

The common but differentiated responsibilities and respective capabilities principle in global climate change mitigation: a legal appraisal

T Monyake

 orcid.org/0000-0002-0615-5551

Mini-dissertation submitted in partial fulfilment of the requirements for the degree *Masters of Law in Environmental Law & Governance* at the North-West University

Supervisor: Dr M Barnard

Graduation ceremony: May 2018

Student number: 28136152

ABSTRACT

The economic inequality of States has for a long time hindered global efforts at climate change mitigation. Under international Environmental law, the CBDR-RC principle was adopted as an attempt to level the playing field. The principle attempts to share climate change mitigation responsibilities amongst states in an equitable and fair manner. Although the principle has been adopted under the UNFCCC and its secondary agreements. There is no strict definition of the principle under these instruments, which has over the years led to disagreements amongst states as to what the principle means and how it can or should be applied. The ongoing arguments have led to inaction on the part of states in dealing with climate change, which has in turn caused the phenomenon to worsen.

The 2015 Paris Agreement seemed to have adopted an application of the principle that allowed global participation in climate change mitigation, putting an end to arguments over the application of the CBDR-RC principle. However, the different states still did not have a common understanding and appreciation of the true and most compelling feature of the principle. This is evinced by the withdrawal of the US from the Paris Agreement citing the unfair application of the CBDR-RC principle amongst other reasons. This then begs the question what application and interpretation of the principle can be best suited to mitigate the effects of climate change, while mandating all states to participate on one hand, and allowing for equitable differentiation of the responsibility on the other to achieve the objects of the principle, namely, climate change mitigation.

This dissertation seeks to establish the best application of the CBDR-RC principle for climate change mitigation by looking at the above-mentioned agreements and the applications adopted therein. The dissertation makes recommendations as to how global participation of states in climate change mitigation can be acquired. Keeping in mind that states are sovereign and can only take on responsibilities voluntarily. the dissertation further makes recommendations on how the responsibility can be equitably shared amongst states, allowing the developing states to take part, and not placing all the burden on the developed states.

TABLE OF CONTENTS

ABSTRACT i

TABLE OF CONTENTS..... ii

LIST OF ABBREVIATIONSv

1.1 Background 1

1.2 Purpose of the study 5

1.3 Framework of the Study 6

2.1 Introduction 8

2.1.1 Brief history of the UNFCCC and climate change..... 9

2.2 Mitigation in terms of the UNFCCC 11

2.3 The Normative Framework Underlying Mitigation under the UNFCCC 20

2.4 Conclusions 22

3.1 Introduction 25

3.2 The North-South divide: The Historical Development of the CBDR-RC principle 27

3.2.1 Introduction 27

3.2.2 The North-South divide and its influence on the CBDR-RC..... 29

3.3 The CBDR-RC Principle within the UNFCCC..... 31

3.3.1 Introduction 31

3.3.2	<i>The CBDR-RC principle and its place within the UNFCCC</i>	33
3.3.3	<i>The CBDR-RC principle in post-Kyoto agreements.....</i>	36
3.3.4	<i>The CBDR-RC principle in the Paris Agreement.....</i>	38
3.4	Measurement, Reporting and Verification and Finance in the Evolution of the CBDR-RC principle	42
3.5	Conclusions	44
4.1	Introduction	46
4.2	Responsibility under International Law	47
4.2.1	<i>Introduction</i>	47
4.2.2	<i>Responsibility as an institution in international law.....</i>	48
4.3	Differentiation under International Environmental law ..	52
4.4	The current application of the CBDR-RC principle in the climate change regime.....	56
4.4.1	<i>The Kyoto Protocol</i>	57
4.4.2	<i>The Paris Agreement</i>	59
4.5	Achieving greenhouse gas emissions mitigation: the normative reality	60
4.6	Conclusions	62
5.1	Overview of the research question	64
5.1.1	<i>Summary of the analysis.....</i>	66
5.2	Recommendations	68

5.2.1 *Concretising the CBDR-RC as a customary international law principle.....68*

5.2.2 *Differentiation amongst developing countries69*

5.3 Conclusions70

BIBLIOGRAPHY72

LIST OF ABBREVIATIONS

CBDR-RC	The Common but Differentiated Responsibilities and Respective Capabilities principle
COP	Conference of the Parties
GHG	Greenhouse gas
IPCC	Intergovernmental Panel on Climate Change
INDC	Intended Nationally Determined Contributions
LDC	Less developed Countries
MEA	Multilateral Environmental Agreement
REDD	Reduction of Emissions from Deforestation and forest Degradation
UNCED	United Nations Conference on the Environment and Development
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change.
WMO	World Meteorological Organization
US	The United States of America.

CHAPTER 1

1.1 Background

In an attempt by the international community to equitably mitigate the effects of climate change, the principle of Common but Differentiated Responsibilities and Respective Capabilities, 1992 (CBDR-RC) was adopted under the United Nations Framework Convention on Climate Change (hereinafter referred to as the UNFCCC). The aim behind the UNFCCC is to mitigate the effects of climate change through the equitable/fair sharing of responsibility amongst the developed and developing countries. This was to be done by allocating mitigation obligations between member states based on each countries financial and technological capabilities and its past contribution to the advent of climate change.

The CBDR-RC principle encompasses two elements, namely, Common Responsibility and Differentiated Responsibility (these two elements will be discussed in detail in chapter3). The element of differentiated responsibility seems to be the cause of concern amongst the states that have ratified the UNFCCC, with the developed states of the opinion that all states should be obliged to mitigate¹ the effects of climate change, while on the opposite end of the spectrum the developing states argue that the problem was caused by the wealthier and more developed states which should thus be more burdened to rectify the situation.² There seems to be little consensus³ amongst member states on which application of the principle can be said to be fair and equitable. One specific aspect related to the aforementioned is the difference in capabilities between the wealthier North and the poorer South. This divide and the

¹ Honkonen 2009 *Kurt Deketelare* 8.

² Honkonen 2009 *Kurt Deketelare* 8.

³ Which consensus it is my assertion is strictly necessary for purposes of curbing climate change because of the fact that the protection of the environment is of global concern and at the heart of asserting global climate protection it is strictly necessary to have an amicable consensus as far as the interpretation and application of the CBDR-RC principle is concerned.

concomitant obligations placed on each state has stunted the ability to test the limits of the CBDR-RC principle to its fullest potential and thereby curb climate change.⁴

The primary and most compelling aim of the CBDR-RC principle is to play a key role in mitigating the effects of climate change as already experienced. It is enshrined in several multilateral environmental agreement (MEA's), namely principle 7 of the Rio Declaration,⁵ Article 10 the Kyoto Protocol,⁶ the 2015 Paris Agreement⁷ and the United Nations Framework Convention on Climate Change (UNFCCC).⁸

The principle encompasses general principles of equity as found in international law. Under the UNFCCC, the principle apportions the duty of reducing greenhouse gases according to historical differences in their contribution to climate change by developing and developed countries as well as differences in the financial capabilities of member states.

The most rudimentary application of the principle manifests itself in that developed countries are subject to a binding commitment to cut greenhouse gas emissions because of their contribution to the bringing about of climate change.⁹ This commitment is based on an assessment of their unrestricted greenhouse gas emissions in the past. These developed states are furthermore responsible for money and technology transfer to assist developing countries to adapt to the effects of climate change.¹⁰ When regard is had to the historical emissions which were by their very nature unrestricted, developed member states have more of a "meaningful"¹¹ role to

⁴ Peel, Cambridge University Press 2016, 249.

⁵ The Rio Declaration on Environment and Development (1992).

⁶ The Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997).

⁷ The Paris Agreement to the United Nations Framework Convention on Climate Change

⁸ A 3(2) of the United Nations Framework Convention on Climate Change (1992).

⁹ A 3 of the United Nations Framework convention on Climate change (1992), provides for the need for the developed states to take the lead in climate change mitigation. A 2 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997), sets out emission reduction obligations for the developed states/Annex 1, and no such obligations for the developing states.

¹⁰ A 3 of the United Nations Framework Convention on Climate Change (1997).

