



**NEAR EAST UNIVERSITY
INSTITUTE OF GRADUATE STUDIES
DEPARTMENT OF INTERNATIONAL LAW**

**COP26CLIMATE CHANGE SUMMIT: ANALYZING THE LEGALITY,
VIABILITY AND IMPACT**

LL.M THESIS

Mercy Fattim Miri

Nicosia

2022

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Approval

We certify that we have read the thesis submitted by Mercy Fattim Miri titled **“COP26 CLIMATE CHANGE SUMMIT: ANALYZING THE LEGALITY, VIABILITY AND IMPACT”** and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Laws in International Law.

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Declaration

I hereby declare that all information, documents, analysis and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.

Mercy Fattim Miri

10/05/2022

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Mercy Fattim Miri

ABSTRACT

COP26 Climate Change Summit: Analyzing the Legality, Viability and Impact

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The quest for a carbon-free climate and environmental protection has been on the international terrene since 1972; the Stockholm Declaration on the Human Environment provides the blueprint for several international conventions on environmental protection including Climate Change. Having a carbon-free climate requires the cutting down of greenhouse gas emissions below 2°C and achieving this goal involves breaching the gap of scientific, financial, economical and political inequality amongst states. The Conference of the Parties serves as an international referee ensuring states achieves their climate change mitigation goals. This thesis, therefore, analyses the results of the recent COP26 by closely discussing the impacts of the decisions taken to mitigate climate change firstly on the effects of inventing new technologies on developing and least developed countries, the effects of climate change on global migration and the plights associated with climate migration under international law. Lastly, I will discuss the role of international law in ensuring consent and commitments of states in reaching net zero emission by 2050, as well as the hindrances and difficulties of enforcing environmental protection law on the international level.

Keywords: climate change, environment, greenhouse gas, international law.

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List of Abbreviations

COP:	Conference of the Parties
GHG:	Green House Gas
UN:	United Nations
UNFCCC:	United Nations Framework Convention on Climate Change
NDC:	Nationally Determined Contributions
CO₂:	Carbon dioxide
AI:	Artificial Intelligence
WEF:	World Economic Forum
IPCC:	Intergovernmental Panel on Climate Change
WCC:	World Climate Conference
UNIFEM:	United Nations Development Fund for Women
RBS:	Regenerating Barking System
EV:	Electric Vehicle
IEA:	International Energy Agency
MTCO_{2e}:	Metric Tons of Carbon dioxide equivalent
DLT:	Distributed Ledger Technology
ISS:	Institute for Security Studies
UNEP:	United Nations Environmental Program
ICJ:	International Court of Justice
UNHCR:	United Nations High Commissioner for Refugees
IOM:	International Organisation for Migration
AUPSC:	African Union and Security Council
BTC:	Bitcoin
US:	United States
UK:	United Kingdom

Introduction

One of the pronounced threats to the existence of life (humans, plants and animals) on earth is climate change. The fight against poverty, hunger, diseases of all kinds as well as mental health pressure, force displacement and many other natural and artificial catastrophes we face now and the ones predicted for the future generation will be lesser if climate change is harnessed.¹

The acknowledgement over the years that a shift in temperatures and weather, which has caused flooding and the melting of ice in the polar region, extreme drought, Heat waves, acute strange fires and accelerated migration etc² over the last decades all caused by the increase in greenhouse gas emission largely the release of carbon dioxide brought the nations of the world together for the first time in 1972 in Stockholm a United Nations Conference on the Environment of which environmental protection was placed as one of the most significant principles of the conference. The UNEP was birthed in the same conference to lead, encourage, inspire and advocate for the safety of the global environment.³

The United Nations also created a series of international bodies and protocols like the Bruntland commission and the Montreal protocol to combat the depletion of the Ozone layer. In 1992, the Rio declaration was adopted alongside the UNFCCC and the Convention on Biological diversity.⁴

The UNFCCC is the United Nations body responsible for granting support for the world's fight against climate change The United Nations Framework Convention on Climate Change which was endorsed in 1992 with almost all the nations of the world as members of this convention, has since then birthed treaties like the 1997 Kyoto protocol also called Conference of The Parties (COP3) to lower greenhouse gas emission to a favourable degree for creatures on the planet, as well as manages human activities in the emission of carbon dioxide by countries coming

¹World Health Organization: Climate Change and Health, *WHO*, 30th October 2021<<https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>> accessed 2nd march 2022

²United Nations Climate Actions 2021, What is Climate Change, *UN* (2021) <https://www.un.org/en/climatechange/what-is-climate-change> accessed 2nd march 2022

³UNEP: 'About the UN environment program'(2022)<<https://www.unep.org/about-un-environment>> accessed 26/04/2022

⁴Florencia Ortúzar Greene, 'International Environmental Law, History and Milestones'(2020)<<https://aida-americas.org/en/blog/international-environmental-law-history-and-milestones>> accessed 26/04/2022

together to make a review of their progress in fighting climate change, as well as make new resolutions on strategies to improve their actions.⁵

The Conference of The Parties (COP) has since been held every year till COP 21 also known as the 2015 Paris Agreement which is a legally binding treaty. In the Paris agreement, an increasing ambitious circle was adopted lasting for 5 years to enable countries to prepare their contributions on the steps they will take to lower greenhouse gas emissions below 1.5 degrees, which was submitted in the recent COP26 held at Glasgow in 2021.⁶

The 26th COP was held from 31st October -12 November 2021, discussions were made from the political perspective of climate change, religious, social, and Gender perspectives down to the individual effort of every human in reducing greenhouse gas emissions. We could summarise the whole summit into; Completion of the Paris Agreement, the commitment of non-state actors, Commitments with regards to NDCs, commitments outside the NDCs, the implementation of the vision of transition in fairness and equity, and the Glasgow pact on Climate Change.⁷

⁵Savaresi Annalisa, the Paris Agreement; A new beginning? (*Journal of energy and natural resources law* 28 January 2016) Page 1-4 <<https://sci-hub.ee/10.1080/02646811.2016.1133983>> accessed 2nd March 2022

⁶ United Nations Climate Change, What is the Paris Agreement? (UNFCCC 2021) <<https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>> accessed 2nd March 2022

⁷ David Hunter, James Salzman & Durwood Zaelke, Glasgow Climate Summit: COP26, International Environmental Law and Policy (2021), 6th edition <<https://deliverypdf.ssrn.com/delivery.php?ID=134094121066119087067076082092098120021087025040030006018106091106125080029070097023027001056044123040017065003078000114021082102008032018048089096105108121002069029066042024021094100083112110121004096083077094088064122124077005118115031104103108122&EXT=pdf>> accessed 2nd March 2022

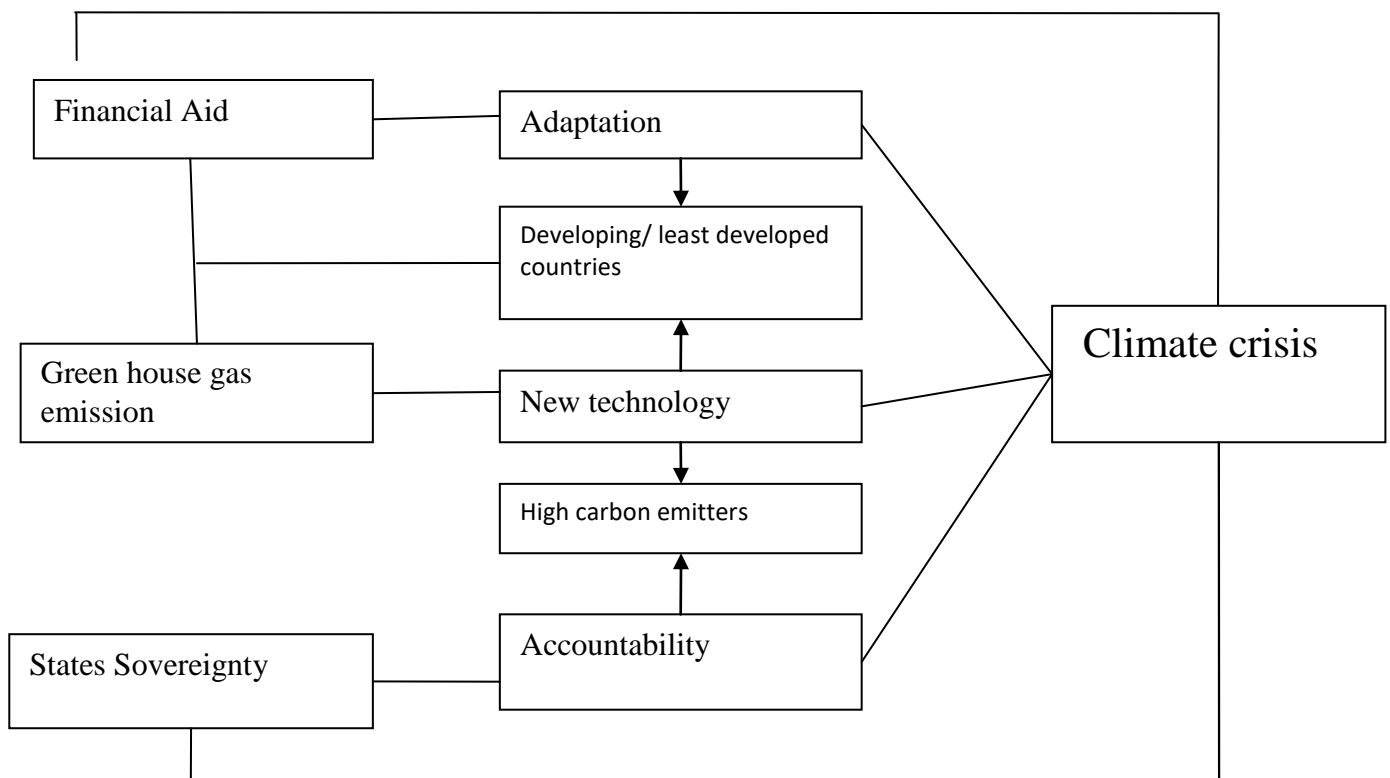
CHAPTER I

Statement of the Problem

There is no doubt that the next course of action is the implementation of this vision green economy strategy by states, but differentiation and inequality between states is one of the glaring hindrances to achieving this goal, the gap between developed and developing nations economically, scientifically financially and even political strengths, will affect the implementation of their NDCs.

The fact that reducing greenhouse gas emissions in the developed countries alone is not enough cannot be overemphasised, but ensuring the commitment of states to implementing their decisions, putting the notion of state power, sovereignty and hegemony aside to fight a common enemy is yet to be ascertained, been sure that the impacts of decisions made by stronger nations to work together will not on the other hand, be a burden to the weaker nations is a hard nut to crack. Also, the question of if reducing gas emissions in the developed nations will not just be the beginning of more gas emissions in the developing nations which will equate all our efforts to nothing is still a question that is yet to be answered. Reducing GHG emissions, amidst Gabbling between International law, states sovereignty, human right, AI and emerging technology accelerating globalization, and making the world a global community is another area in need of balance.

CONCEPTUAL MODEL



Hypothesis

H1. If states are held accountable for the emission of greenhouse gas and taxed proportionately based on the level of emission then, they will take climate change mitigation procedures seriously.

H2. The invention of new technology serves as a moderating variable between the reduction of greenhouse gas emissions and achieving the COP 26 goal

H3. There is a relationship between financial support and reducing greenhouse gas emissions in developing and least developed nations.

H4. The lesser the rate of greenhouse gas emission, the lesser the climate crisis will be experienced.

Research question

Haven outlined the above problems and uncertainties; these questions were answered in this research.

Question one: Based on the conclusions made at the COP 26 summit, what is the feasibility of having a crisis-free climate by 2050?

Question two: How can we measure the impact of implementing the decisions made in COP26?

Question three: What is the role of international law and conventions in ensuring that the state's commitment to achieving a crisis-free climate is certain?

