nautical miles from the nearest land.[177]

While some problems are common, there are some marine issues which are peculiar to particular oceans and seas due to factors like geography, current, salinity, depth and temperature. Also, the ecology varies in different locations; this necessitates the need to combat marine pollution on a regional level. A regional level approach allows for easier responses in cases of emergency. One regional organization which is proactive in reducing

[173] *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter* 1972.
[174] *Adoption: 1973 (Convention), 1978 (1978 Protocol), 1997 (Protocol - Annex VI); Entry into force: 2 October 1983 (Annexes I and II).*
[175] *Annex I, Regulations for the Prevention of Pollution by Oil.*
[176] *Annex II, Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk.*
[177] *Annex IV Prevention of Pollution by Sewage from Ships* (entered into force 27 September 2003).

marine pollution is the European Union. The European Union has agreed on both European Union Environmental Liability Directive[178] and the European Union Marine Strategy Framework Directive.[179] The aim of the Environmental Liability Directive is that it lays down regulations in line with the polluter-pays principle. Companies causing environmental damage shall be liable under the Directive and must take preventive and remedial actions. The Marine Strategy Framework Directive aims at the protection of the marine environment while creating a framework for sustainable use.[180]

Amongst the regional frameworks for the protection of the marine environment, there is the *Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources* (1980).[181] *Article 1* of the Protocol establishes the primary obligations of the parties to the treaty to be the prevention, abatement, combating and elimination of pollution of the Mediterranean Sea.

Concerning regional frameworks, there are also the *Protocol for the Protection of the South-East Pacific Against Pollution from Land-Based Sources* (1983),[182] the *Protocol to the Kuwait Regional Convention for the Protection of the Marine Environment Against Pollution from Land-Based Sources* (1990) and the *Protocol on Protection of the Black Sea Marine Environment Against Pollution from Land Based Sources* (1992).[183] All of these regional instruments provide against both the pollution of international and internal waters.

Role of the International System

The UN Environment Assembly (UNEA) has a sub-body called UN Environmental Program (UNEP) which was established to ensure the sustainability of the environment, and marine pollution is one of the key sources of concern.[184] In addition, the International Maritime Organization (IMO), a specialized agency of the UN, which was established by a constitutive convention, adopted in 1948 and entered into force in 1958, is another body which was established to ensure efficiency of navigation and prevention and control of marine pollution from ships.[185] The agency has set standards, leaving the enforcement of such regulations in the hands of national authorities. The IMO has 172 Member States.[186] Although the IMO existed since 1948, it only began to address marine pollution in the 1960s. The agency is responsible for the creation of MARPOL.[187]

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[178] 2004/35/EC.
[179] 2008/56/EC.
[180] Wise Marine, "Marine Strategy Framework Directive".
[181] UNEP(OCA)/MED IG 7/4.

[182] Ecolex: 1983 Protocol for the Protection of the South-East Pacific Against Pollution from Land-Based Sources.
[183] (1992) 32 ILM 1110 209.
[184] UNEP, "Why Does UN Environment Programme Matter?"
[185] IMO, "Introduction to IMO".
[186] Kitack Lim, "The Role of the International Maritime Organization in Preventing the Pollution of the World's Oceans from Ships and Shipping".
[187] *Ibid*.

In 1997, The International Maritime Organization incorporated *Annex VI to the Convention for the Prevention of Pollution from Ships* (MARPOL), dealing with atmospheric pollution from ships.[188] The Annex also contains requirements to control pollution of the sea by sewage. Discharge of sewage is prohibited except when the ship has in operation an approved sewage treatment plant. Sewage which is not disinfected also has to be discharged at a distance of more than 12 nautical miles from the nearest land.

There is a concerted effort at the regional level to protect regional seas from marine pollution.[189] This can be seen in the Regional Seas Conventions and Action Plans.[190] The regional bodies also work with agencies of the UN for the protection of the environment, and some of such agencies include: The International Maritime Organization (IMO), International Atomic Energy Agency (IAEA), Intergovernmental Oceanographic Commission (IOC) of UNESCO, UN Division for Ocean Affairs and the Law of the Sea (DOALOS), UN Development Programme (UNDP), UN Industrial Development Organization (UNIDO) and the Food and Agriculture Organization of the UN (FAO).