¹¹ Reference to meaningful herein is to demonstrate the fact that developed states' contribution towards the fight to curb green-house gas emissions will or is likely to bring about a more significant and positive change to the trajectory that the earth's system seems to be taking. This trajectory as experienced is bringing about unprecedented changes in the manner in which the earth system is known to behave.

play in the fight against climate change than less developed states. This is because developed states are regarded as being more to blame for the current climate change phenomenon and must consequently contribute more towards curbing climate change.¹²

Under the Kyoto Protocol to the UNFCCC countries are to categorise themselves into either Annex 1 or non-Annex 1 countries.¹³ Annex 1 contains a list of developed countries with binding greenhouse gas emissions reduction commitments. Developing countries have no such binding commitments under the Kyoto Protocol but are expected to monitor their emissions.¹⁴ Countries like China, India and Brazil classify themselves as developing countries or non-annexed countries.¹⁵ The unfortunate result of this is that they have no commitment to reduce their greenhouse gas emissions. This is the case despite the fact that they are some of the largest greenhouse gas emitters in the world. This eventually led to the refusal by the USA to sign the Protocol, stating that the agreement imposed burdensome obligations on the developed states and unfairly requires no action from the least developed states.¹⁶

States then negotiated to create an agreement that would rectify this unfair application of the CBDR-RC principle and give effect to climate change mitigation. In 2015, it seemed a solution was found with the birth of the 2015 Paris Agreement which up until today is the most recent binding agreement adopted under the UNFCCC. Under this agreement states are all required to submit INDC's which give a picture of what mitigation efforts a country can make as well as when implementation is expected to take place. The Agreement even goes further, adding the phrase "In light of differing

¹² O'Connell AJ 2013 Centre for Energy, Petroleum and Mineral Law and Policy Annual Review 163.

¹³ Bortscheller 2010 Sustainable Development Law and Policy (10)2 50.

¹⁴ The Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997)

¹⁵ Bortscheller 2010 Sustainable Development Law and Policy (10)2 64.

¹⁶ Scholtz, (2008) 33 SAYIL 132.

national circumstances"¹⁷ to the CBDR-RC in an attempt to give it a global, equitable and all-encompassing application.

The CBDR-RC seemed to have gained traction as an equitable principle until the United States of America threatened to pull out of the agreement yet again citing the inequitable application of the principle. The United States contended that more should be required of the least developed states.¹⁸ This contention by the United States which is a developed state, is the same contentions that thwarted the application and eventual efficacy of the CBDR-RC in the first Multi-Lateral Environmental Agreement (UNFCCC).

There is a need therefore for an investigation into the definition of the CBDR-RC principle in the UNFCCC legal regime, its use, and its application.¹⁹ The definition should be one that will advance the fundamental aims that underpin the formulation of the MEA's in the first place. Further it is important to find a definition that will not only have universal application but that will meet the expectations of all member states so that states will willingly adhere to the treaties dealing with climate change and to find an equitable solution.

This was the attempt made by both the Kyoto and the Paris Agreement, but it seems that states can never agree on a suitable definition or application. And while climate change agreements continue to fail, the climate continues to degenerate even further. The intention behind this dissertation, therefore, is to reach an understanding of the CBDR-RC with its all shortcomings of interpretation and application and to find in that understanding an ideal formulation that will lead to general acceptance of MEA's that deal effectively with climate change mitigation.

Amongst the recommendations of this paper is the possibility of concretising the CBDR-RC principle into a customary international law principle. This will mean that the

¹⁷ The Paris Agreement to the United Nations Framework Convention on Climate Change (2015)

¹⁸ Shear The New York times. June 1, 2017

¹⁹ The United Nations Framework Convention on Climate Change makes mention of the Principle under its article 3 but provides no definition in the definition section.

principle will be mandatory amongst all states making it difficult for developed states such as the US to escape climate change responsibility by continuously finding fault with the application and/or interpretation of the CBDR-RC principle.

1.2 Purpose of the study

Climate change poses a threat to all states, both developed and developing. The developed states have the monetary capabilities to be able to deal with the consequences of climate change while the developing do not and are most likely to be worse affected by climate change.²⁰ This dissertation will be focused on the most efficient understanding of the CBDR-RC principle. This understanding will be one that takes heed of the need of states to develop while at the same time keeping in mind the different states' obligations under the climate change arena.

The aim of the study is to examine the current normative content of the CBDR-RC principle as it appears in international instruments and MEAs in order to reach a point where recommendations as to the ideal understanding/conceptualisation of the CBDR-RC principle can be made. Being able to properly define and understand the principle will enable a proper understanding as to what the purpose of the principle is or should be. In so doing a literature study of the primary international legal instruments listed under 1.2 above will be undertaken. This will be coupled with a literature review of secondary academic sources such as journals and textbooks.

Further, criticism levelled against the principle will be discussed to arrive at an informed conclusion as to what the content of the CBDR-RC principle is and whether it can be relied on as it stands to mitigate the effects of climate change. The most compelling part of this interpretation will be the processes of international law that have been advanced and have to date worked for the international community. It will be from this background that the CBDR-RC principle will be interrogated and an

²⁰ Verheyen, State responsibility and compensation for climate damages-A legal and economic assessment

investigation of how it can be interpreted within the international climate change arena particularly within the UNFCCC.

1.3 Framework of the Study

Chapter 2 of the study is aimed at the investigation of the international climate change legal regime and mitigation. This will enable an understanding of the role that is to be played by mitigation under the UNFCCC and all its subsequent agreements and protocols. This will be done not losing sight of the intentions that underlie climate change mitigation vis-a-vis adaptation, the former of which is regarded as more practical and possible to advance than the latter.

Drawing from the preceding chapter, Chapter 3 of the study will then look into the CBDR-RC principle. This will be done by delving into the history behind the inception of the principle, the definition of the principle that can be gathered through its application in all the relevant MEAs, and the evolution of the CBDR-RC principle to date. All of This will be done keeping in mind the context which is climate change mitigation. It must be understood that climate change mitigation in comparison with adaptation, is much easier to advance.

Chapter 4 will focus on the CBDR-RC principle as a normative construct in climate change mitigation. This chapter will be aimed at investigating whether the CBDR-RC principle as it stands acts as a better or worse solution to the advent of climate change mitigation (which is the ultimate objective of the UNFCCC and all secondary agreements). Chapter 4 will furthermore delve into placing the UNFCCC ideally within the international law framework and will demonstrate the fact that it is possible to so apply the principle despite the criticism levelled against its alleged inequitable application. Equitability becomes a key factor when regard is had to the sovereign status of states. A different type of compulsion then becomes necessary to implement the CBDR-RC principle for the greater good. It will be so demonstrated that even within the international arena the CBDR-RC principle is capable of implementation, despite

some states avoiding compliance on the grounds that they are not signatory to any binding treaty or agreement.

Chapter 5 will draw on all other chapters in the thesis, providing the necessary conclusions as well as recommendations. This trace the history of the idea from the rudimentary understanding of the principle as a provision within the UNFCCC to its evolution and application within succeeding MEA's as well as, finally, the CBDR-RC principle's standing as possibly being regarded as an international customary law principle worthy of implementation despite a lack of consensus by states. This final recommendation becomes even more pertinent when regard is had to the fact that the application of the CBDR-RC principle will go a significant way towards addressing the international community's concerns regarding climate change. This means therefore that the CBDR-RC principle and its application are crucial to ameliorating climate change.

CHAPTER 2

2.1 Introduction

The UNFCCC was adopted at the UN conference on the environment and development in Rio in 1992.²¹ The Convention is an agreement aimed at the mitigation of climate change on a global scale. The Convention has been signed and ratified by 197 countries and entered into force only 2 years after it was signed in March 1994.²² Before the adoption of the UNFCCC, the IPCC published its first report on the state of climate change science in the 1990's²³ in which it stated that "human activity was leading to increased atmospheric concentrations of Co2 and rising temperatures"²⁴. This report led to the negotiation and ultimately the adoption of the UNFCCC.²⁵

The UNFCCC is the Constitution of the climate change legal framework in that all other climate change instruments draw from it. The Convention concentrates mainly on climate change mitigation which will be discussed later in this chapter. It further relies on the CBDR-RC principle as a tool towards the achievement of its main objective, which is the stabilization of carbon dioxide emissions in the atmosphere. The primary aim of this chapter is to explore the UNFCCC legal framework and how the principle of CBDR-RC finds its most practical application in the legal documents.

A brief history of how climate change led to the development of the UNFCCC legal regime will be traversed. The history will be followed by a consideration of mitigation as envisioned in terms of the UNFCCC. The chapter will also consider the Normative

²¹ Ramakrishna The UNFCCC-history and evolution of the climate change negotiations 47.

²² Yamin and Depledge The International Climate Change Regime.3.

²³ Yamin and Depledge The International Climate Change Regime.23.

²⁴ Yamin and Depledge The International Climate Change Regime.23.

²⁵ Yamin and Depledge The International Climate Change regime.23.

Framework underlying the main objective of the UNFCCC as well as the progression of the mitigation objectives as embedded in the UNFCCC.