RESEARCH AIMS AND OBJECTIVES

Overall aim

This research seeks to analyze the 26th Conference of the Parties (COP26) that was held in Glasgow from the 31st Oct to the 12th Nov 2021, by closely discussing the impacts of the decisions taken to mitigate climate change, practically outlining the possible negative outcomes of these decisions by linking subjects like third world countries, World super powers and legal effects.

Objectives

To analyze tackling climate change, focusing on the criticisms of COP26 Climate change summit with regards to inequalities, new technologies and political plan of action.

To examine the effects of climate change on global migration, migration laws, analyzing case laws and case studies.

RESEARCH METHOD

People:

The whole world is involved in this research because we are all overblown by the consequences of climate change, but most importantly, the activities of countries considered to be the largest emitters of carbon, organizations in charge of climate change mitigation, and countries most affected by climate change are also targeted in this research.

Materials

Secondary sources like journals and articles, textbooks as well as media sources recorded video transcriptions including interviews will primarily be used for this research, Case studies, as well as case law analysis will also be included to portray correctly the achievements of the aims and objectives of this research.

Analytical plans

I wish to use the analytical induction method to analyze the collected data, by giving a global explanation of the problem phenomena through the use of qualitative research methods as well as inductive reasoning. Defining the problem, then an explanation of why the problem exists and then moving on to examine the main problem to remove inconsistent cases will allow me to explain hypothetically the sensation throughout my research.

Procedure

All data will be subject to a test of accuracy and eligibility before being adapted, Academics experts like the supervisors, and the ethics committee must give their consent before the data will be used. Data will be collected through the method mentioned above, or face to face if need be.

Limitations of the Research Design

Because the study was confined to a qualitative style, statistics of the successes or failures of the measures taken to achieve zero-emission could not be made also considering that the process of achieving this goal is still ongoing. However, with the help of the present and past statistics compiled by the government and other online resources, evaluations, analyses and suggestions were made.

CHAPTER II

This chapter is an overview of previously conducted research and past conventions concerning reducing GHG emissions. The information and various opinions gathered from different scholars are beneficial in providing understanding and enlightenment of this study.

Literature Review

Considering COP26 like other past conferences will not be a mistake, the only difference it has is the fact that it is a deadline for the submission and review session for the decisions taken in the past Paris agreement in 2015. Just like every other climate change summit, COP 26 is just another United Nations Framework on Climate Change (UNFCCC) which is not legally binding, and this platform allows for a high political engagement which is not so clear. Just as in the previous COPs, there is always a consensus at the end of the summit, and a milestone to be reached.

The Paris Agreement concentration was primarily on mitigating GHG emissions below 2°C through NDCs based on equity. This means that each country will independently be able to devise means of achieving this task and developing countries will be assisted by developed countries in capacity building whiles adapting to new technologies in the mitigation process, as well as financially where need be, to ensure progress equality over time.⁸ Clive L. Spash described the Paris Agreement as a fantasy without an execution plan. He argued that throughout the Paris Agreement, there was no mention of the GHG emitter, nor the uses of fossil fuels, and how the exploration of crude oil can be curtailed, he argued that the Paris convention had no enforcement mechanism because according to the article 15 of the Paris agreement, a non-binding non-adversarial committee was established which indicated that countries cannot be held responsible for non-compliance.⁹

⁸ A. Ghezlouna, A. Saidaneb , H.Merabeta,COP22: New commitment in support of the Paris Agreement(TMREES17, 21-24 April 2017,)<www.s.csiceinecneceidreircetc.ct.ocrn> accessed 21st March 2022

⁹ Clive L. Spash ,This Changes Nothing: The Paris Agreement to Ignore Reality, Globalizations,(11, April 2016)<<http://dx.doi.org/10.1080/14747731.2016.1161119>> accessed 22nd March 2022

The nature and participation of countries in pledging for the reduction of GHG best confirms the unlikelihood of achieving the promises made in COP26¹⁰ the initial pact for COP26 was to phase out coal but due to low participation from the highest users of coal, it went from ‘phasing out coal’ to ‘phasing down coal’¹¹ While it is been argued that the Paris Agreement was nothing but an acknowledgement of the fact that the amount of GHG emission should be reduced, COP22 confirms the application of the Paris Agreement also known as the “COP of the action”. The "Marrakech Proclamation for Action, was the most notable progress made during the summit, where alliances were made between the developed and the developing countries concerning the transfer of new technologies, financial assistance and adaptation of policies to enable the implementation of the Paris Agreement.¹² One consistent target from the Paris Agreement passed down to the 21st COP is the emphasis on the use of technology to reach the Net Zero Goal.

While technology is predicted to be a very acceptable means of reducing GHG emissions, many scholars have noted that it can cause more harm to the environment than it will solve the problem if not regulated, technology has enhanced the discoveries, drilling and exploration of many other natural resources like the cobalt found in Africa, used for producing electric car batteries, laptop batteries etc the extraction and refining of these minerals give rise to the release of CO₂ in the environment which causes temperature rise, environmental and water pollution.¹³

Focusing on energy efficiency and the use of renewable sources including stepping up innovations like recycling, and manufacturing more substantial and transposable products should be the goal of every IT company at this crucial time

¹⁰ Hanna Duggal, ‘What has your country pledged at COP26?’ *ALJAZEERA* (2021)<<https://www.aljazeera.com/news/2021/11/14/infographic-what-has-your-country-pledged-at-cop26>>accessed 6th April 2022

¹¹ Naveen Kumar Arora, Isha Mishra: COP26: more challenges than achievements(2021) 4, 585-588, <https://doi.org/10.1007/s42398-021-00212-7> accessed 6th April 2022

¹² A. Ghezlouna, A. Saidaneb , H.Merabeta, COP22: New commitment in support of the Paris Agreement(TMREES17, 21-24 April 2017,)<www.s.ciceinecneceidreircetc.ct.ocm> accessed 22nd March 2022

¹³ Marco Mazzotti and others: ‘Mineral carbonation and industrial uses of carbon dioxide’ in Baldur Eliasson (Switzerland), R.T.M. Sutamihardja (Indonesia)(eds), *Carbon dioxide Capture and Storage*, IPCC Special Report(Cambridge University Press 2005)

instead of inventing new technologies¹⁴ many expert opinions tilted to the point of repairing the already existing technological equipment we have instead of replacement to avoid producing more e-waste. Responsibilities lie on the shoulders of both national and international organizations, but more success will be achieved when governments and other institutions create platforms and infrastructure to aid commitment because, the time gap between invention and actual implementation for the use of this new technological equipment, takes longer than we can bear at this time.¹⁵

The undeniable truth is that globalization has come to stay; nations and transnational corporations are bent on expansion, construction of infrastructures, mass production, exploration and refining of fossil fuels which leads to massive GHG emissions. Mitigating these actions should be the core focus of the various climate change summits, but the unfortunate situation is that although the outlook of the Paris Agreement and other climate change summits is to tackle climate change, it is just a panel of insuring climate change rather than stopping it.¹⁶

Acknowledging that climate change is a general concern is the first step but taking more practical steps like calling out the highest emitters and polluters would have been more appreciated. Not doing that has sent out indirect messages that no one will be held accountable for their pollution and amount of GHG emission. The above mentioned is missing in the Article of the Paris Agreement.¹⁷

Notwithstanding, haven't called out the Paris Agreement for generalising responsibility of resolving climate change problem, another most ignored part in the whole COP is their inability to point out significant vast energy-consuming

¹⁴Professor Katina Michael and Dr Roba Abbas: The negative impact of technology and information systems on the environment (Nov 12 2021)
3.2.7.1<<https://www.katinamichael.com/research/tag/public+interest+technology>> accessed 31st March 2022

¹⁵Yogesh K. Dwivedi and others, Climate change and COP26: Are digital technologies and information management part of the problem or the solution? An editorial reflection and call to action(2021)63 (102456) INTJM<<https://doi.org/10.1016/j.ijinfomgt.2021.102456>> Accessed 25th March 2022

¹⁶ Clive L. Spash ,This Changes Nothing: The Paris Agreement to Ignore Reality, Globalizations,(11, April 2016)<<http://dx.doi.org/10.1080/14747731.2016.1161119>> accessed 29th March 2022

¹⁷ United Nations, Paris Agreement: Adoption of the Paris Agreement (2015)<https://unfccc.int/sites/default/files/english_paris_agreement.pdf> Accessed 29th March 2022.

technologies like the blockchain and Crypto currencies mining technologies. Research shows that as these currencies grow so does the energy needed to power them. As of 2021, the energy needed to power the mining of bitcoin per year was estimated to be more than the total energy consumed by many countries yearly¹⁸ In trying to identify blockchain's carbon footprint and its effect on the environment, Stoll and others have stated that mining bitcoin is just one single part of the use of blockchain, as companies, farmers, hospitals as well as other multinational corporations are beginning to adopt the use of blockchain to enhance their various transactions¹⁹ blockchain on the flipside when combined with the use of AI can help in climate change control process by regulating the ecological environment through the distribution of water to the dry areas to avoid drought and desert encroachment as well as reducing excess water from the flooded environment.²⁰The World Economic Forum reported on the importance and efficiency of AI, and its ability to reduce carbon emission by 4% by 2030²¹blockchain is also carbon-conscious through the use of smart contracts in which an individual's carbon emission can be calculated. Coins like sola coins are also climate-conscious due to their very low energy consumption²² One of the reasons why world leaders did not reach the goal set in the Paris Agreement, is because cities, as well as the local government, were not fully involved. Noticing that cities are beginning to experience the effect of climate change is a sign that they can easily be involved in adapting, to climate change action²³Knigge and others discussed that if local cities are given a chance to take

¹⁸Devin Pradita: Is green cryptocurrency possible? (Feb 17,2022)<<https://rehack.com/crypto/is-green-cryptocurrency-possible/>> accessed 31st march 2022

¹⁹Stoll, Christian; Klaaßen, and others:*The Carbon Footprint of Bitcoin, Joule*(2019),(S2542435119302557)< doi:10.1016/j.joule.2019.05.012> accessed 31st march 2022

²⁰ Yu-Pin Lin and others:Blockchain with Artificial Intelligence to Efficiently Manage Water Use under Climate Change(2018)<[file:///C:/Users/ACER%20USER/Downloads/Blockchain with Artificial Intelligence to Efficie.pdf](file:///C:/Users/ACER%20USER/Downloads/Blockchain%20with%20Artificial%20Intelligence%20to%20Efficiently%20Manage%20Water%20Use%20under%20Climate%20Change.pdf)> accessed 31st March 2022

²¹ World Economic Forum: Harnessing Artificial Intelligence for the Earth(2018)030118, WEFhttps://www3.weforum.org/docs/Harnessing_Artificial_Intelligence_for_the_Earth_report_2018.pdf> accessed 5th April 2022

²² Howson Peter, Tackling Climate Change with Blockchain, Nature Climate Change (2019)<<https://doi.org/10.1038/s41558-019-0567-9>> accessed 5th April 2022

²³Linda K Westman: 'Cities as Climate Saviors? Political Strategy Ahead of COP-26'

action against climate change, more pressure will be mounted on the upper tier of government. Contrary to popular believes, activities carried out by local industries are also a major contributing factor to GHG emissions.²⁴ Many local cities using the US as an example have more idealistic plans for curtailing GHG emissions than many countries.²⁵ There is no automatic solution to saving the climate without the involvement of everybody, various local city heads have understood the importance of reducing GHG emissions, and should be allowed to participate in the action²⁶

More so, small island nations, as well as developing countries, have expressed the fact that although they are not the highest emitters of GHG, they have over the years suffered from the offences of developed nations and are most vulnerable to the effect of climate change.²⁷ To these vulnerable nations, damage caused by climate change is real, and has destroyed lives and properties, waiting for the adaptation of new technology is not an option for them, developed countries are expected to take up responsibility for their actions considering that they own the technology, finances and are the highest emitters of GHG as well.²⁸