The Regional Seas Strategic Directions (2017-2020) were adopted at the 17th Global Meeting of the Regional Seas Conventions and Action Plans held in October 2015. The Regional Seas Conventions and Action Plans identified four priority areas in the context of the 2030 Agenda for Sustainable Development: pollution, climate change, extraction of living and non-living resources, and governance.[191]

Many countries and regional organizations around the world have banned single-use plastics, including the USA, European Union (EU) Parliament, amongst others.[192] Single-use plastics refer to plastics which are neither reused nor recycled, and so, are only used once. They are often used for packaging of products. 250 groups have launched a global partnership.[193] These 250 groups were responsible for 20% of the world's plastics. It includes Unilever, Coca-Cola, PepsiCo, H & M, and other international manufacturing companies.[194] Under the partnership, targets shall be reviewed every 18 months, businesses participating shall publish their progress annually, and governments pledged to the effort shall make policies to help the cause.[195]

The Oceans Conference is a UN initiative organized by the General Assembly through the General Assembly *Resolution 73/292* (2019) for Member States to come together to discuss the issues the water bodies are facing.[196] The conference will be held from 2-6 June

[188] The Role of The International Maritime Organization in Preventing The Pollution of the World's Ocean from Ships and Shipping.
[189] UNEP, "Strategy".
[190] *Ibid*.
[191] *Ibid.*
[192] National Geographic: A running List of Action on Plastic Pollution.
[193] *Ibid.*
[194] *Ibid.*
[195] *Ibid.*
[196] UN, "2020 UN Ocean Conference".

2020 and will be co-hosted by the Governments of Kenya and Portugal.[197] This conference aims to raise the profile and create more awareness of the many threats to the world's oceans that are affecting people's lives and life underwater, ranging from land-based pollution to coral bleaching, overfishing, marine habitat degradation, ocean acidification and the impacts of climate change, as well as the importance of healthy oceans to sustainable development and the achievement of the SDGs.[198]

While some problems are common, there are some marine issues such as oil drilling, over-exploitation of fishing resources, pollution and coral bleaching which are peculiar to particular oceans and seas due to factors like geography, current, salinity, depth and temperature. Also, ecology varies in different locations. This necessitates the need to combat marine pollution on a regional level. Also, a regional level approach allows for easier responses in cases of emergency. One regional organization which is proactive in reducing marine pollution is the European Union. By the virtue Marine Strategy Framework Directive (MSFD), European Union Member States are to ensure "that by 2020, properties and quantities of marine litter do not cause harm to the marine environment".[199]

Water Bodies: The Engine of Life

It is no news that water is one of the essentials of man's survival and that water bodies are one of the major sources of accessing water. Bodies of water have shaped human history time and time again hence; the importance of the water bodies can never be overemphasized. Research shows that 70% of the earth is covered with water bodies.[200] It is also established that one of the most important needs for man's survival is water.[201] The water bodies also serve as major sources of livelihood for man, which includes the transportation of goods and services in order to earn a living for survival. These and many more constitute the importance of water bodies hence tagging them as the engine of life. The most important feature of water bodies is that it provides food (seafood) for man.

Over the years, bodies of water across the world have served as major sources of transportation. Humans, goods and services are transported daily on canoes and ships across various parts of the earth. Also, swimming pools can be classified as water bodies. Sports that occur in or on the water are called water sports. There are different types of popular water sports around the world. Such sports include but are not limited to swimming and diving, surfing, water-skiing, canoeing and kayaking, rowing, fishing, sailing,

[197] *Ibid.*
[198] *Ibid.*
[199] European Commission, "Marine Litter".
[200] NASA, "Follow The Water: Finding a Perfect Match for Life".
[201] *Ibid.*

skim boarding.[202] Water bodies commonly used for these sports are oceans, rivers, lakes and seas.