2.1.1 Brief history of the UNFCCC and climate change

The phenomenon of climate change has over the years gained attention as a pressing issue that needs to be addressed urgently, and the only way to do that was through an understanding of the factors giving rise to climate change. Fankhauser and Stern²⁶ describe the science that underpins climate change as stemming from the basic physics of the greenhouse effect. Jean Baptiste and John Tyndall are regarded as two of the first individuals to assess the key concerns of the earth's heat balance.²⁷

Climate change is brought about predominantly by the constant extraction and burning of fossil fuels. The increased emission of greenhouse gases into the atmosphere leads to a high concentration of greenhouse gases in the atmosphere the result of which is an increase in the amount of heat energy that is entombed in the atmosphere. As evidence of the large concentration of greenhouse gases in the atmosphere scientists trace the beginning of climate change to the beginnings of the industrial revolution in the middle of the 18th century.²⁸ This era seemingly gave rise to the consistent emissions and resultant high concentrations of greenhouse gases in the atmosphere as experienced in the world today.²⁹

The road to the development of the climate change regime had many important stages. Notable among them are the publication of the Brundtland Commission Report titled

²⁶ Fankhauser and Stern *Climate change, development, poverty and economics Grantham Research Institute on climate change and the Environment 7* (May 2016) The learned authors trace the greenhouse effect and state that: "there are heat-trapping gases in the atmosphere, which allow the earth to retain heat... and these observations were done by Jean-Baptiste Fourier and John Tyndall in the second half of the 19th century."

²⁷ Fankhauser and Stern *Climate change, development, poverty and economics Grantham Research Institute on climate change and the Environment 7* (May 2016).

²⁸ Allen *American Economic Review* 65.

²⁹ Fankhauser and Stern *Climate change, development, poverty and economics Grantham Research Institute on climate change and the Environment 7* (May 2016) the learned authors go further to elucidate the concentration of the 6 main gases and the extent of their concentration in the atmosphere and state that: "Since then the concentration of the six main gases... has increased from around 285 parts per million (ppm) of carbon dioxide equivalent (CO_{2e}) to over 450 ppm of CO_{2e} today of which 440 ppm is carbon dioxide. Around 70 years ago we were adding

"Our Common Future" in 1987³⁰ and the United Nations Conference on the Environment and Development (UNCED) in Rio de Janeiro. In the latter stage climate change underwent a very important metamorphosis from being regarded as a mere scientific issue to a policy issue.³¹ The development of the Keeling Curve monitoring the ongoing changes in carbon dioxide concentrations in the atmosphere³² was also a major step in the international recognition of climate change.

The process of recognising climate change as an issue that needs to be addressed began in 1985 at the Villach Conference held by the World Meteorological Organization (WMO) and the United Nations Environmental Programme (UNEP).³³ In these conferences it was concluded that due to the rise of carbon dioxide emissions illustrated by the Keeling Curve significant climate change was looming and that states "should initiate considerations of developing a global climate Convention".³⁴ In 1988 in Canada at the Toronto Conference states agreed that Carbon dioxide emissions had to be cut by 20% by 2005³⁵ and further that there was a need for the development of a framework Convention on the Law of the atmosphere.³⁶ In the same year the United Nations General Assembly agreed that "Climate change was a common concern of mankind," further strengthening the need for states to collaborate in the attempt to combat climate change.

In 1989 at the Noordwijk Conference³⁷ states further agreed that developed states should be at the forefront of stabilizing greenhouse gas emissions as soon as

approximately 0.5ppm of CO₂e per year and now we are adding around 2.5ppm of CO₂e per year. That rate of addition continues to rise. If this continues the overall concentration could be in the region of 750ppm of CO₂e by the end of the century. An atmospheric concentration of 750ppm is associated with a median temperature increase over the next one or two centuries in the region of 4°C, with a substantial probability of well over 4°C.

³⁰ Bodansky The History of the Global Climate Change Regime 1

³¹ Bodansky The History of the Global Climate Change Regime1

³² Bodansky The History of the Global Climate Change Regime 2

³³ Bodansky The History of the Global Climate Change Regime 3

³⁴ Bodansky The History of the Global Climate Change Regime 3

³⁵ Bodansky The History of the Global Climate Change Regime 3

³⁶ Bodansky The History of the Global Climate Change Regime 3

³⁷ Bodansky The *History of the Global Climate Change Regime 3*; the conference was held in the Netherlands.

possible.³⁸ In the following year the IPCC published its first assessment report in which it stated that global temperatures were likely to increase by 0.3% per decade under the prevailing global conditions.³⁹ As a result, at the second world climate change conference it was agreed that countries had to stabilize greenhouse gas emissions and developed countries were mandated to establish suitable emissions targets as well as national programs and strategies.⁴⁰ A negotiating committee for a framework Convention on climate change was created in December 1990 to negotiate a Convention containing commitments for member states.⁴¹ Three years later, in 1992 as a result of the convening of the negotiating committee and the eventual formation of the framework, the UNFCCC was opened for signature.⁴² In 1994, after its ratification by 50 states, the Convention came into force⁴³

The largest contributing gas to the greenhouse effect is carbon dioxide⁴⁴ which is one of the six gases that are covered by the UNFCCC.⁴⁵ Carbon dioxide emissions from fossil fuels use grows at 1.9% per year⁴⁶ making it an important gas to eliminate in the fight to curb climate change. Climate change mitigation is one of the measures that the UNFCCC mandates the party states to pursue in the fight against climate change.

2.2 Mitigation in terms of the UNFCCC

Mitigation in terms of climate change refers to efforts advanced by human beings to lessen the release of harmful greenhouse gases by source or encourage their elimination from the atmosphere by sinks.⁴⁷ Climate change mitigation is the key pillar of the UNFCCC. Adding further emphasis to this, Fussel and Klein⁴⁸ state that mitigation

³⁸ Bodansky The History of the Global Climate Change Regime 3

³⁹ Bodansky The History of the Global Climate Change Regime 3

⁴⁰ Bodansky The History of the Global Climate Change Regime 3.

⁴¹ Bodansky The History of the Global Climate Change Regime 3.

⁴² Bodansky The History of the Global Climate Change Regime 10.

⁴³ Bodansky The History of the Global Climate Change Regime 10.

⁴⁴ The United Nations Climate Change Convention fact sheet: the need for mitigation 1

⁴⁵ The United Nations Climate Change Convention fact sheet: the need for mitigation 1

⁴⁶ The United Nations Climate Change Convention fact sheet: the need for mitigation 1

⁴⁷ The United Nations Climate Change Convention fact sheet: the need for mitigation 1. The paper further states that a sink "Refers to forests, vegetation or soils that can absorb CO₂."

⁴⁸ Fussel and Klein climate change vulnerability assessments: an evolution of conceptual thinking.4.

has been more of a key focus among nations in the climate change debate than adaptation, when viewed either from a science or even a policy point of view.⁴⁹ Kabani⁵⁰ further defines climate change mitigation as being the efforts made with the intention of permanently reducing or even alleviating the long-term risks of climate change to the health and well-being of human life and property.⁵¹

The primary objective of the UNFCCC and all legal instruments under it is the attempt to stabilise greenhouse gas concentrations in the atmosphere and the said concentrations to a level that prevents interferences with the climate system of the earth.⁵² The primary objective therefore being climate change mitigation, as embedded in the UNFCCC, a focus on such an attempt especially in terms of the UNFCCC is of grave significance. It will highlight the centrality of mitigation to the UNFCCC and how such a centrality will interplay with the CBDR-RC principle in the climate change arena.

The Convention stipulates actions that must be taken by the developed nations to mitigate greenhouse gas emissions⁵³ and the Kyoto Protocol strengthens these commitments by quantifying them under its Article 10.⁵⁴ The UNFCCC sets out some obligations under Article 4 that form the back bone of the Convention and are legally binding on member states. It requires member states to;

Formulate, implement, publish and update national and where appropriate regional programmes containing measures to mitigate climate change by addressing anthropogenic emissions by source...⁵⁵

The Article requires further that all member states develop national inventories of anthropogenic emissions and to formulate national and regional programmes with measures to mitigate climate change by addressing anthropogenic emissions, and make these inventories and plans available to the conference of the parties.⁵⁶ The

⁴⁹ Fusel and Klein Climate change vulnerability assessments: an evolution of conceptual thinking.4.

⁵⁰ Kabani Mitigation and Adaptation strategies 5

⁵¹ Kabani, Mitigation and Adaptation Strategies 5

⁵² The United Nations Framework Convention on Climate Change 1992.

⁵³ Article 4 of the United Nations Framework Convention on Climate Change 1992.

⁵⁴ Article 10 of the 1997 Kyoto Protocol, 1998.

⁵⁵ Article 4(1)(b) of the United Nations Framework Convention on Climate Change 1992.

⁵⁶ Article 4(1)(a) of the United Nations Framework Convention on Climate Change 1992.