Countries are also expected to make self-governing rules concerning GHG emissions to be in line with their pledge to curtail Carbon emissions and enhance the use of clean energy as well as to adapt to new technologies this will prove the legality of the conference.²⁹ International climate law is supposed to stand in between culture and the governance of accomplishing the net Zero Goal, since

[2021] 1

(1) buildingsandcities <<https://www.buildingsandcities.org/insights/commentaries/cop26-cities-saviours.html>> Accessed 5th April 2022

²⁴ Knigge and others, Climate Change Policies at the U.S subnational Level- evidence and Implications(2006) ECO,(Ecologic Institut, Berlin) <<https://www.ecologic.eu/node/1609/printable/print>> accessed 6th April 2022

²⁵ Adam Millard-Ball, Do city Climate change plans reduce emission?[2012] 71(3), 0-311 <<https://sci-hub.hkvisa.net/10.1016/j.jue.2011.12.004>> accessed 6th April 2022

²⁶ Mark Watts, Cities spearhead climate action(2017) vol 7 nature climate change <<https://www.nature.com/articles/nclimate3358.pdf>> accessed 6th April 2022

²⁷ Baba Martins: 'Africa now at the receiving end of Climate Change'(Daily Trust 2021) <<https://allafrica.com/stories/202110310068.html>> accessed 7th April 2022

²⁸ Admin, A matter of life or death: At COP26, vulnerable countries tell developed nations it's time to keep their promise on climate finance. (UN Sustainable Development Goal2021) <<http://119.78.100.173/C666/handle/2XK7JSWQ/341111>> accessed 8th April 2022

²⁹ Michael Wolosin, 'Navigating the false Dichotomy between Legality and Zero Deforestation'(forest policy trade and finance initiative 2022) <<https://www.forest-trends.org/wp-content/uploads/2022/02/Navigating-the-False-Dichotomy-Between-Legalit-and-Zero-Deforestation.pdf>> accessed 11th April 2022

climate change is a global issue, it corresponds with the approach of International law, as well as the UNFCCC discourse on climate change as a ‘common concern’.³⁰ To achieve justice for our climate, many areas of international law must be involved, and enforcement mechanisms for GHG emission reduction rather than just causes of GHG emission must not be taken lightly³¹

The notion of state sovereignty is also a contending issue in curtailing GHG considering that countries easily turn the common goal of eliminating climate change into a political issue, it is argued that climate change is gradually eradicating the notion of state sovereignty in international law because of its general effects on the environment³² international law, in other words, is making it difficult for countries to make reservations to the clause with regards to reducing GHG as stated in the Kyoto convention by allowing them the opportunity to unilaterally make their choices and come up with decisions on how to domestically reduce emission³³ this was formally practised in the 1990 and 1992 Kyoto convention fast-forward to the Paris convention in 2015, it is still the same practice in form of NDCs which allows states to strategize on their measures of curtailing GHG emission.

Theoretical Framework

Climate Change

Climate change is the displacement of the weather, warmth, and cold and heat condition of an environment over a long period. These changes occur naturally as

³⁰Nicola Silbert, ‘ Making International Law, Making Carbon Market’ (2021), Vol. 0(0) 1–5, Alternative Law Journal <DOI: 10.1177/1037969X211029728journals.sagepub.com/home/alj> accessed 11th April 2022

³¹Anna-Julia Saiger and others, ‘ International Law in the age of Catastrophe’(2020)Völkerrechtsblog<https://web.archive.org/web/20211203231426id_/https://i-ntr2dok.vifa-recht.de/servlets/MCRFileNodeServlet/mir_derivate_00008366/International_law_>accessed 11th April 2022

³²Andreas Kluth, ‘Climate change will kill national sovereignty as we know it’(Bloomberg 2021)<<https://www.deccanherald.com/opinion/panorama/climate-change-will-kill-national-sovereignty-as-we-know-it-1047130.html>> accessed 14th April 2022

³³Schrijver N, ‘The Changing Nature of State Sovereignty’(British Yearbook of international law 2000) 70(1), 65-98 <<https://sci-hub.hkvisa.net/https://doi.org/10.1093/bybil/70.1.65>> accessed 15th April 2022

season changes but can also be induced by the activities of human³⁴ Climate change occurs when the earth's climate system is heated over a long period primarily by burning fossil fuels which in turn, changes the balance of the atmospheric condition of an environment for a long term³⁵

Change in the atmospheric condition of an environment displacing seasonal arrangement and concurrences can as well affect human activities, food, water, human and animal security as well as cause more strife for resources. The method and pattern of survival of humans can as well cause changes in temperature which in turn affect them.³⁶

Human activities over the century have caused more changes to the climate than natural elements, activities like fossil fuel burning, overgrazing, deforestation, and transportation, are just a few of the many causes of change in temperature over the years. These activities have increased the release of CO₂ into the atmosphere causing ocean warming, acidification of the sea, and a rise in sea level which increases the strength of storms, frequent floods, damaging erosion and the misbalancing of natural habitats for marine lives.³⁷ Effects have drastically increased over the years. Research has also shown that CO₂ has a long life span and even if we stop releasing carbon into the atmosphere today, the effects will still last for some years.³⁸ Climate change is one of the worst things that can happen to this planet following its deadly effects on everything on the planet.

Another famous term used when describing climate change is global warming, global warming is the rise in temperature caused by GHG emissions and although it is often used as a synonym to climate change, it is more of a contributing factor to climate change. So while climate change is the change in the temperature of an

³⁴United Nations Climate Action, 'What is climate change' (UN Climate report 2021)<<https://www.un.org/en/climatechange/what-is-climate-change>> accessed 11th April 2022

³⁵ Environmental Analyst 'Report from Intergovernmental Panel on Climate Change'(2007)<https://www.slwvd.com/sites/g/files/vyhlif1176/f/uploads/item_10b_4.pdf> accessed 11th April 2022

³⁶UN High Commissioner for Refugees (UNHCR), *UNHCR, 'The Environment & Climate Change,'* (2015,) <https://www.refworld.org/docid/561f670a4.html> accessed 11 April 2022

³⁷ Christina Nunez and National Geographic Staff, 'Sea level rise, explained'(NATIONAL GEOGRAPHY 2022)<<https://www.nationalgeographic.com/environment/article/sea-level-rise-1#:~:text=Consequences,fish%2C%20birds%2C%20and%20plants.>> accessed 12th April 2022

³⁸ Trenberth, Kevin E, 'Climate change caused by human activities is happening and it already has major consequences' (Journal of Energy & Natural Resource Law 2018) 1-19<10.1080/02646811.2018.1450895> accessed, 11th April 2022

environment which includes the warmth, air pressure, breeze, cloud, moistness, and storm of an environment, Global warming is the rise in the temperature due to an increase in GHG emissions that causes a change in the climatic condition of an environment.³⁹

Effects of Climate Change

There are numerous consequence of climate change some of which include, environmental degradation (flood, drought, desertification, forest fires) human effects like forced migration, economic effects, health effects, air pollution and water pollution, just to mention a few.

Amongst the many effects of climate change, the health effect of climate change on both plants animals and humans is one of the most dangerous effects of temperature rise ranging from wildfires that cause bush burning, desert encroachment, and air pollution that has been confirmed to be the main cause of most respiratory diseases, malnutrition, floods, diseases related to consuming bad water, infectious diseases, allergies, thermal stress as well as heat waves claiming lives every now and then.⁴⁰

Another global consequence of climate change is its influence on forced migration. Aside from globalization, climate hazard to the environment is one of the biggest factors of forced migration. The Intergovernmental Panel on Climate Change predicted in 1990 that millions will be displaced as a result of climate change in the 21st century⁴¹ similar health reasons like malnutrition caused as a result of desertification, loss of lives and properties by floods and the rise in sea level also cause migration.⁴²

³⁹Gale, 'Global warming and climate change'(opposing viewpoints online collection 2018)<<https://www.gale.com/intl/databases-explored/social-issues/global-warming>> accessed 15th April 2022

⁴⁰ Haines Andy, 'Health Effects of Climate Change (2004) JAMA, 291(1)99< <https://sci-hub.hkvisa.net/10.1001/jama.291.1.99>>accessed 11th April 2022

⁴¹ IPCC, 'The IPCC 1990 and 1992 Assessments' (IPCC report 1990)<<https://www.ipcc.ch/report/climate-change-the-ipcc-1990-and-1992-assessments/>> accessed 12th April 2022

⁴² Etienne Piguet, 'Climate Change and Force Migration' (2008) unhcr (153)<<https://www.unhcr.org/uk/47a316182.pdf>> accessed 12th April 2022

Other effects of climate change include long term economic backlash,⁴³ psychological effect on children's mental health as they adapt to changes in temperature,⁴⁴ a decrease in labour especially in the affected regions as well and a massive decrease in production caused as a result of heat stress which will in turn result to poverty and hunger.⁴⁵

The development of environmental protection Laws

The driving force behind environmental protection has for many centuries been to protect wild lives; curtail water pollution and the protection of the sea. Dating back to the 19th century, treaties and bilateral agreements were signed when necessary (ad hoc). One of the first treaties was the whaling convention of 1931 purposely for the protection of the aquatic life from exploitation. The 1902 bird convention was mainly for the protection of certain birds, and the preservation of certain species from extinction which allowed for some scientific research and had also reflected in the 1992 biodiversity convention. Most environmental treaties were bilateral; the first regional convention for the protection of wildlife in Africa was signed in 1900 to protect wildlife in most European colonies, this failed and never came into force because it was not signed by many European countries. Some other bilateral drafted treaties that were not adopted were the 1909 water Boundary treaty between the United State and Canada, and agreements to avert pollution of the seas with oil.

Despite the limitation in establishing international organizations for environmental protection, two significant cases were submitted to the international arbitration committee. The first was the Pacific Fur Seal Arbitration between the United State and Great Britain, which set precedence for future disputes over natural resources of value which are outside the jurisdiction of a state as well as presented the role of international law in settling disputes.

⁴³Tol, Richard S J, 'The Economic Effects of Climate Change' (*Journal of Economic Perspectives* 2009) 23 (2): 29-51.<<https://www.aeaweb.org/articles?id=10.1257/jep.23.2.29>>accessed 12th April 2022

⁴⁴Burke, and others 'The Psychological Effects of Climate Change on Children' (2018)*Curr Psychiatry Rep* 20, 35<<https://link.springer.com/article/10.1007/s11920-018-0896-9#citeas>>accessed 12th April 2022

⁴⁵Dasgupta and others, 'Effects of climate change on combined labour productivity and supply' (*The Lancet Planetary Health*, 2021) 2(7), e 455-e465<[https://doi.org/10.1016/S2542-5196\(21\)00170-4](https://doi.org/10.1016/S2542-5196(21)00170-4) accessed 13th April 2022

The second arbitration case was the Trail Smelter case between the United States and Canada where the tribunal noted that ‘no state has the right to use its territory in such a manner as to cause injury to the territory of another when there is a clear evidence of causing danger’⁴⁶

The treaties and organizations for environmental protection although many never came into force and were not binding had over the years created awareness of the threat faced by environmental pollution and served as the foundation for the first international declaration on environmental protection in 1972.

The first international document to acknowledge the need for a healthy environment is the First United Nations Conference on the Human Environment known as the Stockholm Declaration of 1972, which established the principle of cooperation among states to protect the health of the environment, creating a responsibility among states to ensure the safety of other states territory by refraining from activities that are prone to causing damage to other states. The UNEP was also created by the UN General assembly to be in charge of environmental protection and is active to date.

The UN General assembly also established the World Commission on Environment and Development known as the Brundtland Commission in 1987, which focused on using the environment to sustain it for the future generation hence the concept of sustainable development was established in a report termed ‘Our Common Future (1987).