Furthermore, water bodies in motion also serve as a source of energy which can be used to generate power.[203] This is known as hydroelectricity. Most power plants are built of rivers and canals. However, for a more reliable supply of water, dams are often needed. Dams store water for purposes like irrigation, domestic and industrial use as well as power generation.[204]

Agricultural water is water that is used to grow fresh produce and sustain livestock.[205] The use of agricultural water makes it possible to grow fruits and vegetables and raise livestock, which is the main part of our diet. Agricultural water is used for irrigation, pesticide and fertilizer applications, crop cooling (for example, light irrigation), and frost control.[206] According to the United States Geological Survey (USGS), water used for irrigation accounts for nearly 65% of the world's freshwater withdrawals excluding thermoelectric power.[207]

Water plays an important role in the health care field. From washing surgical tools and equipment to creating a soothing environment for patients to have hydrotherapy, water is essential to the effectiveness of the health industry.[208] Manufacturing and other industries use water during the production process for either creating their products or cooling equipment used in creating their products. According to the United States Geological Survey (USGS), industrial water is used for fabricating, processing, washing, diluting, cooling, or transporting a product. Water is also used by smelting facilities, petroleum refineries, and industries producing chemical products, food, and paper products. Large amounts of water are used mostly to produce food, paper, and chemicals.[209]

The Effects of Plastics and Micro-Plastics on Marine Life

About 6.5 million tons of litter enter the world's ocean each year and 50% of these is long-lasting plastic that will drift for hundreds of years before it is degraded.[210] Worldwide, 100,000 marine mammals are killed annually by plastic litter.[211] A study carried out by the International Union for the Conservation of Nature found 693 marine species that had

[202] Water Encyclopedia, "Water Based Sports".
[203] USGS, "Hydroelectric Power: How it works".
[204] *Ibid.*
[205] CDC, "Agricultural Water".
[206] Centre for Disease Control and Prevention, "What is Agricultural Water?"
[207] U.S. Geological Survey, "Estimated Use of Water in the US in 2000".
[208] Centre for Disease Control and Prevention- Uses in Medical and Healthcare Settings.
[209] *Ibid*.
[210] World Ocean Network; Marine Pollution Facts and Figures.
[211] Janaya Wilkins, "Plastic: The Largest Predator in our Oceans".

ingested or been entangled in marine litter, a majority of which were plastics and micro-plastics.[212]

It has been estimated that there are 15 to 51 trillion micro-plastics floating in the oceans and weighing about 93,000 to 236,000 tonnes.[213] Plastics serve as one of the world's largest used recyclable products.[214] They take the form of bottles, plates, nylons, straws, clothing, food containers, among other things. Even though plastics are recyclable, they are mostly disposed of. The disposal of plastics has not only been executed on land but has been extended to the oceans to cause marine pollution.[215] It is often observed that the flow of water from dams and canals are often obstructed due to the blockages caused by plastics in the way.

Research shows that more than 60% of all seabirds and 100% of sea turtles species mistake plastic for food.[216] When animals ingest plastic, it can cause life-threatening problems for them. Plastics in animal guts can prevent food digestion and may result in the slow and painful deaths of such animals.[217] In August 2000, an eight-metre-long Byrde whale died after swallowing a six square metre of plastic. Previously, in 1998, a pelican died after ingesting 17 plastic bags.[218] This reflects the fate of tens of thousands of animals every year. An aquatic animal so rare that it was thought to be extinct was discovered dead in 2016 after it consumed plastic.[219] Furthermore, the exposure of marine animals to plastics can alter feeding habits, reproduction, the ability to metabolize pesticides and pollutants, amongst other things.[220]

Plastic bags resemble jellyfishes, one which is commonly consumed by sea turtles. Because of its resemblance, the sea turtles are automatically drawn to the plastic bags, which they proceed to ingest. Also, some seabirds eat plastic because it contains a chemical that makes it smell like natural food.[221] The species which ingest marine plastics include fish, seals and birds. Globally, it is estimated that over 100 million animals are killed by marine plastics yearly.[222]

These plastics and micro-plastics in the oceans shall affect human health just as they affect animals. Scientists have found micro-plastics in 114 aquatic species, and more than half of these end up in human meals.[223] So far, it has been difficult to determine exactly if and how the consumption of animals exposed the micro-plastics affects humans. However, some of

[212] Science Daily, "Global impact of debris on marine life studied".
[213] World Animal Protection, "The plastic tide: does ghost gear add to the microplastics problem?"
[214] Benedette Cuffari, "What are the Most Recyclable Materials?"
[215] IUCN, "Marine Plastics".
[216] Ocean Conservancy, "The Problem With Plastics".
[217] "How Plastics Affect Wildlife".
[218] *Ibid.*
[219] The Asean Post "Death by plastic waste".
[220] National Geographic "We Know Plastic Is Harming Marine Life. What About Us?"
[221] Marine Pollution Explained: Plastic Pollution.
[222] The Asean Post "Death by plastic waste".
[223] National Geographic "We Know Plastic Is Harming Marine Life. What About Us?"

these chemicals are known to interfere with normal hormone functions. Furthermore, some are known to cause cancer, birth defects and interfere with brain development. It is currently unknown if the passage of these chemicals through the food chain alters its effects.