Convention further requires members to promote sustainable development and cooperate in the development and transfer of technology and practices that control or prevent anthropogenic emissions.⁵⁷

Article 4(2) concentrates on mitigation and outlines obligations for developed countries (Annex 1).⁵⁸ The Convention requires developed states to take the lead in mitigation by implementing measures aimed at the mitigation of climate change by limiting their anthropogenic emissions and protecting greenhouse sinks and reservoirs.⁵⁹ The Convention requires the developed states to report their progress on the implementation of the measures within 6 months after the Convention enters into force. The Convention further mandates the developed countries to reduce their emissions jointly or independently to their 1990 levels⁶⁰ as well as to assist developing nations by the transfer of or the granting of access to environmentally sound technologies.⁶¹ The commitments in the Convention are placed mainly on the developed states as evinced by the sentiments of the Convention when it states that:

The extent to which developing country parties will effectively implement their commitments under the Convention will depend on the effective implementation by the developed country parties of their commitments under the Convention related to financial resources and transfer of technology.⁶²

Although the UNFCCC placed no quantitative emission reductions on the developed countries such quantitative emission reductions were required of the developed states

⁵⁷ Article 4.1(c) of the United Nations Framework Convention ON Climate Change 1992.

⁵⁸ Article 4(2) of the United Nations Framework Convention on Climate Change 1992.

⁵⁹ Article 4(2)(a) of the United Nations Framework Convention on Climate Change 1992.

⁶⁰ Article 4(b) of the United Nations Framework Convention on Climate Change 1992.

⁶¹ Article 4(5) of the United Nations Framework Convention on Climate Change 1992

⁶² Article 4(7) of the United Nations Framework Convention on Climate Change, 1992.

in the Kyoto protocol, which was adopted to strengthen the commitments under article 4.⁶³

Under article 17 of the UNFCCC states that "the conference of the parties may at any ordinary session adopt protocols to the Convention."⁶⁴ Following the successful signing of the UNFCCC in 1994, which demonstrated the willingness of member states to curb climate change, the member states met the following year in Berlin (COP1) with the aim of strengthening the commitments they had made under article 4 of the Convention.⁶⁵ Two Conference of the Parties later in Kyoto (Japan), the Kyoto Protocol was adopted and member states agreed to be legally bound by the emission reduction targets for the first period of 2008-2012.⁶⁶

The Kyoto Protocol to the UNFCCC also contains mitigation objectives for member states as demonstrated by article 2. This Article states that the ultimate objective, namely the mitigation of climate change, will apply to all legal instruments under the UNFCCC.⁶⁷

Under the Kyoto Protocol Annex 1 countries are mandated to reduce their GHG emissions by at least 5% below their 1990 emission levels.⁶⁸ Mitigation is also the primary focus of the Protocol, as can be seen in the body of the text. Article 2 of the Protocol sets out the policies and measures that the Annex1 countries must implement. The policies include renewable energy research, fiscal incentives, taxes, and policies aimed at reducing greenhouse gas emissions from transport and the energy sectors.⁶⁹

⁶³ Yamin and Depledge *The International Climate Change regime*.93. states that "article 10 of the Kyoto Protocol aims "...to continue to advance the implementation of the commitments set out in article 4.1 of the Convention."

⁶⁴ Article 17 of the United Nations Framework Convention on Climate Change, 1992.

⁶⁵ Freestone *The international climate change legal and institutional framework: an overview* 7.

⁶⁶ Bulkeley and Newell *Global Institutions, governing climate change*.21.

⁶⁷ Article 2 of the United Nations Framework Convention on Climate Change 1992

⁶⁸ Article 3 of the Kyoto Protocol, 1998.

⁶⁹ Article 2(iv) to (viii) of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998.

The Protocol further stipulates that by 2005 member states must have made progress in achieving the quantified emissions targets.⁷⁰

In furtherance of climate change mitigation, the Kyoto protocol provides for mechanisms aimed at helping the Annex1 countries achieve their quantified emission targets. Article 6 makes provision for the joint implementation mechanism. The mechanism "allows annex1 country to transfer, or acquire from another Annex 1 country reductions of GHG emissions described as emission reduction Units (ERUs)".⁷¹ The Protocol allows for the emissions reduction Units to be generated from projects that reduce anthropogenic emissions of specific greenhouse gases. The Protocol further provides for the Clean Development Mechanism.⁷² The clean development mechanism allows the Annex 1 countries to invest in emission reduction projects in non Annex1 countries.⁷³ The last mechanism provided by the protocol under article 17 namely, Emissions Trading "allows the trading of parts of assigned amounts among annex 1 countries".⁷⁴

As a result of the sentiments of the UNFCCC and the Kyoto Protocol Annex 1 countries agreed to take on municipal policies and take measures with equal effect that mitigate climate change by reducing the emission of anthropogenic gases.⁷⁵ At the end of the first commitment period as a whole, the Annex 1 countries had succeeded in reducing their GHG emissions by 22.6% lower than their 1990 levels.⁷⁶ In that regard, it could therefore be said that the Kyoto Protocol was a success in fostering the sentiments of the UNFCCC and successfully implementing them. However, in 2010 scientists predicted that even with the momentous global efforts aimed at the reduction of greenhouse gas emissions, the effects of climate change such as a debilitating long

⁷⁰ Article 3(2) of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998.

⁷¹ Freestone The international climate change legal and institutional framework: an overview 9.

⁷² Article 12 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998.

⁷³ Article 12 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998.

⁷⁴ Freestone The international climate change legal and institutional framework: an overview. 11.

⁷⁵ Ramakrishna The UNFCCC-history and evolution of the climate change negotiations.55.

⁷⁶ Ramakrishna The UNFCCC-history and evolution of the climate change negotiations.58.

term drought and considerable rises in sea-level were almost inevitable.⁷⁷ Cognisance should be taken of the fact that the implementation of the UNFCCC and the Kyoto Protocol has had an almost counter-productive effect in its application in that states such as China, which is one of the highest emitters of greenhouse gas in the world, is not as per the terms of the UNFCCC and Kyoto Protocol bound by mitigation obligations which attach to developed states, because China is itself a state in the process of development.⁷⁸

The rise of countries like China, Brazil and India to becoming among the highest emitters was as a result of the application of the CBDR-RC principle in both the UNFCCC and the Kyoto Protocol. The Convention and its Protocol required no emissions reductions from developing countries. This state of affairs is somewhat counter-productive as per the envisioned aims of the UNFCCC and the Kyoto Protocol. While on the one hand the developed countries succeeded in reducing their emissions, the developing countries continued to emit the result of which is that the greenhouse gases in the atmosphere continued to increase instead of decreasing as intended by the UNFCCC and the Kyoto Protocol. In the light of this Bortscheller states that

China's position impacts the global community's ability to combat climate change because other GHG emitters (most notably the United States) have used China's lack of binding commitments to justify their non-participation in the Kyoto protocol.⁷⁹

Following the creation and eventual ratification of the Kyoto Protocol, a number of agreements although not legally binding, were created, which demonstrated an evolution of the ultimate objective of the UNFCCC and the Kyoto Protocol, namely, climate change mitigation. Although mitigation remains the focus of the UNFCCC regime, the manner in which the states have agreed to achieve the mitigation objective has changed over the years. This change was brought about by a number of factors. The continued rise of greenhouse gas emissions despite mitigation efforts by the developed states was one such factor. As the years progressed the UNFCCC member

⁷⁷ Bortscheller, 2010 Sustainable Development Law and Policy (10)2 49.

⁷⁸ Bortscheller, 2010 Sustainable Development Law and Policy (10)2 49.

⁷⁹ Bortscheller 2010 Sustainable Development Law and Policy (10)2 49.

states were aware of the need to change the mitigation strategy in order to achieve greenhouse gas stabilization. This awareness by member states is evident in the content of the agreements that followed the Kyoto agreement and how the said agreements now address climate change mitigation.

The first important document was the Copenhagen Accord, which was a result of COP 15 convened in Copenhagen. The Accord contains agreements by member states that global emissions must be restricted to ensure that global temperatures do not exceed 2 degrees Celsius.⁸⁰ However, unlike the Kyoto Protocol the Accord further mandated developing countries to report their emission reduction measures by the end of 2010.⁸¹ At this juncture it becomes clear that the Accord mandates both developed and developing states to take on mitigation obligations. This is a contrast from the Kyoto position, which focused mainly on mitigation by developed member states. Although the Accord was not binding on member states it nonetheless illustrates a change in the nature of the thought as member states and how they wished collectively to address climate change.

The Copenhagen Accord and its trajectory were outlined in the Bali road map in which the Bali action plan was created.⁸² In terms of this action plan the United States(US) agreed to negotiate commitments that would include further binding emission reduction measures.⁸³ This was a crucial undertaking on the part of the US because it had not initially been party to the Kyoto Protocol and is also one of the largest emitters in the world. This was the point at which China also promised to reduce its energy intensity by 20% by 2020.⁸⁴ Brazil also agreed to cut its deforestation rate by 70% by 2017,⁸⁵ while Mexico committed to cutting its emissions by 2050.⁸⁶ These are all notable and worthy undertakings by these member states that were either not party to the initial attempt to address climate change, as the US was not party to the Kyoto

⁸⁰ Bortscheller 2010 Sustainable Development Law and Policy (10)2 49

⁸¹ Bortscheller 2010 Sustainable Development Law and Policy (10)2 49

⁸² Hunter, 2010 Sustainable Development Law and Policy (10)2 5.