Another notable transition in the development of environmental protection law was the Rio declaration in 1992, alongside the Convention on Biological Diversity and the Adoption of the UNFCCC. The Rio declaration set the Agenda 21 plan for the protection of the environment. As well as principles of environmental protection; The 10th Principle recognised the right to information, participation and justice in environmental matters.⁴⁷

⁴⁶*United States v. Canada* (1938 and 1941) 3 R.I.A.A. 1905

⁴⁷ Philippe Sands, ‘Principles of International Environmental Law’ (2nd Edition Cambridge University Press 2003) Part 2, page 25-30

From Rio Declaration to COP26

During the 1992 Earth Summit in Rio de Janeiro, the UNFCCC was adopted and ratified by 196 countries as it comes into force in 1994 with COP as its highest decision-making body represented by all the parties to the convention. It held a convention on climate change in 1995 and has since met every year. Within the UNFCCC framework, the Kyoto protocol was presented in 1997 even though it failed in mitigating GHG emissions; it stands as the first international agreement, creating a legally binding obligation on developed states in mitigating GHG emissions.⁴⁸

COP stands for Conference of the Parties, and is a decision making body under the UNFCCC, it is regarded as the apex decision making body of the United Nations framework convention on climate change which is an international treaty body in charge of recognising the climate change, the effects of climate change, as well as creating the platform for countries to participate in the negotiation process of mitigating and restoring the planet from the effects of climate change.

The major responsibility of the Conference of the Parties is to assess the strengths and weakness of the measures that have been taken by the parties in achieving the climate change mitigation goal set by the UNFCCC, thereby reviewing the methods, checking new inventions, adaptation processes as well as the financial capabilities of the parties. These meetings holds yearly, and the venues are rotated based on the five (5) UN regions which are Asia, Africa, Latin America, the Caribbean, Central and Eastern Europe, and Western Europe.⁴⁹

Members of the COP are elected or appointed yearly from the five (5) UN regions and other regions to act as the governing body of the UNFCCC, Kyoto Protocol and Paris agreement as well as in charge of the whole COP. The executive council of the COP consist of eleven (11) persons including the president, serving for at most two (2) years. The presidency of the COP is also rotated yearly among the

⁴⁸Norton Rose Fulbright, ' Historical Overview of COP 2009-2017(climate change and sustainability 2018)<<https://www.nortonrosefulbright.com/en/knowledge/publications/6d484a90/historical-overview-of-cop-2009-2017#:~:text=The%20Convention%20was%20adopted%20in,of%20representatives%20from%20a%20pa>> accessed 13th April 2022

⁴⁹UNFCCC, 'What is the COP?'(Conference of the Parties 2021)<<https://unfccc.int/process/bodies/supreme-bodies/conference-of-the-parties-cop>> accessed 13th April 2022

five (5) regions of the UN⁵⁰ The president is assisted by the bureau, rendering advice to the parties, handling undertakings, inspecting NGOs and IGOs as well as submitting the results at the meetings.⁵¹

The first Conference of the Parties COP-1 was held in the year 1995 in Berlin from 28th March to 7th April, where negotiations concerning where the permanent secretariat should be, a joint project agreement was also reached most importantly reaching an agreement on the actions that will go beyond the year 2000, which will be the bases for other future COPs.⁵² The COPs continued to be held yearly till the year 2015 in France the COP was referred to as the Paris agreement and was called a legal agreement binding all the members of the convention. Although the use of the term ‘Legally binding’ has been criticized by many scholars because of the absence of an enforcement mechanism, a five-year cycle was established to enable states to prepare their plans known as their Nationally Determined Contributions (NDCs) to reduce GHG below 2°C.

The 26th conference of the parties is also referred to as the Glasgow Climate Conference because it was held in Glasgow from the 31st of October to the 12th of November 2021; several decisions to reduce GHG emissions to 1.5°C were taken during the COP 26 some of which include nation’s agreement to build strength, flexibility and adaptability against climate change, filling up the gap of financial instability in the developing countries by developed countries by agreeing to fulfil their promises of donating 100 billion dollars annually to developing states, as well as creating a balance between the plan to reduce emission and what it takes to reduce emission.⁵³

One of the most relevant decisions taken during the COP26 conference is the transparency rule of reporting, progress, support rendered and received and also

⁵⁰ UNFCCC, ‘Election and Membership’ (Conference of the Parties 2021)<<https://unfccc.int/process-and-meetings/bodies/election-and-membership>> accessed 13th April 2022

⁵¹UNFCCC, ‘What is the Bureau of the COP, CMP, and CMA?’(Conference of the Parties 2021)<<https://unfccc.int/process/bodies/supreme-bodies/bureau-of-the-cop-cmp-and-cma#eq-3>> accesses 13th April 2022

⁵²UNFCCC, ‘provisional agenda and annotations, including suggestionsfor the organization of work’ (conference of the partiesfirst session 1995) FCCC/CP/1995/1<<https://unfccc.int/cop3/resource/docs/cop1/01.htm>> accessed 13th April 2022

⁵³ UNFCCC, ‘The Glasgow Climate Pact – Key Outcomes from COP26’(Conference of the Parties 2021)<<https://unfccc.int/process-and-meetings/the-paris-agreement/the-glasgow-climate-pact-key-outcomes-from-cop26>> accessed 19th April 2022

the waste and destruction that occurred during the process of mitigation. This was in regards to the Paris agreement's rule book consisting of the non-market and market approach to reducing GHG emissions this

Was following Article 6(2) of the Paris Agreement, and it was necessary to implement the Paris Agreement complete.⁵⁴

⁵⁴Gauthier van Thuyne, ' The Paris Rule Book after COP 26' (Allen and Overy 2021) <<https://www.allenoverly.com/en-gb/global/blogs/countdown-to-cop/the-paris-rulebook-after-cop26>> accessed 19th April 2022

CHAPTER III

Findings and Discussion

The first official response to climate change on a global, political, and scientific platform was in the year 1979 which was the first World Climate Conference after which a series of conferences with regards to climate change were organised including the Brundtland World Commission on Environment and Development which was what placed climate change concern as the global environmental development problem. The UNEP formed the IPCC in the year 1988 to assess the science related to climate change.⁵⁵ Over the years ministries in charge of the environment of different sorts of International Law, Non-Governmental Organisations have participated in the fight against GHG emissions. Recently, religious leaders, local communities, human rights activists and feminist groups and even individuals are beginning to participate in this fight this is to show how the approach in the response to climate change has evolved over the years.

Findings for Research Question I

General analysis of Cop26 climate change summit

The long-awaited Glasgow conference pact known as the 26th Conference of the parties ended on 13th November 2021. All through the summit, the urgency for climate change mitigation was emphasized by the acceptance and recognition of the available science that can be involved in the cutting down of GHG emissions, encouragement to parties to adapt to new technologies both nationally and internationally, build capacity, acknowledge the reports of the IPCC, and to scale up financially towards building resilience against climate change. The need and importance of international collaboration were also emphasized through the acknowledgement that climate change is a global problem, challenges and mitigation to the implementation of the conference resolution, as well as

⁵⁵ WCED, 'Our common future, The World Commission on Environment and Development' (Oxford University Press; 1987) 400
pp.<<https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>>
accessed 19 April 2022

encouraging parties to meet up their pledges with regards to previous conferences.⁵⁶

The above paragraph is a summary of the COP26 summit, with which I wish to point out that such a report should be an indication of the effectiveness of the summit. The effort put in by states, NGOs, representatives of indigenous people, religious leaders, experts, Human rights activists, feminist groups etc to attend the summit must not be left unnoticed, coupled with the risk of exposing themselves to the Covid-19 virus yet they prioritized the safety of the planet as well as the lives of all living things on the planet. Not effectively ensuring that all the decisions taken are rightly implemented will be a high form of disrespect to the organizers of the forum, and also to the entire participant as well as the world leaders involved.

First and foremost, the legality of the summit has been questioned. From the first time the Paris Agreement was addressed as an internationally binding agreement, it has been criticised for not having the backing of any international court to enforce the compliance of its terms of the agreement, as well as not having other legal mechanisms to impose sanctions on parties that will not comply to the terms of the Paris Agreements and the pledges made during the COP. with this, I will be right to point out that the COP is not binding.⁵⁷

As it has always been in international law, ensuring sovereign states are accountable for their acts and omission is a problem due to the particularity of jurisdiction. The case of emitting GHG and the effects makes it worst, the fact is that the highest emitters are not the most vulnerable when it comes to the effects of the GHG and the CO2 that has been emitted. Countries like the United States, the UK, China, and Russia, Poland, Chile are some of the highest emitters, but countries in sub-Sahara Africa are suffering from drought and desertification which is a result of their emission. The problem lies in the fact that nobody is s

⁵⁶ UNFCCC, 'Report of the Conference of the Parties on its twenty-sixth session, held in Glasgow from 31 October to 13 November 2021'(Conference of the Parties 2021) <file:///C:/Users/ACER%20USER/Downloads/cp2021_01_adv%2520..pdf> accessed 19th April 2022

⁵⁷ World Economic Forum, 'Is the Paris Climate Agreement legally binding? Experts explain' (2021)<<https://www.weforum.org/agenda/2021/11/paris-climate-agreement-legally-binding/#:~:text=It%20does%20not%20impose%20penalties,legally%20binding>> accessed 19th April 2022

simply responsible for the emission as the emitter cannot be traced in proportion to the rate of their emission and the region they are affecting. Affected regions cannot file a case against the emitters due to this fact.⁵⁸

Now, supposing there are ways of trapping GHG and tracing their destination as well as the exact region that it affects, it would have been easier to hold a country responsible for causing damage to another region but even if it was possible, it will still not be feasible because there are no enforcement mechanisms with regards to COP, and the lack of political accountability and penalty will eventually make developed countries disregard the urgency of the issue on ground while developing countries continue to suffer for their act and omission thus making it impossible to have a disaster-free climate by 2030.

Aside from establishing the fact that the COP is not binding which is one of the weaknesses of the summit in achieving its set goals, one of the greatest strengths of the COP was its acknowledgement of the influence a common individual has in contributing to climate change mitigation. According to the report of the COP26, the six elements of climate empowerment were reaffirmed which include: Training, Public awareness, education, public participation, public access to information and international cooperation on climate change. In my opinion, putting all these into action is the most accurate interpretation of the statement that climate change is a global concern and just the concern of the government of the states.⁵⁹

The Agromet advisory council in India have reported that informing local farmers about climate change in languages they can understand has helped farmers make deliberate choices on the crops to plants in a certain season, irrigation, making well-informed decisions, managing risks and adapting to the changes that occur during different seasons due to change in the climate.⁶⁰

⁵⁸Alexandre Kiss, Dinah Shelton, Guide to International Environmental Law (MartinusNijhoff Publishers, Leiden / Boston 2007) Chap 1, page 18-20

⁵⁹UNFCCC, 'Report of the Conference of the Parties on its twenty-sixth session, held in Glasgow from 31 October to 13 November 2021' (8 March 2022)Decision 18/CP.26
<file:///C:/Users/ACER%20USER/Downloads/cp2021_12_add2_adv.pdf> accessed 20/04/2022

⁶⁰ Pinaki Roy, 'Agromet Advisory for Empowering Farmers to Mitigate Climate Change'(Agriculture 2018) 3824 <https://www.researchgate.net/profile/Pinaki-Roy/publication/325593652_Agromet_Advisory_for_Empowering_Farmers_to_Mitigate_Climate_Change_Agromet_Advisory_for_Empowering_Farmers_to_Mitigate_Climate_Change/links/5b176cf2a6fdcc6d3e051e0e/Agromet-Advisory-for-Empowering-Farmers-to-Mitigate-Climate-Change-Agromet-Advisory-for-Empowering-Farmers-to-Mitigate-Climate-Change.pdf> accessed 20th April 2022

Scholars like Petra and Kathleen have noted that implementing climate change in the developed countries will be very different from the method that will be used in the developing countries, the least developed countries and countries most susceptible to climate change. For countries battling hunger, and poverty, it will be a case of learning the challenge practically in the face of a vulnerable livelihood, while in the already affected regions; it will be first a case of survival and then learning the challenge. Climate change empowerment will be much easier in developed countries at this point because they have less hunger and poverty rate, less damage from climate change and also already have the technology to aid adaptation.⁶¹

Furthermore, the resolution to include gender roles in the process of achieving a crisis-free climate can be accorded as one of the strengths of the COP. This further affirms that the climate crisis is indeed everyone's concern, and all hands must be on deck to help achieve this goal even though the need for climate mitigation is perceived differently across societies and identities. Including women who are also affected by the change in climate will most likely demystify some conceptions.