Chemical Pollution and the Marine Ecosystem

Chemical pollution is mostly associated with industrial activities. Chemical waste from industries situated around water bodies, waste from industrial ships and so on. They also surface in the form of pesticides. Chemical pollution includes the introduction of contaminants into oceans.[224] This may be in the form of pesticides, herbicides, fertilizers, industrial chemicals and sewage. Chemical pollution may occur either through intentional depositing of chemicals into marine ecosystems or unintentionally. These chemicals have far-reaching effects on marine ecosystems. One example is the effect of fertilizers which cause the exponential growth of algae and rubs marine life of oxygen. In one particular instance, an insecticide, DDT, managed to place the bald eagle on the endangered species list in the United States of America.[225]

For the purposes of the Ocean Health Index, "chemical" refers to a compound or substance that has been purified or manufactured by humans.[226] It does not include the many chemicals that marine plants, animals and microbes produce as part of their normal life processes. Chemicals end up in the oceans through atmospheric transport, runoff into waterways or direct disposal into the ocean.

When chemicals are dumped in the oceans or find their ways into the oceans, they re-appear in the food chain. The effect of this is reflected on both the ecosystem and human health.[227] This building up of pollutants in the food chain led to the death of many in Minamata Bay, Japan.[228] Over a thousand people died from eating contaminated fish, while over two thousand people suffered from mercury poisoning.

There are regulatory frameworks and large international monitoring programmes such as the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention). However, one major deficiency is that only currently known chemicals are monitored. New chemicals which enter the environment are not routinely monitored.[229] The consequence of this is that until these new chemicals are monitored, they will freely pollute the marine ecosystem. Also, it is impossible to determine precisely the extent of the impact of these chemicals on the marine ecosystem.

[224] National Geographic, "Marine Pollution, Explained".
[225] Marine Pollution Explained: Plastic Pollution.
[226] Ocean Health Index "Chemical Pollution".
[227] Sea Pollution: Chemical Pollution.
[228] Jonathan Watts, "Mercury poisoning of thousands confirmed".
[229] European Marine Board, "Marine Chemical Pollution".

Two-thirds of aquatic life is currently considered to be endangered species because of improperly disposed of chemicals and other wastes.[230] It is important to understand that the food chain and ecosystem can be fragile, and the destruction of a single species or a significant lowering of its presence in the ecosystem can affect the entire ecosystem.[231] When the elimination of a predatory species in an ecosystem occurs, it can cause an explosion of the population of the prey in such an ecosystem. In turn, the prey exhausts whatever orgasm it feeds on. In turn, the elimination of a prey species from an ecosystem may lead to the loss of its predators in that ecosystem.

Enforcement of Waste Disposal Laws in the Oceans

A huge part of the waste generated by humans ends up in oceans. This occurs through transportation through oceans, underwater excavation projects, ocean dumping, amongst others. In the second half of the twentieth century, more specifically the 1970s, nations and the international community became more concerned about ocean dumping. This concern was hinged on the consequences of waste disposal in the oceans which included negative effects on both the environment and human health.

One response from the international community to ocean dumping was the drafting of the *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter* in 1972. Furthermore, it attempts to control pollution of the sea by dumping and it encourages the drafting of regional agreements to prevent ocean pollution. The Convention highlights which may not be dumped into the sea at all, while also providing for some materials regarding which special care must be taken while dumping them into the sea. It also makes provision for a requirement of ocean dumping permit and criteria to obtain the permit. A protocol to the convention was adopted in 1996 which emphasized precautionary and preventive measures, while also proposing land-based solutions to the dispersal of waste.