⁸³ Hunter 2010 Sustainable Development Law and Policy (10)2 5.

⁸⁴ Hunter 2010 Sustainable Development Law and Policy (10)2 6.

⁸⁵ Hunter 2010 Sustainable Development Law and Policy (10)2 6.

⁸⁶ Hunter 2010 Sustainable Development Law and Policy (10)2 6.

Protocol or the historic undertaking by the Peoples Republic of China's to cut energy intensity. The metamorphosis of the character of climate change mitigation becomes even more evident herein.

Although these commitments were not translated into a legally binding document, the change in perception by the member states as regards climate change indicated a change in the perception towards climate change mitigation. Further, climate change mitigation seemed finally to be geared towards the reduction of human induced climate change as per the main objective of the UNFCCC. Under COP 16 in the Cancun Agreements for the first time fixed dates were given to developed countries to submit their national communications. It was decided at this COP that developing states would submit their national communications every 4 years.⁸⁷ Climate change mitigation was slowly shifting from a developed state's issue to an issue warranting global attention and not just attention from the few developed states.

The Doha Agreement created under COP18 would be the next stepping stone in the development of climate change mitigation. The parties agreed to create an international mechanism that would be dedicated to dealing with the loss and damage that resulted from climate change in developing countries.⁸⁸ COP18 also resulted in the creation of the second commitment period of the Kyoto Protocol also known as the Doha Amendment to the Kyoto Protocol.⁸⁹ Developed countries agreed to a second round of binding GHG emission reduction commitments following the Kyoto Protocol commitments.⁹⁰ Climate change mitigation was no longer the sole responsibility of

⁸⁷ Available at www.unfccc.int/focus/mitigation.

⁸⁸ Basvishi et al Developing an institutional framework to address loss and damage.5

⁸⁹ Centre for climate and energy solutions, Outcomes of the U.N Climate Change Conference in Doha 1

⁹⁰ Centre for climate and energy solutions, Outcomes of the U.N Climate change conference in Doha 1

developed countries. Instead, all countries were mandated to submit statements of their intended national contributions before the convening of Cop 21.⁹¹

The 2015 Paris Agreement, which will be discussed in further detail in chapter 3, also marked the progression of mitigation measures under the UNFCCC. The Paris Agreement aims to keep emissions below 2degrees Celsius.⁹² A very novel feature of the Paris Agreement is that instead of the obligatory emissions reduction measures, the Paris Agreement takes a bottom-up approach in that it allows for countries to submit their intended national contributions relating to climate change mitigation.⁹³ The agreement therefore allows each country to submit a statement of its individual contributions based on each country's financial capabilities.⁹⁴

The Paris Agreement does not create any new mitigation mechanisms. Instead it allows for the continued use of the Kyoto mechanisms mentioned above. The agreement further mentions the REDD+ mechanism which acronym stands for the Reduction of Emissions from Deforestation and forest Degradation.⁹⁵ This is a mechanism that was created at a COP in Warsaw to address carbon dioxide emissions created by deforestation and forest degradation. The Paris agreement, although not making any changes to the mechanism, states that it shall continue to apply.⁹⁶ The Agreement creates a new instrument called the Ratchet mechanism.⁹⁷ The mechanism requires all member states to strengthen their national contributions every 5 years⁹⁸ Under the Paris agreement, mitigation no longer takes precedence as it did under the Kyoto

⁹¹ Obergassel and Arens Phoenix from the ashes- An analysis of the Paris agreement to the United Nations framework convention on climate change 18

⁹² Obergassel and Arens Phoenix from the ashes- An analysis of the Paris agreement to the United Nations framework convention on climate change 3

⁹³ Obergassel and Arens Phoenix from the ashes- An analysis of the Paris agreement to the United Nations framework convention on climate change 3.

⁹⁴ Obergassel and Arens Phoenix from the ashes- An analysis of the Paris agreement to the United Nations framework convention on climate change3.

⁹⁵ Obergassel, Arens et al. Phoenix from the ashes- An analysis of the Paris agreement to the United Nations framework convention on climate change 3

⁹⁶ Obergassel and Arens Phoenix from the ashes- An analysis of the Paris agreement to the United Nations framework convention on climate change 45

⁹⁷ Obergassel and Arens Phoenix from the ashes- An analysis of the Paris agreement to the United Nations framework convention on climate change 18

⁹⁸ Obergassel and Arens Phoenix from the ashes- An analysis of the Paris agreement to the United Nations framework convention on climate change 18

Protocol and the UNFCCC. The instrument makes provision for both mitigation and adaptation. At this juncture, further cognisance should be taken of the metamorphosis that is being undergone by these instruments in the attempts to address remedying climate change in its entirety and with every member state contributing thereto.

2.3 The Normative Framework Underlying Mitigation under the UNFCCC

The UNFCCC relies on several principles with regards to its ultimate mitigation objective as listed under Article 3.⁹⁹ Principles relating to mitigation under the Convention and as a result placing a binding mandate on annex 1 countries are; the principle of intergenerational equity,¹⁰⁰ the precautionary principle,¹⁰¹ the sustainable development principle¹⁰² and the CBDR-RC principle.¹⁰³

The precautionary principle,¹⁰⁴ according to Yamin,¹⁰⁵ can be defined as an international principle that has at its core the requirement that:

States should not advance scientific uncertainty as a reason not to take action to prevent environmental damage or disasters, particularly if the harm may be serious and irreversible¹⁰⁶

The UNFCCC lists the principle as one of its guiding principles by stating that parties have to endeavour to find methods that have the effect of anticipating, averting and reducing the causes of climate change, and moderating the effects of climate change. In the event of threats of serious damage that is permanent, a lack of scientific

⁹⁹ A 3 of the United Nations Framework Convention on Climate Change (1992)

¹⁰⁰ A 3.1 of the United Nations Framework Convention on Climate Change (1992).

¹⁰¹ A 3.3 of the United Nations Framework Convention on Climate Change 1992. The principle is defined as a principle which "mandates parties to take precautionary measures to prevent minimize and anticipate the causes of climate change and mitigate its adverse effects." Yamin F. Depledge J. *The International Climate Change Regime: A guide to rules, Institutions and Procedure*.76.

¹⁰² A 3.4 of the United Nations Framework Convention on Climate Change (1992).

¹⁰³ A 3.1 of the United Nations Framework Convention on Climate Change (1992).

¹⁰⁴ A 3(3) of the United Nations Framework Convention on Climate Change (1992).

¹⁰⁵ Yamin and Depledge the International Climate Change regime.71.

¹⁰⁶ Yamin and Depledge the International Climate Change regime.71.

evidence cannot be used as a motive for postponing the implementation of such measures.¹⁰⁷

The principle was alluded to before in the Rio declaration on environment and development,¹⁰⁸ wherein it was required of the countries not to use the lack of scientific certainty as an excuse for not implementing cost-effective measures.¹⁰⁹ However, it should be noted that unlike the declaration, the UNFCCC has done away with the cost effectiveness limitation¹¹⁰ making this version of the principle slightly more effective.¹¹¹

The Convention also provides for the principle of intergenerational equity.¹¹² As regards this principle, human beings are to use natural resources to fulfil their needs in a manner that will allow future generations to be able to enjoy the natural resources in a manner that will effectively fulfil their needs.¹¹³ Article 3¹¹⁴ further provides for the principle of sustainable development,¹¹⁵ which requires countries to promote sustainable development considering the importance of economic growth on the one hand and the duty to protect the environment on the other.

The documents that followed the UNFCCC, such as the Kyoto protocol make no explicit mention of the principles stated under article 3 of the UNFCCC. The documents apply the principles by giving various obligations to the individual countries. The allocation of finance is an example under the Paris agreement.

The most important of these principles is the CBDR-RC principle, which the Convention uses to allocate responsibility between the developed or Annex 1 countries and the developing or non-annex countries. The principle is the most important because both

¹⁰⁷ A 3 of the United Nations Framework Convention on Climate Change (1992).

¹⁰⁸ Principle 15 of The Rio declaration on environment and development. 1992.

¹⁰⁹ Principle 15 of The Rio Declaration on Environment and Development.1992

¹¹⁰ Yamin and Depledge The International Climate Change regime.71.

¹¹¹ Yamin and Depledge The International Climate Change regime.71

¹¹² A 3(1) of the United Nations Framework Convention on Climate Change 1992.

¹¹³ Weiss *Intergenerational equity and rights of future generations*. The author further states that: "as members of the present's generation, we hold the earth in trust for future generations. At the same time, we are beneficiaries entitled to use and benefit from it." 2.