Mac Gregor has argued in his article that women are perceived in three ways when it comes to their contribution or connection to climate change,

First, he argued that women are perceived as the most vulnerable and most affected when climate change hits a region; one of the reasons for this is the fact that the number of women mostly outweighs the number of men in many regions.⁶² The World Health Organisation has also estimated that most women lose their lives as compared to men in the face of Natural disasters. This is simply because they are most likely to care for their families at the expense of their health, going without food, travel longer distances to source clean water, and working long hours under bad conditions to outsource food and good living condition for their children.⁶³

⁶¹ Petra Tschakert and Kathleen Ann Dietrich, 'Anticipatory Learning for Climate Change Adaptation and Resilience' (2010) *Ecology and Society* 15(2): <http://www.ecologyandsociety.org/vol15/iss2/art11/> accessed 20th April 2022

⁶² MacGregor, Sherilyn (2010). 'Gender and climate change': (from impacts to discourses. *Journal of the Indian Ocean Region*, 2010) 6(2), 223–238. <10.1080/19480881.2010.536669> accessed 20th April 2022

⁶³ World Health Organisation, 'Gender, Climate Change and Health' (WHO 2014) <https://apps.who.int/iris/bitstream/handle/10665/144781/9789241508186_eng.pdf?sequence=1&isAllowed=y> accessed 20th April 2022

Women in already vulnerable and poor conditions especially in underdeveloped regions are most likely to be displaced in the face of disaster, making their number the highest amongst climate refugees, most susceptible to sexual abuse, and maternal death due to poor health care facilities. And even when not displaced after a crisis, they are left behind in tougher conditions as saviours and still experience the pain of the crisis independently which leads to so many unfortunate circumstances.⁶⁴ With all these biases against women, their presence in the policymaking process for a crisis-free climate is an added advantage for success.

Another inconsistency found in the COP26 is their misappropriation of words like the use of words that can be interpreted as probabilities or connotes that the organizers of the COP are not been sure of their persuasiveness on states to obey the terms of the agreements. The use of words like ‘encourage, request, remind’ and many others, would rather be interpreted by the parties and political leaders as weak which can easily misinterpret the message of achieving a crisis-free climate, the urgency for actions will be taken for granted.

I will like to connect this to how it affects the final pledges made by the parties at the end of COP26. At the end of the Conference, 137 countries pledged to reverse deforestation backed by billions of dollars of funding from both private, and financial institutions and trillions of dollars from global assets to make implementation possible, 103 countries pledged to reduce the emission of methane by 30 per cent by 2030, and more than 30 countries including cities, car manufacturing companies pledged to begin producing new cars to be zero-emission cars with the aim of total transformation by 2040, countries like the United Kingdom, the United States, France, Germany and South Africa, agreed to collaborate and support each other to create a carbon-free economy.⁶⁵ All these pledges communicate consent, collaboration and determination to reach the goal

⁶⁴ UNIFEM, ‘policy and programme work on international migration by the united nations development fund for women’(2008)<https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/unpd-cm7-2008-11_p06_unifem.pdf> accessed 20th April 2022

⁶⁵ United Nations, ‘COP26: Together for our planet’ (Climate Action 2021) <<https://www.un.org/en/climatechange/cop26>> accessed 20th April 2022

by 2050 but the problem sets in when the individual participant in the pledges are singled out.

Taking the coal pledge, for an instance, countries like Chile, Vietnam, and Poland pledged to face out of coal by 2030, but the largest users of coal were not part of this pledge. Countries like China and US are the greatest coal-dependent nations and they should be the first to pledge to this course. Their absence in this pledge sets the process of achieving this goal in jeopardy, considering that all efforts by other countries to face out coal will do little to achieve a coal-free economy with the absence of the largest users. During the conference, UK business secretary Ed Miliband pointed out that there are gaps among the other largest emitters and China who have not promised to stop the use of coal domestically. I will blame this on the non-binding nature of the conference, then primarily on the weak languages used during the conference.⁶⁶

The same problem goes for the pledge on cutting methane emissions, out of 105 countries with the 15 largest emitters as parties to the pledge; there were four (4) significant emitters and plumbers of methane locally. Countries like China, India, Russia and Australia are responsible for the highest per cent of methane emissions and even though methane is responsible for 30% of GHG in the atmosphere, these countries were absent from the pledge with nothing being done or said about it.⁶⁷

Producing zero-emission vehicles

One of the outstanding pledges made at the COP26 for reducing GHG emissions was the production of zero-emission vehicles, more than 30 countries including six(6) major car-producing companies pledged to this goal to completely face out the selling of petrol and diesel cars by 2035 hence achieving a decarbonised road transport system by 2040⁶⁸ switching from petrol used cars to electric cars will be one of the many changes we will have to adapt to as our lives changes with regards to the decisions made in the COP26

⁶⁶Matt McGrath, 'COP26: More than 40 countries pledge to quit coal' BBC News (November 2021) <<https://www.bbc.com/news/science-environment-59159018>> accessed 20th April 2022

⁶⁷Adam Vaughan, 'COP26: 105 countries pledge to cut methane emissions by 30 percent' (Environment 2021) <<https://www.newscientist.com/article/2295810-cop26-105-countries-pledge-to-cut-methane-emissions-by-30-per-cent/>> accessed 20th April 2022

⁶⁸United Nations, 'COP26: Together for our planet' (Climate Action 2021) <<https://www.un.org/en/climatechange/cop26>> accessed 20th April 2022

summit. Transportation contributes 26% of the GHG into the atmosphere. Out of the 26%, road transport is responsible for 10% of the emission which makes it important to phase out carbon-producing cars as soon as possible. While many experts believe that electric cars will in no time be as cheap as petrol cars, others argue that making electric cars affordable is not solving the problem, but cutting down the number of petrol cars used for transportation is enough to solve the issue of cars generating carbon.⁶⁹

Tackling transport has been on the climate change agenda since the Kyoto protocol in 1997. Generally, transportation strongly affects the environment because fuel is the primary source enabling transport and the process of extracting and refining crude oil for transportation and other purposes also contributes to the release of CO₂. Research has shown that 76% of CO₂ emission from cars was a result of their use of fuel, only 9% is produced from the process of car manufacturing, and 15% is produced in the process of oil supply.⁷⁰

For several years, scholars have suggested the substitute for road transport for walking and the use of cycles to reduce the number of cars that are been produced, and the number of cars use for transportation and equally reduce the extraction, refining and transfer of crude oil. Others have also suggested that the government can encourage people to use public transport by increasing taxes on car production, increasing parking prices, penalty fines, and fuel tax levies. As this will reduce congestion of Carbon in the environment as lesser cars will be on the road daily.⁷¹

From all indications over the years, the road transport industry has expanded massively and going back to walking and using cycles to substitute cars will not be a great option for a fast-growing world. The zero-emission cars as proposed in the COP26 are most likely becoming the new normal as many electric car producing companies like Waymo, Uber, Lucid Motors, Tesla, Zoox, Revel, Hyliion and many others have emerged and are implementing the zero-emission policy.⁷²

⁶⁹Helen Briggs, 'COP26: How might decisions at the climate summit change our lives?' (BBC Environment 2021) <<https://www.bbc.com/news/science-environment-59263761>> accessed 20th April 2022

⁷⁰Lee Chapman, 'Transport and climate change: a review' (2007) 15(5), 0-367 </10.1016/j.jtrangeo.2006.11.008> accessed 20th April 2022

⁷¹Jillian Anable and Shaw, 'Priorities, Policies and (Time) Scales: The Delivery of Emissions Reductions in the UK Transport Sector' (2007) AREA 39(4), 443-457 </10.2307/40346066> accessed 20th April 2022

⁷²Sunny Betz, 'The Top 30 Electric Car Companies Shaping the Future of Travel' (2022) <<https://builtin.com/transportation-technology/electric-car-companies>> accessed 20th April 2022

Having electric cars as a substitute for petrol consuming cars is a better option for carbon emission. But, what about the carbon emitted during the production of these cars? What about the energy they consume, the materials used in producing their batteries, and where will all the petrol using cars be kept during this transition?

Research has shown that using electric cars also known as zero-emission cars will reduce the use of fuel and at the same time cut down road transport carbon emissions by 33% however, the use of electric cars will require more electricity consumption. The electric car's advantage over regular petrol consuming cars is that electric cars can capture and store energy as well as convert actual energy to electrical energy through the Regenerating Braking System (RBS). It has also been discovered that in the case of Electric vehicles, saving power is more efficient when in an urban traffic-congested route in contrast to the traditional petrol consuming vehicles where free roads help save time and fuel. This is suggesting that as the numbers of electric cars increase, the behaviour of an EV driver in the future has to be different from the behaviour of petrol consuming car drivers.⁷³

The concept of zero-emission concerning electric cars has been questioned because they need more electricity to function. It has also been discovered that the purer the energy, the better the electricity and the better the electricity used in powering the electric car, the better it functions. Now, 60% of electricity is gotten mostly from burning fuels fuel that causes air pollution as well as causes damage to the environment. The bigger an electric vehicle is the larger the battery and the more electricity is needed to power it which means more fuel is burnt⁷⁴

Another concern about the notion of electric cars' zero-emission policy is that the mineral resources like cobalt, nickel, lithium etc used for producing the batteries of these vehicles are found under the ground and the process of extracting and refining these elements is very polluting to the environment.⁷⁵ So, the amount of pollution that will be caused by using electric vehicles including their battery production process as

⁷³ Wu, Xinkai and others, 'Electric Vehicles energy consumption, measurement and estimation' (2015) Transport and Environment 34(0), 52<<https://sci-hub.hkvisa.net/10.1016/j.trd.2014.10.007>> accessed 21st April 2022

⁷⁴ Anrica Deb, 'Why electric cars are as clean as their power supply' the Guardian(Palo Alto, California 8 Dec, 2016)< <https://www.theguardian.com/environment/2016/dec/08/electric-car-emissions-climate-change>> accessed 21st April 2022

⁷⁵ André Gonçalves, 'Are Electric Cars really Greener?' You matter(25th Sep, 2018)<<https://youmatter.world/en/are-electric-cars-eco-friendly-and-zero-emission-vehicles-26440/>> accessed 21st April 2022

well as generating the electricity used for charging them will be equal to or even more than the CO₂ produced by the traditional petrol and diesel consuming vehicles.

For many centuries till dates, Africa remains the exploration and exploitation ground for developed countries, as well as a dumping ground for unwanted goods, electronic appliances, clothes, foods, and cars just to mention a few. I am subjectively convinced that transitioning and adapting to zero-emission vehicles will not just be a difficult thing for African countries, but Africa will as well be the dumping ground for the present petrol consuming vehicles that are presently in use.

One of the most ignored parts of transitioning, adaptation and transfer of technologies in the COP was their inability to consider the downstream of Mining, waste flow and the labour involved in creating a decarbonised economy. Transitioning from petrol and diesel consuming vehicles to electric cars sounds great, but for so many years, the Democratic Republic of Congo has been the mining ground for mining the element like cobalt, nickel, lithium and so many others used in making the batteries for laptops, electric cars, phones and other electronic appliances. Not only have these activities destroyed the land and environment in that region, but there is also a high rate of child labour, a toxic working environment for the locals, an inappropriate payment system etc all of these are all just in a bit to transition to a decarbonised system.