In 1972, the United States of America enacted the Marine Protection, Research and Sanctuaries Act. Also known as the Ocean Dumping Act, it regulates dumping along the United State of America's coastal area. While it still allows an extent of dumping, it absolutely prohibits the dumping of materials like high-level radioactive wastes, biological and chemical weapons, amongst others. The *Marine Plastic Pollution Research and Control Act* (MPRCA), also called the Ocean Dumping Act, generally prohibits: transportation of material from the United States for the purpose of ocean dumping; transportation of material from anywhere for the purpose of ocean dumping by U.S. agencies or U.S.-flagged vessels; and dumping of material transported from outside the United States into the U.S. territorial sea.[232]

[230] IDR Environmental Services, "Chemical Wastes that Impact on Aquatic Life or Water Quality" (2014).
[231] National Geographic, "Role of Keystone Species in an Ecosystem".
[232] United States Environmental Protection Agency, "Laws that protect our oceans".

The enforcement of waste disposal laws in the oceans is usually carried out by national governments at the national level. One example is in the United States of America, where the Ocean Dumping Act is enforced by the Environmental Protection Agency, the U.S. Army Corps of Engineers, the National Oceanic and Atmospheric Administration and the Coast Guard.[233] The provision of international laws does not stop at ocean dumping. The international community has attempted to protect the marine environment as much as it can, and there are several laws to that effect.

The Act to Prevent Pollution from Ships (APPS) implements the provisions of *Marpol 73/78*, the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. In 1987, APPS was amended by the *Marine Plastic Pollution Research and Control Act* (MPPRCA). The MPPRCA requires the *Environmental Protection Agency* (EPA) and National Oceanic and Atmospheric Administration (NOAA), to study the effects of improper disposal of plastics on the environment and methods to reduce or eliminate such adverse effects. MPPRCA also requires EPA, NOAA, and the U.S. Coast Guard (USCG) to evaluate the use of volunteer groups in monitoring floatable debris.

Title IV of the *Ocean Dumping Ban Act* 1988 created the *Shore Protection Act* 1988 (SPA), which prohibits the transportation of municipal or commercial waste within coastal waters by a vessel without a permit and number or other marking. Permits are not to run beyond renewable five-year terms and will terminate when the vessel is sold.[234]

Chile's Constitutional Court ratified a bill that bans retail use of plastic bags across the country on July 6, ruling against an appeal that had been filed by the plastics industry.[235] In June, Chile's Congress had unanimously approved the new ban, citing concerns of plastic pollution in the ocean and on land.[236] On 30 July 2017, its Independence Day, the Pacific nation of Vanuatu announced the beginning of a phasing out of plastic bags and bottles.[237] When implemented, it will ban the use or importation of single-use plastic bags and bottles and it will make Vanuatu the first Pacific country to launch such a ban. In January 2018, the UK announced a 25-year plan to "set the global gold standard" on eliminating plastic waste, according to environment minister Michael Gove.[238] The first "landmark step" was to eliminate plastic microbeads, which can no longer be used in "rinse-off" cosmetic and personal care products. It is not quite a complete ban, however, with "leave-on" products like sunscreen and makeup still allowed containing microbeads. The UK has also brought in a tax on plastic bags, as of 2015, which has resulted in 9 billion fewer plastic bags in circulation.[239] The Former Prime Minister, Theresa May also announced consultation on a ban on plastic straws, stirrers, and cotton buds, which will launch later in

[233] Gard, "The United States Ocean Dumping Act".
[234] United Nations Environmental Protection Agency, "Summary of the Shore Protection Act".
[235] National Geographic, "A Running List of Actions on Plastic Pollution".
[236] *Ibid.*
[237] *Ibid.*
[238] *Ibid.*
[239] *Ibid.*

the year.[240] In July 2017, Zimbabwe announced a total ban on expanded polystyrene (EPS), a Styrofoam-like material used for food containers that takes up to a million years to decompose. Those caught violating the bans have to pay a fine of between $30 and $500.[241]

Preventive Measures in Reducing the Disposal of Industrial and Toxic Waste into the Oceans

While there are laws that provide for the cleaning up of polluted oceans, prevention is often better than cure. Instead of focusing on the cleaning of polluted substances from the oceans alone, focus is also being given to prevent toxic waste from getting into the oceans. The deposition of waste is sometimes intentional. At other times, it is the result of poorly managed waste either on land or during coastal activities. Either way, there are several steps which may be taken to reduce the disposal of industrial and toxic waste into the oceans. Some of these measures have been introduced by various legislative bodies, international and regional systems and various organizations and institutions concerned with the eradication on marine pollution.