¹¹⁴ The United Nations Framework Convention on Climate Change (1992).

¹¹⁵ A 3(4) of the United Nations Framework Convention on Climate Change (1992).

the UNFCCC and the Kyoto Protocol rely on the CBDR-RC principle to further and justify their objectives

The principle of common but differentiated responsibilities and respective capabilities is the standard which the Convention applies when differentiating responsibility between the developed and developing states. Article 4(1) is an instance of this. It lays out the commitments before it lists the parties, and states that every member state keeping in mind their common but differentiated responsibilities and their municipal as well as regional priorities and situations shall... This demonstrates the centrality of and cognisance of the myriad of circumstances that persist within the confines of each individual state and the effect that could have on the collective effort to curb climate change.¹¹⁶

This Principle of Common but Differentiated Responsibilities and Respective Capabilities has had a significant role to play in the global effort to curb climate change. At the opposite end of the spectrum, the principle has also permitted a rather counter-productive situation to persist as regards permitting emissions in some instances and curbing emissions in others. Obviously, this state of affairs was foreseen from its inception and inclusion in the Kyoto Protocol as well as the UNFCCC. However, the Principle has manifested itself over the years in a number of different characters. While still maintaining its initial purpose of curbing greenhouse gas emissions, the Principle at present surfaces in a different character with the same effort and effect as those with which it was initially formulated.

2.4 Conclusions

Climate change is a global phenomenon that affects all individuals of all states, with more adverse effects in some areas than are evident in others. The success of the attempt to curb climate change through mitigation depends on the will of member states to participate in the process of mitigation. The sovereign nature of states inhibits the ability of one state being dictated to by any other state as far as what to do is

¹¹⁶ A 4 of the United Nations Framework Convention on Climate Change (1992).

concerned, this therefore makes it is rather difficult for an international agreement to oblige a country to do what it does not want to. This may be pegged as the reason for the failure of agreements such as the Kyoto Protocol to mandate all countries to reform their energy sectors to mitigate climate change.

Notwithstanding this, climate change mitigation has changed character, from a focus on placing commitments on developing states to burdening all member states with obligations. This state of affairs, permits states to have the capacity to collectively work together to combat the rise in global temperatures and keep same below 1.5°C. It is through the participation and willingness of member states to compromise that climate change mitigation could be a success.

The application of the CBDR-RC as it stands does not seem to be geared towards the curbing of climate change. The principle places developed states at the forefront of the climate change debacle while not insisting on the same conduct from the developing member states.¹¹⁷ This state of affairs has led to the rise in global emissions of countries such as The Peoples Republic of China. Scholars have argued against the application of the principle stating that the principle is flawed because it holds modern day citizens responsible for pollution emitted generations before them in the developed states.¹¹⁸ At the opposite end of the spectrum, other scholars argue that because of the fact that the citizens of developed countries are enjoying the fruits of the past emissions it is only fair that they bear a greater burden.¹¹⁹

As illustrated above, the Paris Agreement was the result of a lengthy process of COP meetings leading up to COP21. The Agreement is the last legally binding document under the UNFCCC. It clearly illustrates the change in perception of member states as regards climate change. In terms of the agreement no member state has the luxury of hiding behind a lack of binding mitigation measures because all of them are to make

¹¹⁷ Bortscheller, 2010 Sustainable Development Law and Policy (10)2 50.

¹¹⁸ Bortscheller, 2010 Sustainable Development Law and Policy (10)2 51.

¹¹⁹ Bortscheller, 2010 Sustainable Development Law and Policy (10)2 51.

efforts to mitigate under their intended national contributions. The Agreement will be discussed in detail in chapter 3.

CHAPTER 3

3.1 Introduction

According to scientists, humanity has altered the earth's system to a point of no return by crossing four of the nine planetary boundaries.¹²⁰ One of the boundaries that humanity has already crossed is climate change. We are no longer in the safe boundary limit as regards climate change. Human conduct from the inception of the industrial revolution until today has altered the earth in such a significant manner that Crutzen and Stoermer have coined a term to explain this new geological epoch namely, "the Anthropocene."¹²¹ This term signifies a geological era in which humanity has had a devastating impact on the earth and its systems,¹²² and scientists argue that we are no longer in the Holocene epoch where nature and humanity lived in perfect harmony.¹²³

Although the term Anthropocene has not been formally accepted as describing this new era or epoch, argument has been advanced to the effect that the impact of humanity on the earth's system is already evident and that the system that once characterised the earth has shifted outside the purview of the normal flexibility that had been witnessed over the preceding half a million years.¹²⁴ Changes initially known to exist or that could be predicted no longer occur as they used to. Instead, the sizes of the changes and the rates of change are such as have never before been seen. The

¹²⁰ Gonzalez 2015 Pace Environmental Law Review.407

¹²¹ Kotze 2014 Journal of Energy and Natural Resources Law 122

¹²² Kotze2014 Journal of Energy and Natural Resources Law 122

¹²³ Kotze 2014 Journal of Energy and Natural Resources Law 122

¹²⁴ Kotze 2014 Journal of Energy and Natural Resources Law 122

earth is regarded as presently "operating in a no-analogues state".¹²⁵ Robinson expresses the opinion that indicators of this new epoch include:

The melting of the cryosphere, the changes in the nitrogen and carbon cycles, acidification of the oceans absorbing carbon dioxide, new coastlines shaped by rising sea levels, radioactivity from atmospheric weapons testing.¹²⁶

Climate change is therefore undeniably one of the challenges that are presently being faced in this new geological epoch. Climate change governance should be at the forefront of things to look into if a solution to climate change is to be provided. As discussed in chapter 2 the CBDR-RC principle is one of the most important models for curbing climate change that should be considered.

With the Anthropocene at hand, it is of dire importance that the CBDR-RC principle be successful in advancing its aim, which is to stabilize greenhouse gases. Before the CBDR-RC principle is examined, however, it is important to look into the history and evolution of the principle for a better understanding of the aims of the CBDR-RC principle using the north-south divide as a point of reference. This will be done in section 3.2.

Section 3.3 will discuss the evolution of the CBDR-RC principle and the likely contribution the principle could make towards addressing climate change mitigation. This consideration of the evolution will demonstrate the flexibility of the principle from its inception as a principle used to divide responsibility for climate change to its current form wherein the focus is not squarely on the north-south divide from which it was initially fashioned. Rather it will be demonstrated that the character of the principle has been changed in so far as it now relies on the notion of different capabilities of states. While it still retains a focus on common but differentiated responsibility, it now adds separate competences to the principle. This evolution will be demonstrated

¹²⁵ Kotze 2014 *Journal of Energy and Natural Resources Law* 122

¹²⁶ Robinson 2012 *Journal of Public Affairs* 181

through scrutinising the different instruments that address climate change and how they reflect the principle.

The anticipated successes of the Common but Differentiated Responsibilities principle and the addition of the notion of different capabilities also have to be looked at. These will be discussed in section 3.4 under the measurement, reporting, verification and finance aspects of the Paris Agreement in as far as they apply to the CBDR-RC principle.

Finally, section 3.5 will discuss the conclusions of chapter 3. There will be an attempt to present a picture that makes sense as a whole one that attempts to summarise the sentiments expressed in chapter 3 and outlines the CBDR-RC principle's normative framework within the UNFCCC.

3.2 The North-South divide: The Historical Development of the CBDR-RC principle

3.2.1 Introduction

As far as environmental law and environmental regulation are concerned, the divide between the economically affluent North and the poorer South has been one of the causes if not the primary cause of a failure to address climate change.¹²⁷ These conflicts manifest in the differences in the responsibilities assigned to each member at the negotiating table for the environmental harm caused or the environmental priorities, or more relevantly the deadlock between environmental protection and economic development.

An extrapolation of the cause of the North- South divide is beyond the scope of this dissertation. What can be said about the divide, however, is that it can be attributed to such untenable model of governance such as colonialism.¹²⁸ Gonzalez states that the international law validated colonialism in that it constructed the inhabitants of a most southern state as being culturally or even racially inferior and asserted that was

¹²⁷ Robinson 2012 *Journal of Public Affairs* 181.

¹²⁸ Gonzalez 2015 *Pace Environmental Law Review* 408.

a duty to civilise the southern states along the model of European standards of civilisation.¹²⁹

Europe's conception of civilisation was rooted in the domination of nature and developing industry. This was the hallmark of a civilised state as far as Europe was concerned.¹³⁰ This state of affairs had the effect of characterising societies that lived in harmony with nature as inferior or uncivilised, and it was in terms of this analogy that these societies were in need of modernisation and development. And so, industrialization took place, which was in two brief centuries to bring about the disaster that is climate change.