Ghana has for many years been the processing and recycling ground for E-waste⁷⁶ The International Energy Agency in 2018 reported that EVs will increase to 125 million cars, trucks and Lorries by the year 2030.⁷⁷ This prediction also indicates rapid production of the batteries, more mining, more E-waste, and more electricity consumption. The question now will be, at whose expense will all these be, whose life, Land, region and resource will be destroyed for this course?

Despite all the advantages of EVs, the process of transitioning will be rather slow or largely impossible in developing and least developed countries. Producing the cars and exporting them to these countries will not be the problem, but the energy with which to power the batteries and sustain these cars will be the first problem. Before most of these countries will be able to manage EVs, they must first build stable electricity. And

⁷⁶Benjamin K.Sovacool and others, 'the decarbonisation divide: Contextualizing landscapes of low-carbon exploitation and toxicity in Africa' (Jan, 2020) volume 60 <<https://doi.org/10.1016/j.gloenvcha.2019.102028>> accessed 21st April 2022

⁷⁷IEA, 'Electric Vehicles'(IEA, Paris 2021)<<https://www.iea.org/reports/electric-vehicles>> accessed 21st April 2022

if the electricity generated is from fossil fuels, then it equates to more harm than good. After which these countries must be empowered with knowledge of how EVs operate and are used. With all the predictions and growth of the road transport system with regards to EVs all other excesses must be put into consideration and tackled appropriately if not, all efforts to create a carbon-free climate might just continue to remain an issue for deliberation in the future COPs after 2030.

Global acceptance of Bitcoin

While the world battles the reduction of E-waste, tries to focus on energy efficiency and puts more effort into producing a more substantial and transposable product and encourages the use of viable sources to lower the emission of carbon in the environment, evolution in technology causing the acceleration of change and globalization is making the transition to clean and renewable energies almost impossible, as new technologies are invented daily and possibilities of regulating them are getting slimmer by the day. Some recently invented technologies that took a tone on the world financial system and are gradually affecting other world sectors are cryptocurrencies and blockchain.

Cryptocurrency is a system of money, coming from the Greek word ‘*kurptos*’ which means hidden. It is used mainly as a prefix. Example: cryptography, cryptology etc. In this regard and in the simplest form, cryptocurrency is defined as hidden money.⁷⁸ This is true because no one has ever touched or seen the currency. Cryptocurrency is a payment exchanged online. It is a digital currency used for buying goods and services using online ledgers. Example of cryptocurrency includes. Litecoin, bitcoin, chainlink, tether, polkadot etc.⁷⁹

Cryptocurrency stores information through the use of blockchain. Blockchain is a mechanism that uses cryptography to record data where there can only be an addition to the structure and nothing else. So as the name implies, information in blockchain is encrypted in block forms initiated by nodes. Even though blockchain is mostly known to be applied to financial services and digital schemes, it can theoretically be applied to other institutions like healthcare, trade, governance etc. Although cryptocurrency and blockchain are used regularly

⁷⁸ Brain Benchoff, What does Crypto actually mean?, April 23rd 2018, Hackday<<https://hackaday.com/2018/04/23/what-does-crypto-actually-mean/>> accessed 22/04/2022

⁷⁹ James Royal. PHD, Kevin Viogt, What is Crypto currency?, March 23,2021, Nerdwallet,<<https://www.nerdwallet.com/article/investing/cryptocurrency>> accessed 22/04/2022

together, they are in every way different from each other. Blockchain is the ledger used by cryptocurrency for transactions.⁸⁰

In the last two years, we have experienced a rise in the use of cryptocurrencies, especially bitcoin. The uses of these currencies have made it easier for both merchants and consumers to perform transactions all around the world without going through any bank rules and regulations. The use of cryptocurrencies has given a lot of hope to many, as it is said to have created a more borderless and globalized economy, and has the potential of fighting inequality hence, a global acceptance of this currency⁸¹

The rise of blockchain has accelerated commercial activities in the continent of Europe and Asia. Governments are experimenting with blockchain technologies to secure their services, cryptocurrencies are used as speculative investment across borders, and companies and individuals are mining cryptocurrencies (bitcoin) and providing blockchain services.⁸² The United States is listed as the largest bitcoin miner after China banned mining, Kazakhstan as the second-largest miner and recently Russia in 2022 as one of the biggest miners of bitcoin.⁸³

While the world accepts the use and mining of bitcoin as a step up in a financial transaction, research has shown that the carbon emission associated with mining bitcoin alone is enough to accelerate global warming above 2°C. In 2017, 69 Metric tons of carbon dioxide equivalents (MTCO_{2e}) were emitted from bitcoin mining and usage, bitcoin covered 0.033% of cashless transactions as of that time. bitcoin grew bigger and larger in the year 2020 with an increase of over 300% rise in its price and circulation which means more mining and more carbon emission.

The concern is that if bitcoin mining and usage can leave such a massive carbon

⁸⁰ European Parliament, Legal context and implications for financial crime, money laundering and tax evasion, March 2018, Crypto currencies and Blockchain
<<https://www.europarl.europa.eu/cmsdata/150761/TAX3%20Study%20on%20cryptocurrencies%20and%20blockchain.pdf>> accessed, 22/04/2022

⁸¹ IlkerKoksal, The rise of Crypto as Payment Currency, 23rd August 2019, Forbs,
<<https://www.forbes.com/sites/ilkerkoksal/2019/08/23/the-rise-of-crypto-as-payment-currency/?sh=ac7e91526e98>> accessed 22/04/2022

⁸² World Bank Group, Cryptocurrency and blockchain, May 2018, World bank document,
<<http://documents1.worldbank.org/curated/pt/293821525702130886/pdf/Cryptocurrencies-and-blockchain.pdf>> page 22, accessed 22/04/2022

⁸³ Finance, 'Where are the key Bitcoin mining hotspots and what is the industry's future?' (24, Feb, 2022)<<https://www.investmentmonitor.ai/finance/bitcoin-mining-hotspots-energy-countries#:~:text=Since%20China%20banned%20crypto%2C%20the,%20and%20pro%2Dcryptocurrency%20policies.>> accessed 22/04/2022

footprint within a short period, and if it continues at this rate, its level of emission can warm the globe above 2°C in the next few years.⁸⁴

Amidst the emission and carbon emissions, many have pointed out that the benefits of bitcoin outweigh its disadvantages especially when blockchain is considered. John Truby, the director of Qatar University's Centre for Law and Development has pointed out that the technology behind bitcoin can be adopted to tackle climate change. Bitcoin relies on blockchain as its DLT, countries can record their mitigation progress by allowing emitters to record their emission quantity and using blockchain in this regard will help the full implementation of Art 6 of the Paris agreement which focuses on ensuring transparency by countries in their effort to mitigate carbon emission in their NDCs.⁸⁵

Bitcoin has many times been described as a power-consuming monster, research shows that the energy consumption of bitcoin can be around 213,101,865kWh (Kilowatt-hour) estimated value per day. It has been agreed that bitcoin energy usage is more than the total energy consumed by some countries annually. Despite all these, experts have pointed out that BTC is greener than we can think, unlike the fiat money transfer where the money goes through so many processes, centres for dictating fraud etc before getting to its final destination, experts have called the process an energy monger as well. So many solutions to bitcoin energy consumption have been suggested over the years.

Some experts have suggested empowering miners with the knowledge of clean energy thereby changing their mindset from using energy generated through burning fuel fuels to energies generated from the wind, solar, etc. Some have also suggested that mining should not be for everyone, and there should be a system to regulate who qualifies to mine bitcoin. For example, a miner is only qualified if he or she has a rank of more than 100. So the number of miners should be regulated

⁸⁴Mora, and others, 'Bitcoin emissions alone could push global warming above 2°C' (2018) Nature Climate Change <<https://sci-hub.hkvisa.net/10.1038/s41558-018-0321-8>> accessed 22/04/2022

⁸⁵ Jon Truby, 'Using Bitcoin technology to combat climate change' (19th, Sep, 2018) <https://www.researchgate.net/profile/Jon-Truby/publication/327761950_Using_Bitcoin_technology_to_combat_climate_change/links/5c1674aea6fdcc494ffa141b/Using-Bitcoin-technology-to-combat-climate-change.pdf> accessed 22/04/2022

and offenders should be duly punished. Building new algorithms to support the green blockchain policy is also necessary.⁸⁶

Findings for Research Question II

Impact of climate change on Africa

It is undeniable that since human activities started causing climate change, the planet's biodiversity has been greatly affected. Beginning from genes, individual species, groups of creatures, and then the whole ecosystem (interaction between plants and animals) is affected.⁸⁷ It is also true that this effect is more concentrated in some regions than it is in others, but this effect is gradually covering the entire earth. Africa as a continent has for many years been on the vulnerable side of climate change, it is still at the dead-end of its experience due to climate change. Although some parts of Asia, Island countries are also victims of this change, I will focus on Africa, why it is at the receiving end of the effect of climate change, the aftermath of climate change on the continent and how to balance these impacts with the results at COP26.

Africa has been exposed to drought, extreme floods and storms due to climate change and although they have contributed very low carbon emissions compared to other continents, they are suffering greatly from it. Many reasons have been given as to why Africa has suffered more from climate change in contrast to other regions.

Firstly, scholars argued that the extreme rate of poverty, high reliance on agricultural produce, low technological growth, and poor economic and financial

⁸⁶ Mir, Usama, 'Bitcoin and Its Energy Usage: Existing Approaches, Important Opinions, Current Trends, and Future Challenges' (2020) Volume 14 issue 8 <<https://doi.org/10.3837/tiis.2020.08.005>> accessed 22/04/2022

⁸⁷ Damian Carrington, 'What is biodiversity, and why does it matter to us' The Guardian, (March 2018) <<https://www.theguardian.com/news/2018/mar/12/what-is-biodiversity-and-why-does-it-matter-to-us>> accessed 25/04/2022

system have made Africa less adaptive to climate resilience, and most unguarded to the effects of climate change⁸⁸

Collier and others explained the connections of all these factors and how they expose the continent to the damaging effects of climate change. Reliance on Agriculture as a source of livelihood generally includes depending on agriculture for employment, source of national revenue, and source of food for both humans and animals, as countries balance of payment booster of which new technological equipment are imported into the country. Employment dependence on agriculture in Africa is about 60% while in some countries 50% of their GDP rests on the growth of agriculture.⁸⁹ This connection will in simple terms suggest that a shift in the agricultural season in Africa causes a negative change in all that has been mentioned above, making the effect worst than it is in developed countries.

One of the outstanding impacts of climate change on Africa is its direct trigger of conflict in the most vulnerable regions. The IPCC stated that climate change could be one of the main causes of conflict by causing drought, and desertification which intensifies the scarcity of freshwater, food, and other natural resources, also causing huge population dislocations, migrations, and relocations.⁹⁰ In Africa, there are so many conflicts that have traced their roots to changes in the climate.