Outright banning of specific materials may be used. One of such is the ban in both the London Convention and the Ocean Dumping Act where high-level radioactive materials and chemical and biological weapons are not to be dumped in oceans. Ocean dumping may be regulated. One example is in the United States of America where a permit must be obtained for ocean dumping, and there are criteria to be fulfilled before the permit is granted. Furthermore, some materials can only be dumped in the sea after proper consideration by appropriate authorities. One example is in the United States of America, where Congress must grant its permission before low-level radioactive materials may be dumped at sea. The encouraging of the reusing of materials such as packaging would reduce the amount of waste generated, and consequently reduce the amount of waste dumped in oceans. The recycling of materials, just like the reusing of materials by the populace, would also help to reduce the amount of waste generated. The burden in this instance is on the government and manufacturers to create the appropriate circumstances to encourage recycling. Recycling is beneficial both from the environmental perspective and the financial. Some governments have requested that manufacturers should find alternatives to hazardous materials in a bid to contain the disposal of toxic wastes into the sea. Manufacturers may also modify processes to reduce toxic wastes produced.

The Role of Youths in Reduction of Marine Pollution

Any problem which plagues our environment plagues all of us. This is why the problem of marine pollution involves every person, including youths. The World Youth Foundation

[240] Global Citizen, "16 times countries and cities have banned single-use plastics".
[241] *Ibid.*

believe that young people are a major power of change and hence every youth of every community have a role to play in the reduction of marine pollution.[242] It is even more important for the youth to play an active role in the reduction of marine pollution when we consider that the youths will be around for much longer in this environment. This realization appears to have struck the youths as they themselves have become more concerned about marine pollution.

In Santa Monica High School, a group of students calling themselves "Team Marine" has become active in the legislative process to ban disposable plastics.[243] Team Marine carried out multiple marches against the use of disposable plastic bags. In one march, over sixty people took to the streets. The groups of students have also engaged in protests against the use of disposable plastics; disposable plastics are the greatest cause of marine pollution. In Brentwood school, the sixth-grade students initiated a project to stop the waste from plastic bottles on their campus.[244]

Youths should see it as one of their responsibilities to engage in enlightenment projects, organize and join beach clean-ups, avoid products with microbeads, reuse plastic bags, amongst other activities geared towards combating marine pollution.

Conclusion

It is clear that pollution has a drastic effect on marine life. It is important to think seriously to solve or curb to the barest minimum all forms of pollution in the sea because it is a place marine species survive, as they also consider one of the important sources for humanity. If oceans are polluted and or contaminated, it will directly harm human health and marine organisms as well as cause habitat destruction for marine organisms.

Further Research

Marine pollution is majorly man-made and thus in drawing up the background guide, we have it in mind to ensure that delegates fully understand the importance of keeping our water bodies clean and the conservation of the marine life. Therefore, we expect delegates to put in mind the following questions: What are the major sources of marine pollution? What are some preventive measures that have been put in place by states to curb marine pollution? What laws have been put in place by international and regional bodies to curb the pollution of our water bodies? Are companies and individuals adhering to these laws? Are there any long-term plans for the total eradication of marine pollution? Are there proper waste disposal or recycling plans for plastics and micro-plastics? How effective is the media as regards creating awareness concerning the pollution of water bodies?

[242] International Institute for Sustainable Development (IISD), "International Conference on Youth, Ocean and SDG 14: Engaging Youth on Marine Issues".
[243] Chad Winthrop, "Samohi Students Win International Environmental Competition".
[244] Lisa Kaas Boyle, "Youth Movement to Reduce Plastic Pollution".