Before the 1970's the protection of the environment and the regulation thereof resorted solely in the hands of industrialised states.¹³¹ This was because the poorer states, famously categorised as the south, owing to the crippling effects of such legacies as colonialism, had pressing issues to deal with apart from environmental protection. Such pressing issues as poverty and economic development proved key aspects to focus on to the detriment of environmental protection and awareness. This resulted in these states placing environmental law or the regulation of the environment at the bottom of their priority lists.

The wealthier North, with only 18% of the world's population commanded approximately 95% of the planets wealth.¹³² This had the effect of creating major disparities in the economic balance between the wealthier North and the poorer South.

¹²⁹ Gonzalez 2015 Pace Environmental Law Review 408

¹³⁰ Gonzalez 2015 Pace Environmental Law Review 408

¹³¹ Beyerlin and Marauhn International Environmental Law 61.

¹³² Gonzalez 2015 Pace Environmental Law Review 408

In direct consonance, the balance of negotiation and the bargaining power of these poorer states were just as unequal.¹³³

3.2.2 The North-South divide and its influence on the CBDR-RC

International environmental law is regarded as giving all states the opportunity to voice their opinions and play a role in the formulation of international environmental policy. However, this has not been the case because the North dominates decision making in multilateral environmental treaty forums as a "consequence of its greater economic and political clout."¹³⁴As a result, these disparities between states led to what would later be described as the North-South divide, which has been defined in the environmental context as:

Conflicts between affluent and poor countries over environmental priorities the allocation of responsibility for environmental harm, and the relationship between environmental protection and economic development.¹³⁵

This divide has been the primary cause of the slow development of the formulation of international environmental policy through agreements in environmental treaty negotiations."¹³⁶ Demonstrating these disparities, especially their place in the arena of international law, Gonzalez alludes to the fact that the North holds more bargaining power and can influence decision making within such international institutions as the International Monetary Fund, the World Bank and the World Trade Organization.¹³⁷

These differences in the balance of economic power amongst other things led to the South demanding that the North take responsibility for its historical contribution to environmental issues, which the North was not willing to do.¹³⁸ A need then arose for

¹³³ Gonzalez 2015 Pace Environmental Law Review 408

¹³⁴ Gonzalez Environmental justice and International Environmental Law4

¹³⁵ Gonzalez 2015 Pace Environmental Law Review 408

¹³⁶ Gonzalez 2015 Pace Environmental Law Review 408

¹³⁷ Gonzalez Environmental Justice and International Environmental Law 5

¹³⁸ Gonzalez 2015 Pace Environmental Law Review 409

the striking of a balance between the North and the South in international law and its concomitant obligations.

The 1970's¹³⁹ saw the rise of the international community's awareness of the need to protect the environment. This meant therefore that the responsibility and the task at hand to protect the environment had to be equitably shared amongst all states. This was because the task to protect the environment was a global one.¹⁴⁰ When describing this responsibility Boyte states that;

It has been recognised that, given the reality of ecological interdependence, and the concomitant recognition of the global nature of environmental problems, the protection of the global environment has come to be seen as the common concern of humankind and not solely a matter of the domestic jurisdiction of each individual state.¹⁴¹

The CBDR-RC principle was then developed as a means to equitably share this common responsibility amongst states. Bortscheller states that for the purposes of reaching a complete global covenant that included all states, the first Conference of the Parties used the CBDR-RC principle to arrive at a political compromise.¹⁴²

Given the disparity in power between the affluent North and the poorer south and the inception of the CBDR-RC principle as a point of reference in the endeavour to address climate change, difficulties in the interpretation of the principle are bound to arise.¹⁴³ The North is of the view that no line of demarcation should exist between the wealthy North and the poorer South in that all states must make the requisite sacrifices,¹⁴⁴ therefore that the principle should not be applied at all. In direct contrast, the South supports the CBDR-RC and requires the North to bear the greater of the sacrifice

¹³⁹ Boyte New Zealand Journal of Environmental Law 66

¹⁴⁰ Boyte New Zealand Journal of Environmental Law 66

¹⁴¹ Boyte New Zealand Journal of Environmental Law 66

¹⁴² Bortscheller 2010 Sustainable Development Law and Policy 50

¹⁴³ Honkonen 2009 *Kurt Deketelare* 8

¹⁴⁴ Honkonen 2009 *Kurt Deketelare* 8.

because the scourge of climate change can be directly equated as being a result of their actions.¹⁴⁵

Under the current climate change regime, it seems that the interpretation of the developing states took precedence.

3.3 The CBDR-RC Principle within the UNFCCC

3.3.1 Introduction

At the core of the CBDR-RC is the notion of differentiation. This differentiation is warranted by the application of distributive justice to a grasp of the history of climate change, which gave rise to the assumption that only the wealthier North has the obligation to mitigate.

Differentiation among states is not a novel concept in international law. The practice of differentiation has been employed in international environmental law since 1919 for many different reasons.¹⁴⁶ Traces of differentiation can be seen in such instruments as the treaty of Versailles. Although in the context of the International Labour Organization, the treaty cited that the distinctions that exist as far as climate, habitat and tradition, economic opportunity as well as industrial practice make it rather difficult to apply uniformity among all member states.¹⁴⁷

The principle of differentiation was adopted without the use of the term CBDR-RC in the 1972 Stockholm Declaration.¹⁴⁸ In this Declaration, differentiation manifests itself, for instance where it is stated that cognisance has to be taken of specific circumstances and the needs of developing countries as well as, of the costs associated with the taking environmental precautions.¹⁴⁹ This demonstrates an awareness of the need for differentiation. The CBDR-RC principle, as seen today, stems from references to

¹⁴⁵ Honkonen 2009 *Kurt Deketelare* 8.

¹⁴⁶ Stone 2004 *The American Journal of International Law* 277

¹⁴⁷ Stone 2004 *The American Journal of International Law* 278

¹⁴⁸ Article 1 *The Stockholm Declaration (1972)*

¹⁴⁹ Stone 2004 *The American Journal of International Law* 279

differentiation such as those which existed in such instruments as the Stockholm Declaration. As is evident from its formulation the CBDR-RC principle was designed to achieve a specific goal while acknowledging the differences among states, but more to the point for the purposes of this dissertation, it was intended to bridge the North-South divide.¹⁵⁰

3.3.1.1 3.3.1.1 The common but differentiated responsibilities and respective capabilities principle: A brief exposition

The CBDR-RC principle is contained in five MEAs, the Vienna Convention and its Montreal Protocol, the Convention on Biological diversity, the UNFCCC and its Kyoto Protocol, as well as the Convention to Combat Desertification. The CBDR-RC principle can be described as being based on equity in that it denotes the fair sharing of responsibilities among states.¹⁵¹ The principle of equity plays a major role in the treaties established under international environmental law. It is on the basis of this principle that differential treatment was introduced into international environmental law.¹⁵²

The CBDR-RC principle requires that a differentiation be made between developed and developing states, if justice is to be served. Maguire states that the principle attempts to breed functional equality which would be impossible to achieve through self-governing equality. This is especially the case, given the already existing lack of substantive equality among states.¹⁵³ Differentiation is necessary in the functional relationship among states to achieve set goals because as it stands the plains are uneven. Achieving collective goals such as the curbing of climate change in the

¹⁵⁰ Beyerlin and Maruhn International Environmental Law 70

¹⁵¹ Maguire 2013 CCCLR 260

¹⁵² Maguire 2013 CCLR 26

¹⁵³ Maguire 2013 CCLR 260

international arena will be almost impossible if the scales are not tipped in favour of the most vulnerable.¹⁵⁴

The principle can be broken into two parts: common concern and differentiated responsibilities. The first part of the principle recognises that climate change is a global responsibility or is a cause of concern for all of mankind¹⁵⁵ and further that humanity must work together to tackle climate change. The second part of the principle deals with differentiated responsibilities. In this regard, the principle makes reference to the fact that emission reductions must be allocated in a fair manner between states and since states are not equally to blame for the phenomenon they must not be held equally liable. Lee believes that a differentiation made as regards responsibility in international environmental law is a form of distributive justice which as far as climate change mitigation is concerned dictates how much it would cost to reduce GHG emissions using fairness as the benchmark.¹⁵⁶ The principle was formally used under the UNFCCC in 1992.¹⁵⁷

3.3.2 The CBDR-RC principle and its place within the UNFCCC

Under the UNFCCC and the Kyoto protocol the differentiation between states is based on the notion of blame.¹⁵⁸ The convention and its protocol place the obligation of mitigation on the developed states/annex 1 countries and no obligations on the developing states. This is because the developed states are to blame for the climate change phenomenon being experienced throughout the world and these developed states must be to the fore in addressing the problem by taking the lead in mitigating their emissions. Lee refers to this approach as the black and white approach.¹⁵⁹ The learned author suggests that the rationale for this type of differentiation is based on

¹⁵⁴ Maguire 2013 CCLR 261

¹⁵⁵ Lee 2015 Vermont journal of Environmental Law 31

¹⁵⁶ Lee 2015 Vermont Journal of Environmental Law 31

¹⁵⁷ Pauw, Bauer et al Differentiated Perspectives on Differentiated responsibilities 3

¹⁵⁸ *The United Nations Framework Convention on Climate Change* 1992, the preamble of the UNFCCC states that: "the largest share of historical and current global emissions of greenhouse gases has originated in developing countries..."