One of them is the world's worst humanitarian crisis, the Darfur conflict in the western region of Sudan, this war has also been referred to as genocide by the UN and is often compared with the 1994 Rwandan genocide, the Darfur conflict even though can be traced back to 1960, the tragic event that escalated the war in 2003 is associated to environmental degradation and a great scramble for shrinking

⁸⁸ Coleen Vogel, 'Why Africa is particularly vulnerable to climate change' The Conversation (2015) <[⁸⁹ Collier and others, 'Climate change and Africa' \(2008\) Oxford Review of Economic Policy, 24\(2\), 337-353 <<https://sci-hub.hkvisa.net/10.1093/oxrep/grn019>> accessed 52/04/2022](https://theconversation.com/why-africa-is-particularly-vulnerable-to-climate-change-41775#:~:text=In%20the%20case%20of%20climate,extreme%20droughts%2C%20flooding%20and%20storms.> accessed 25/04/2022</p>
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⁹⁰ IPCC, 'Synthesis Report' (Climate change 2007) IPCC Geneva <https://www.ipcc.ch/site/assets/uploads/2018/02/ar4_syr_full_report.pdf> accessed 25/04/2022

natural resources in the region, social inequalities, oppression of minority group capped with bad governance was also a contributing factor to the Darfur conflict.⁹¹

Another conflict that has been associated with climate change is the ongoing farmers and herder conflict in Nigeria which is claimed to have taken more lives than the Boko Haram insurgency, accelerated the number of displaced persons, threatens the security of the whole country, and has ruptured many ethnic groups, religions and regions. The conflicts are associated with the continuous desert encroachment from the Sahara desert into the northern region of Nigeria due to a long period of extreme drought causing limited access to vegetation by the herders, forcing them to migrate to the southern forest zone of Nigeria in search of vegetation to feed their cattle.⁹²

Furthermore, conflicts in countries like the Democratic Republic of Congo, the Central African Republic, Somalia, and Mali just to mention a few have been linked to climate change. In Mali, terrorist and extremist groups are said to have a conducive environment to recruit after a poor raining season. The Institute for Security Studies (ISS) stated that 80% of the UN peacekeeping agents are deployed in areas most vulnerable to Climate change effects as an outcome of frequent conflicts in those regions caused by climate change.⁹³

With just a few concerns discussed above on the impact of climate change in Africa, one of the decisions adopted during the COP26 is the enhancement of climate technology and transfer of the transfer of new technologies. Pointing out the need to enhance climate technology in regions where there is no technology at all is needless. Encouraging the Climate Technology Centre and Network to improve their empowerment mechanisms in educating people about climate change through the use of technology without first addressing and finding solutions to the conflicts, lack of natural resources, poverty, hunger etc which was caused by climate change will partly be a waste of time because no one will be ready to be empowered against climate change when survival is uncertain.

⁹¹ Ahmad Sikainga, 'The World's Worst Humanitarian Crisis': Understanding the Darfur Conflict' (2009) <https://origins.osu.edu/article/worlds-worst-humanitarian-crisis-understanding-darfur-conflict?language_content_entity=en> accessed 25/04/2022

⁹² Ojemire B. Daniel, 'Climate Change and Farmers- Herders Conflict in Nigeria' (2021) <<https://www.newsecuritybeat.org/2021/11/climate-change-farmers-herders-conflict-nigeria/>> accessed 25/04/2022

⁹³ ISS, 'Climate change and violence in Africa' (May 2021) <<https://issafrica.org/iss-today/climate-change-and-violence-in-africa-no-time-to-lose>> accessed 25/04/2022

Africa is at the receiving end of a problem they contributed almost nothing to and yet one of the reasons why the fight against climate change is slow is because Africa is underdeveloped, and lacks technological empowerment and the know-how to adapt and develop resilience against climate change. And the effects are just been recognised with nothing done about it.

The first time climate change effect was specifically addressed was in 2021 by the African Union and Security Council (AUPSC) but this effect has been going on for decades some of the consequences of these effects for many years were blamed on illiteracy, corruption, bad governance, etc and even though they are part of the problem, it has been argued that climate change worsened the situation. The core of which is climate change was still not addressed at the COP26 conference. Ignoring major problems as such will suggest the imbalanced nature of the COP.

Impacts of Climate Change on Global Migration

In the year 1990, the IPCC predicted that the most dreadful impact of climate change will be on human migration, they predicted that by 2050, 200 million persons will be displaced and forced to migrate due to the flood, drought, erosion and trouble in an effective agricultural system all caused by climate change.⁹⁴ Taking the IPCC's prediction will mean that by 2050, 1 in 45 persons will be displaced by climate change. In the mid-90s, the report showed that environmental degradation had caused 25 million people to forcefully migrate to other parts of the world. The number at that time was more than the number of documented political, war refugees and refugees running away from persecution worldwide.⁹⁵ Subjecting the above prediction to questioning, scholars like Dr Myers, stated that even though the prediction might not be wrong, nobody can ascertain the impact

⁹⁴International Organization for Migration, 'Migration and Climate Change'(International Organization for Migration Geneva 2008) NO 31<[file:///C:/Users/ACER%20USER/Downloads/5866%20\(2\).pdf](file:///C:/Users/ACER%20USER/Downloads/5866%20(2).pdf)> accessed 28/04/2022

⁹⁵ Steve Lonergan, 'The Role of Environmental Degradation in Population Displacement'(1998) ACF1493, Page 5-15
<<https://oceanfdn.org/sites/default/files/The%20Role%20of%20Environmental%20Degradation%20in%20Population%20Displacement.pdf>> accessed 28/04/2022

of climate change on the human population by 2050.⁹⁶ Notwithstanding, the IOM in 2020 reported that 281 million persons are

Migrants, the estimated number of people living in countries other than theirs in 2020 was 128 million more than the number of migrants in 1990, and three times more than it was in 1970.⁹⁷

There is no doubt that climate migration is caused by climate change, but the direct connection between climate change and migration will be difficult to identify just as it is in identifying the connection between climate change and conflict. For example, it will be ridiculous to leave a region just because the amount of rainfall in that region is higher than in another region if there is no harm caused by excessive rainfall. In-between climate change and migration lays the climate process and the effects of climate change on the environment causing migration (Climate event).

Climate processes eventually cause climate events in many situations. Climate change occurs gradually over a long period and finally makes an environment inhabitable which is a climate event. An example of a climate process will be the shortage of water in an environment over a long period both surface and underground water which causes drought. Another example is the rise in sea level that takes place over some time and it causes erosion of beaches, flooding etc.

While the climate process occurs slowly for a long period, climate events can sometimes be the result of the climate process and also the sudden occurrence of a natural hazard causing human displacement in a particular region. Some examples of climate events are floods, storms, hurricanes etc. Climate events cause their homes, lands countries and lives faster than climate processes. A typical event showing the dangers of climate events is the Hurricane Katrina of 2005 in Louisiana where two consecutive storms from the 29th of August to the 24th of September, resulted in the death of about 2,000 people and caused economic damage of more than 91 billion dollars in just a short period.

⁹⁶ Jeremy Lovell, 'Climate change to make one billion refugees-agency' (London, May 2014) <<https://www.reuters.com/article/idUSL10710325>> accessed 28/04/2022

⁹⁷ International Organization for Migration, IOM Definition of Migrant' (2022) <<https://www.iom.int/about-migration>> accessed 28/04/2022

The concept behind natural disasters caused by climate change is that the effects are worst when it occurs in an already vulnerable region, where climate resilience has not been built, no empowerment on climate change and how to handle the situation and there are no warning signals for the coming hazard. Many of the affected regions have been vulnerable for a long time before the occurrence of the climate change disaster; many other regions yet to face these disasters are still ignorant of building resilience against climate change.⁹⁸

International Law and Climate Migrants

Climate migration is not a new thing in international law. As old as migration Law is a concern, climate migration has been a part of the problems discussed alongside other problems causing migration.

In my opinion, all the 17 UN sustainable development goals to end poverty and hunger, provide clean water, affordable energy, quality education, gender equality, decent work and economic growth, protect life on land and in the water, protect the climate, create sustainable cities and empower responsible production and consumption are all in part to reduce migration because migration is caused by some of the factors mentioned above. The UN migration network group prioritizes combating climate change and smuggling migrants among many others.

Under international law, generating the power of international law on a subject matter means that the matter is capable of a legal definition. In other words, there must be a legal and acceptable definition of a subject under international law of which there is no legal definition of the term climate migrant under international law. Unlike other categories of migrants like Asylum seekers and Refugees who are duly defined and protected under the 1951 Refugee Convention and its 1967 Protocol, the clear definition of a migrant leaving his home as a result of the effect of climate change is not legally defined under any instrument in International Law.⁹⁹

⁹⁸ Oli Brown, 'Migration and Climate Change' (2008) No 31
<<file:///C:/Users/ACER%20USER/Downloads/5866.pdf>> accessed 29/04/2022

⁹⁹The UN Refugee Agency, 'convention and protocol relating to the status of refugees' (Resolution 2198 (XXI) adopted by the United Nations General Assembly) <<https://www.unhcr.org/3b66c2aa10>> accessed 29/04/2022

In 1985, Essam El- Hinnawi defined the commonly used definition of climate migrants as “people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/ or triggered by people) that jeopardized their existence and /or seriously affected the quality of their life”¹⁰⁰ from this definition, the term environmental migrant is used to described persons leaving their countries as a result of environmental degradation which has caused them to be unable to sustain livelihood. Not ignoring the influence of the environmental and climate factor causing migration the UN Refugee Agency (UNHCR), did not recognize the definition of an environmental refugee as a legally binding term under international law.¹⁰¹

While still trying to examine the recognition of the term ‘environmental refugee’ under international law for many years, the debate has lingered concerning the link between climate change and the legality of an environmental refugee under international law; in 1997, Kibreab argued that the term environmental refugee was invented to depoliticise the causes of displacement, and so to enable states to devalue their obligation to provide asylum under international law hence it is ‘poorly defined and legally meaningless’.¹⁰²

Castle in 2002 argued that receiving states will rather prefer to keep the definition of environmental refugee as not legally accepted because of the already existing obligation they have towards refugees. Opening their gates to a new set of displaced persons in the name of refugees is not an economic advantage for the state.¹⁰³

I won’t agree less with Kibreab and Castle on their opinion on the casualties around the legal acceptance of the definition of Climate migrants linking it to recent responses concerning climate migrants using the case of Ioane Teitiota v New Zealand, the first case concerning climate change and migration under international law. While others have argues that this case shows the limitation of

¹⁰⁰ Elena Piasentin, ‘Freedom from Fear’ (Nov 2016) *Volume 2016, Issue 12*, p. 32 - 39

¹⁰¹ Brian Gorlick, ‘Environmentally Displaced Persons: a UNHCR perspective’ (2009) <<https://perma.cc/47UZ-V2J6>> accessed 29/04/2022

¹⁰² Kibreab, G. “Environmental causes and impact of refugee movements: a critique of the current debate”, (1997) *Disasters* 21(1), pp. 20–38. <doi:10.1111/1467-7717.00042 > accessed 29/04/2022

¹⁰³ Stephen Castles, ‘Environmental change and force migration, making sense of the debate’ (2002) UNHCR Refugee Research Paper No7 <<https://www.refworld.org/pdfid/4ff3f8022.pdf>.> accessed 29/04/2022

the human rights framework in protecting climate migrants others have seen it as a step forward in the protection of climate migrants under International Law.

In the case of *Ioane Teitiota v New Zealand*, Ioane Teitiota, a Kiribatian was deported to Kiribati in 2015 with his family after the New Zealand Immigration and Protection Tribunal dismissed his refugee plea because it found that the petitioner had not supplied adequate evidence that he faced a serious risk of being victimized in a life-threatening circumstance caused as a result of environmental degradation. Ioane Teitiota filed an individual letter with the UN Human Rights Committee, claiming that by returning him to Kiribati, New Zealand had breached his right to life under Article 6 of the ICCPR, and even though the answer to if he faces a real risk of irreparable harm” to his right to life in Kiribati was not answered due to insufficient evidence, the UN Human Rights Committee on the 7 of January 2020, ruled that climate-induced displaced people cannot be repatriated to countries where their lives are threatened. Climate conditions can therefore elicit non-refoulement responsibilities. Human rights and refugee rights advocates hailed the decision as a “ground-breaking” decision that allows future protection claims for people whose lives are threatened by climate change.

In my opinion, the New Zealand government applied strictly the definition of a refugee as defined in the 1951 convention relating to the status of refugee, with a total disregard for Teitiota's security, particularly his right to life, and what made matters worse for him was the inability the UN committee to protect his right to life at that point by not allowing New Zealand courts deport him because he did not produce sufficient evidence to cause grave harm to his life. The question then becomes, what yardstick did the committee used to quantify the weight of the threat to his life, or what is the threshold of harm that climate change should wreak on a person before seeking shelter in another country? Certainly, many climate change victims will be deported on the same grounds since the definition of refugee in the 1951 convention relating to the status of refugee remains the same, and since there is no legal acceptable definition of a climate migrant under international law. The lack of direct measurement to determine the degree to which the person is psychologically debilitated due to their loss of property and risk of losing their lives is a reason why states can easily rely on the text of the 1951 convention to the disadvantage of climate migrants.