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> *This document is an important and crucial document regarding this issue. It breaks down the issue of marine pollution, making one to fully understand the severity of this need. It further makes suitable and workable recommendations towards its achievements. Delegates are advised to look through this document to have a thorough understanding of steps that can be taken to combat marine pollution by plastics.*

Howard S. Schiffman, *International Law and the Protection of the Marine Environment.* Retrieved 17 January 2020 from: https://www.eolss.net/Sample-Chapters/C14/E1-36-02-03.pdf

> *This article explains the interaction between international law and marine pollution. It explores how the international community has attempted to protect the marine environment. By understanding what has been done so far, it shall help the delegates to better conceptualize what may be done to improve the protection afforded to the marine environment.*

Ludwik A. Teclaff, "International Law and the Protection of the Oceans from Pollution" 40(3) *Fordham Law Review*. Retrieved 17 January 2020 from: https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=2079&context=flr

> *This article explores international law on marine pollution. It further explores responsibility for pollution. It shall help delegates understand how liability for pollution is distributed, and how exactly the international framework prevents pollution.*

Nature Communications, "Plastic pollution of the world's seas and oceans as a contemporary challenge in ocean governance" (2018). Retrieved 5 January 2020 from: https://www.nature.com/articles/s41467-018-03104-3

> *This document reinforces the criticality in addressing plastic pollution in the world's seas and oceans. It analyses the dangers of plastic pollution on marine life. This article further states and reviews certain international and regional framework and actions to combat plastic pollution in water bodies. Delegates will find this document useful in understanding this topic and providing feasible solutions to the plastic pollution problems plaguing the world.*

National Geographic, “Marine Pollution, Explained” (2019). Retrieved 5 January 2020 from: https://www.nationalgeographic.com/environment/oceans/critical-issues-marine-pollution/

This article examines the core international frameworks regarding marine pollution. It goes further to examine the various forms of marine pollution and their effects on the marine environment. It also examines possible fixes to marine pollution. It shall help delegates to better understand marine pollution, how exactly it affects the environment and human health, and the difficulties in eradicating marine pollution.

Plastic pollution of the world’s seas and oceans as a contemporary challenge in ocean governance [PDF]. Retrieved 5 December 2020 from: https://www.nature.com/articles/s41467-018-03104-3

This document reinforces the criticality in addressing plastic pollution in the world's seas and oceans. It analyses the dangers of plastic pollution on marine life. This article further states and reviews certain international and regional framework and actions to combat plastic pollution in water bodies. Delegates will find this document useful in understanding this topic and providing feasible solutions to the plastic pollution problems plaguing the world.

UN, “Goal 14: Conserve and sustainably use the oceans, seas and marine resources”. Retrieved 17 January 2020 from: https://www.un.org/sustainabledevelopment/oceans/

This article highlights the importance of oceans to humans and the effects of pollution. In particular, it emphasizes why oceans matter. It would help the delegates to better understand why oceans are of grave importance.

UN, *Marine Pollution* (2012). Retrieved 5 January, 2020 from: https://sustainabledevelopment.un.org/content/documents/177602-%20Pollution.pdf

This document is an official release by the UNEP, recognizing international laws created for curbing marine pollution. The document also explores the challenges and issues facing attempts to curb marine pollution. It also highlights global efforts. It shall grant the delegates perspectives as to the obstacles in the way of stopping marine pollution and enhance the creation of more workable solutions.

United Nations Convention on the Law of the Sea (1982). Retrieved 3 December 2019 from: http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf

The United Nations Convention on the Law of the Sea is the major international agreement that governs the rights of all Member States with respect to the world's oceans and seas. The Convention addresses the issues on the continental shelf, exclusive economic zone, territorial seas and high seas, and conservation and management of marine living resources. It also discusses the obligations of

Member States to prevent and control marine pollution and possible liabilities for non-compliance with such obligation. The Convention will be vital since the topic will seek to explore the provisions of UNCLOS on sustainable use and conservation of marine living resources within the exclusive economic zone Delegates are hereby advised to critically look at this law and other laws that apply to The Conservation of Marine Bodies in order to be grounded in the law.

UNEA, *Towards a pollution-free planet* (2017) [Report]. Retrieved 5 December 2020 from: https://www.unenvironment.org/resources/report/towards-pollution-free-planet-background- report

This report describes the pollution challenge, explores what is already being done to address pollution, and proposes 50 focused and actionable interventions to address pollution in all its forms. These solutions include a voluntary non-binding strategic approach to international chemical management, Incentivizing and redirecting finance and investments to less-polluting economic activities amongst others. The report is a call to act towards a pollution-free planet.

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