The UNHCR has declared that climate migrants can rely on the 1951 convention in seeking asylum but the question is, how effective can that be when it is still intertwined with violence and conflict, and are states willing to open their doors to new sets of refugees under the umbrella of climate change? This question takes us back to the role of COP and their decisions on ending climate change, referring back to the legality of the Conference of the Party, and their enforcement mechanism for making states commit to their obligations under international law.

Findings for Research question III

The international community is made up of states and non-state actors, organizations, legal personalities and individuals. The explanation of international law in its ability to govern lies in its sources of law. Art 38(1) of the ICJ explains the application of international conventions (treaties), customs, general principles of law, and judicial decisions in executing its powers over the state and non-state actors' actions and inactions under international law.¹⁰⁴

The most generally accepted definition of international law is that international law is a body of binding norms that governs the relationships of states. Without states, there will be no international law, this simply means that states, coming together to create laws and obligations to guide their actions towards each other is the foundation of international law. All the sources of international law used by international legal institutions like the ICJ, to solve disputes all stems from states' actions (customary laws), agreements (treaties) and decisions. This will imply as well that since states make the laws, they can decide to do otherwise (unmake unfavourable laws).

International law recognises states as legally independent, and sovereign which means states' consent is a necessity for making legally binding laws that create an international legal obligation and allow for smooth dispute settlement procedures

¹⁰⁴Statute of the International Court of Justice 1920, Art 38(1)

under international law. This applies to the process of solving every international problem including environmental protection and climate restoration.¹⁰⁵

International law aims to interpret the responsibilities of states towards each other and to gain the cooperation of states in addressing common international issues. But while all these aims are achievable, it all depends on states' voluntariness in accepting legal obligations in form of treaties, customs and general principles, which is where the main problem of international law lies. There is no other law-making body under international law apart from the states. The United Nations is a universally accepted supranational organisation whose rules are globally accepted because of the participation of states in decision making but it has no legislative power. It has from the beginning of international environmental protection, initiated the idea of climate restoration, and one of its earliest and most significant actions taken was the Montreal protocol of 1987 on the substance that depletes the ozone layer. It is one of the most significant, because of its global state acceptance and ratification and also, the fact that 99% of the ozone-depleting substances were eliminated on this accord.¹⁰⁶

The Kyoto protocol of 1997 which was produced by the UNFCCC also stands with significance as the first international legally binding climate treaty, requiring developed countries to reduce the emission of GHG by 5% and to monitor their progress journey. The Kyoto protocol is criticized for ignoring some developing states like China that are also considered high emitters of carbon. The fact that the Kyoto protocol was a legally binding agreement did not stop the United States from choosing not to ratify the treaty. Other major emitters were also not part of the Kyoto protocol, which proves further the sovereignty of states in their decision to participate in the international law-making process, hence one of the biggest limitations of the Kyoto protocol. The Kyoto protocol compliance mechanism which was to prove its binding nature was not amended by the parties to the

¹⁰⁵ Alexandre Kiss, Dinah Shelton, *Guide to International Environmental Law* (MartinusNijhoff Publishers, Leiden / Boston 2007) Chap 1, page 1-11

¹⁰⁶ Lindsay Maizland, 'Global climate agreements: successes and failures' (Council on Foreign Relations, November 2021) <<https://www.cfr.org/backgrounder/paris-global-climate-change-agreements>> accessed 2/05/2022

convention which makes the compliance mechanism a political agreement with no legal binding status in international law.¹⁰⁷

The 2015 Paris Agreement still stands as the most significant climate convention to date, to reduce GHG below 2°C, requiring states to set targets known as the NDCs, with no enforcement mechanism to make sure states meet their target. The Paris Agreement also aims at reaching a carbon-neutral state where the amount of GHG emitted will be equally proportionate to the amount removed from the atmosphere. Some states are yet to formally approve the Paris Agreement. The Conference of the Parties in general, is a multinational convention, a product of the UN general assembly resolution and although assisted by the secretariats and specialized bodies, their decisions and norms and legal counsels, are not binding on state parties, and in most cases the binding nature these conventions are debatable.¹⁰⁸

Environmental protection laws have since been generated by non-legally binding instruments of international law such as resolutions, decisions and action programs which are soft laws. Agenda 21 adopted by the 1972 Rio Conference on Environment and Development, and the Arctic Environmental Protection Strategy, the adoption of the Conference of the parties fall as an example of soft law. It is no doubt that soft laws are more flexible and allow for the participation of other non-state actors, experts, legal persons and non-governmental organisations. But international agreements are made effective by the actions and compliance of states. It is also true that the legally binding nature of an agreement is not enough reason for states' compliance under international law. States are motivated by other reasons such as building reputation, boosting economic and military power, political reasons and self-interest. The fact that international laws depend on states' consent and compliance is not hopeful that states to achieve an international vision of reaching a carbon-neutral state.¹⁰⁹

¹⁰⁷ Hannah Chang, A “Legally Binding” Climate Agreement: What Does it Mean? Why does it Matter?(Columbia Climate school 2010)<<https://news.climate.columbia.edu/2010/02/23/a-%E2%80%9Clegally-binding%E2%80%9D-climate-agreement-what-does-it-mean-why-does-it-matter/>> accessed 2/05/2022

¹⁰⁸ Alexandre Kiss, Dinah Shelton, Guide to International Environmental Law (MartinusNijhoff Publishers, Leiden / Boston 2007) Chap 1, page 1-11

¹⁰⁹ Hannah Chang, A “Legally Binding” Climate Agreement: What Does it Mean? Why does it Matter?(Columbia Climate school 2010)<<https://news.climate.columbia.edu/2010/02/23/a-%E2%80%9Clegally-binding%E2%80%9D-climate-agreement-what-does-it-mean-why-does-it-matter/>> accessed 2/05/2022

CHAPTER IV

Conclusion and Recommendations

Conclusions based on the findings of this research are presented in this chapter following the objective and sub-objective of the research and recommendations are given accordingly.

Conclusion

The definition of climate change, as well as further studies, have brought to light that climate change does not only cause a rise in sea level, drought, storms, floods, desertification, heat-waves, wildfires, and changes in seasonal events, human effects like forced migration, economic effects, health effects, air pollution and water pollution, but beyond the physical effects of climate change are its connections to wars, conflicts, corruption, hunger, poverty, mental health crisis, inequalities, and so much more. Establishing the Conference of the Parties was primarily to oversee the cutting down of GHG below 2°C which will mean restoring the climate and in turn, solving most of its effects.

Between a polluted environment and a carbon-free environment lie the stages of transitioning which entails, work, risks, collaborations, funds, implementations of strategies to cut down carbon and commitments which can result in either a complete achievement of our goal, part achievement or zero achievements. A thin line lies between facing out carbon in one region and accelerating the burning of fossil fuel in another region due to the unequal level of adaptation to new technology, financial instability, corruption, using state hegemony to exploit weaker nations, relying on the concept of state sovereignty to avoid commitment and selfish political ambitions.

This research examined some of the conclusions made in the recent COP26, and how it can aid in the achievement of a carbon-free climate through acceptance and recognition of the available science that can be involved in the reduction of GHG emissions, acknowledging gender roles encouraging parties to adapt to new technologies both nationally and internationally in their NDCs, build financial capacity, acknowledge the reports of the IPCC, in building resilience against

climate change, Thereby adding to already existing knowledge on climate conventions and international laws, observing the ignored aspects of the COP, and offering suggestions on achieving a carbon-free climate.

During the COP26 summit, consent, collaborations and promises were made to face out the use of coal by 2050, countries made pledges to reverse deforestation, reduce the emission of methane by 30% both domestically and internationally, and car manufacturing companies pledged to wipe out the use of petrol consuming vehicles in 2040 by producing and introducing zero-emission cars, including financial collaborations to support their consent to create a carbon-free economy. All of which was the completion of the legally binding Paris Agreement which took place in 2015.

Despite progress on multiple fronts, national climate and funding commitments has been criticized for falling short of meeting the global challenge. The binding nature of the conference is questioned due to the lack of enforcement mechanism; states' reactions to some of the decisions made at the COP, the use of passive languages like encouraging, request, remind and urge to address the parties, lack of sanctions on emitters, and their focus on reducing carbon emission rather than on the emitters.

Measuring the impact of the decisions made during the COP26 summits by observing the currently accepted practices that are detrimental to creating a carbon-free environment. These include the global acceptance of bitcoin and other cryptocurrencies mining, approving the production of electric cars without a reliable source of clean energy, neglecting the fact that most developing countries do not have the power supply to service the batteries used by these vehicles, empowerment deficits on the usage of electric vehicles, turning blind eyes to the acceleration of migration caused by climate change and the plight of climate migrants by ignoring the fact that the most affected and most vulnerable regions are largely not responsible for the GHG emission.

Reconciling the role of international law and the binding nature of international environmental conventions shows that states play a significant role in ensuring the enforcement of non-legally binding instruments of international law such as resolutions, decisions and action programs which are soft laws because states are

the legitimate lawmakers in the international community through their actions over time (customary laws), agreements (treaties) and decisions. Acknowledging that soft laws under international law are more flexible and allow for the participation of other non-state actors, experts, legal persons and non-governmental organisations and can only be made effective by the consent and compliance of states to the law, has widely encouraged laxity and inconsistency on implementing the laws and it is quite unfortunate that majority of international environmental protection laws are soft laws.

Recommendations

Having an international legally binding agreement is not an assurance of its effectiveness, but having an agreement with an undefined status, which wholly depends on states' consent and commitments for its effectiveness, is as bad as not having laws at all. One of the main reasons for the ineffectiveness of international environmental agreements has been their lack of binding nature and enforcement mechanism on states and other international actors. Having international courts enforce the compliance of the terms of agreements of the Paris Agreements as well as the recent COP26 and also have other legal mechanisms to impose sanctions on parties who are not complying with their pledges and the terms of agreements is action enough to get countries on their toes with mitigating the emission of GHG locally and internationally.

Furthermore, I believe that instead of holding a summit on climate change every year, and having discussions on how to reduce GHG emissions in all the big ways possible without considering the simple and common things around us is a deterring factor to our progress. Since the summit acknowledges that the fight for climate restoration is for everyone, not paying attention to how much knowledge common people have about carbon emission, global warming and climate change are dangerous to the task at hand. So, introducing the subjects of climate restoration in high schools, colleges, universities and other institutes will go a long way in saving the climate from future pollution. Because saving the climate for a future generation that knows nothing about the dangers of climate change is likely to change nothing.

And also, making pledges and promises at the summit every year is not enough for the level of urgency needed for the fight against climate change. From the last summit to date, no country has practically announced an action it has taken for cutting carbon emissions. An actual announcement might not be made, but all am saying is that practical actions are what are necessary right now, not meetings, summits, and sending relief packages to distressed regions.

Considering my discussion on the effects of climate change on migration and climate migrants, and the treatment they get from receiving countries, if the solving climate change problem is the goal for the international climate summit, then revisiting some conventions like the 1951 convention relating to the status of refugees should be a priority. Amending some of the articles to be in alignment with the present situation concerning climate migrants will be additional progress to achieving the zero-emission goal.

Finally, I won't be wrong to assume that my recommendations and suggestions are just one among many other suggestions for future directions regarding climate change. But, I do not disregard my addition to the already existing knowledge in this area of study. I am making a call to action, to everyone on the planet, beginning from the leaders involved in organizing climate change conventions, down to individuals all over the world, to take the fight against climate change personally, and contribute in every way we can to reach net-zero emission by 2050.

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