¹⁵⁹ Lee 2015 Vermont Journal of Environmental Law 31

corrective justice, describing corrective justice as "the idea that liability rectifies the injustice inflicted by one person on another."¹⁶⁰

The CBDR-RC principle is contained in article 3 of the UNFCCC wherein the Convention states that parties are mandated to protect the climate system on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.¹⁶¹ Further, developed countries must take the lead in climate change mitigation.¹⁶² The Kyoto Protocol to the UNFCCC further applies the CBDR-RC principle by allocating different obligations to the member states. The Protocol requires annex1 countries (developed countries) to reduce their emissions, taking into account their common but differentiated responsibilities and circumstances.¹⁶³

The application of the CBDR-RC principle in the UNFCCC and the Kyoto Protocol was mainly aimed at obliging the developed nations to take the lead in mitigation because they are seen to be liable for the current phenomenon, a phenomenon of which has continued to widen the divide between the North and the South instead of narrowing the gap.¹⁶⁴

This has resulted in criticism being levelled against the principle as regards its application in practice, because the principle could be said to have created new emitters instead of curbing the extent of global emissions.¹⁶⁵ This it has done by permitting uncapped emissions for developing states and drastically reducing emissions for developed states. It is on the basis of this rationale that the principle has been seen by some scholars as ineffective as a means of addressing climate change

¹⁶⁰ Lee 2015 Vermont Journal of Environmental Law 31

¹⁶¹ A 3(1) of the United Nations Framework Convention on Climate Change.1992.

¹⁶² A 3(1) of the United Nations Framework Convention on Climate Change.1992.

¹⁶³ A 10 of the Kyoto Protocol 1992.

¹⁶⁴ Lee 2015 Vermont Journal of Environmental Law 33.

¹⁶⁵ Bortscheller 2010 Sustainable Development Law and Policy 50

mitigation.¹⁶⁶ There have also been calls to re-formulate the CBDR-RC in order to make it effective in addressing climate change mitigation.¹⁶⁷

In line with the call for a re-formulation of the CBDR-RC principle, post-Kyoto agreements have been drafted that demonstrate an awareness of the inefficacy of the CBDR-RC principle to address climate change. Although these are non-binding instruments (soft law) their application of the principle demonstrates an awareness of the need for re-formulation of the CBDR-RC principle.¹⁶⁸

There has, however, been no global agreement about what exactly the CBDR-RC principle means or how it can be defined. There is agreement that it is the fair sharing of responsibility, but none of the states can agree on the meaning of "fair".¹⁶⁹ The developing states are of the view that it is fair that the developed states should be the only ones to adopt mitigation measures, because they caused the problem,¹⁷⁰ while the developed states are of the view that climate change is a global problem and should be addressed as such with all states working together.¹⁷¹

In the past, as stated earlier, the burden of climate change mitigation was placed on the developed states. This is how the equitable sharing of responsibility was demonstrated under the CBDR-RC principle. However, the post-Kyoto agreements exemplify a new approach to the principle, which demands that all countries participate

¹⁶⁶ Lee 2015 Vermont Journal of Environmental Law 33

¹⁶⁷ Lee 2015 Vermont Journal of Environmental Law.33

¹⁶⁸ Lee 2015 Vermont Journal of Environmental Law 35

¹⁶⁹ Douglas and Jinnah Berkeley Journal of International law. Publicist 1

¹⁷⁰ Chodor 2015 How can an Equitable Agreement be achieved?.1

¹⁷¹ Chodor 2015 How can an Equitable Agreement be achieved?.1

in the mitigation of climate change.¹⁷² This development should be seen as a point of reference in the enquiry into the character of the CBDR-RC principle.

3.3.3 The CBDR-RC principle in post-Kyoto agreements

In 2007 the Bali action plan was adopted at COP13.¹⁷³ The plan requires all member states to take mitigation responsibilities upon themselves. This it does by mandating all members to implement nationally appropriate mitigation actions voluntarily.¹⁷⁴ However the Plan requires developing countries to adopt "nationally appropriate mitigation actions in the context of sustainable development."¹⁷⁵ This it does while it still requires quantified emission reduction objectives from the developed countries.¹⁷⁶

Although the plan is not a binding instrument, it made a significant change to the definition of the CBDR-RC principle in the Kyoto Protocol by reinforcing the need for an all-inclusive global effort to address Climate change.¹⁷⁷ The Bali action plan illustrates the change in thinking that now prevails among member states. This change in thinking was further illustrated in the Copenhagen Accord which was adopted in 2009,¹⁷⁸ where states met to pave way for an agreement adjacent to the second commitment period of the Kyoto Protocol, which would mandate all member states (developed and developing) to implement mitigation measures.¹⁷⁹

The Accord, although not legally binding demonstrates the nature of the change in the definition and application of the CBDR-RC principle. In Copenhagen the member states agreed that developing countries should undertake emissions reduction targets.¹⁸⁰ However, as against the Kyoto Protocol the Copenhagen Accord allows for countries to decide on their own emission reduction targets.¹⁸¹ The Accord requires both

¹⁷² Lee 2015 Vermont Journal of Environmental Law 35

¹⁷³ Bulkeley and Newell *Governing Climate Change*.21

¹⁷⁴ Lee 2015 Vermont Journal of Environmental Law 35

¹⁷⁵ A 1(b) (ii) The Bali Action Plan, decision 2007.

¹⁷⁶ A 1 (b) (i) The Bali Action Plan 2007

¹⁷⁷ Lee 2015 Vermont Journal of Environmental Law 35.

¹⁷⁸ Bodansky the Copenhagen conference: a post-mortem 1.

¹⁷⁹ Bodansky the Copenhagen conference: A post-mortem 2.

¹⁸⁰ Bodansky the Copenhagen conference: A post-mortem 6.

¹⁸¹ Bodansky the Copenhagen conference: A post-mortem 6.

developed and developing states to submit emission reduction pledges but the Accord requires developing countries to implement their pledges in accordance with financial assistance to be given to them by the developing states.¹⁸² During the negotiations in Bali, developing states such as China, Brazil and India refused to accept the responsibility of taking mitigation measures, but during the Copenhagen negotiations a clear change of attitude was demonstrated¹⁸³ because for the first time these countries agreed to submit their national emissions reduction pledges.¹⁸⁴

The Accord still contains the CBDR-RC principle as a political compromise between the developed and developing countries.¹⁸⁵ However, unlike the Kyoto Protocol, under the Accord all countries are mandated to submit their nationally appropriate mitigation actions. The developing countries are expected to submit their nationally appropriate mitigation actions for national measurement reporting and verification (MRV)¹⁸⁶ while the developed countries mitigation actions will be subject to international MRV.

The Accord further states that the developing countries' nationally appropriate mitigation actions shall be subject to international MRV only where international support is provided.¹⁸⁷ According to Berkeley,¹⁸⁸ the Accord has broken the emission reduction responsibility into 3 tiers, namely, "the developed countries with quantified targets, developing countries who will take some action and LDC's and SID'S who may take action contingent upon funding from the international community."¹⁸⁹

Although the Copenhagen conference is viewed as a failure, because it lacks a legally binding character the adoption of the instrument was to be anticipated.¹⁹⁰ The language in the Accord clearly signifies a change in the application of the CBDR-RC principle and further a change in the negotiating power of developing countries such

¹⁸² Bodansky the Copenhagen conference: A post-mortem 7.

¹⁸³ Bodansky the Copenhagen conference: A post-mortem 10.

¹⁸⁴ Bodansky the Copenhagen conference: A post-mortem 7.

¹⁸⁵ Bodansky the Copenhagen conference: A post-mortem 9.

¹⁸⁶ Bodansky the Copenhagen conference: A post-mortem 10.

¹⁸⁷ Bodansky the Copenhagen conference: A post-mortem 10.

¹⁸⁸ Bushey and Jinnah Berkeley Journal of International Law Publicist 6.

¹⁸⁹ Bushey and Jinnah Berkeley Journal of international law. Publicist 6.

¹⁹⁰ Bodansky the Copenhagen conference: A post-mortem 10.

as China. In this regard Bodansky states that "China was more assertive, reflecting its emergence as a global power."¹⁹¹

A further development of the CBDR-RC principle was illustrated by the Durban platform for enhanced action, which was a process aimed at producing a legal instrument under the UNFCCC to succeed the Kyoto protocol.¹⁹² The Durban platform made no specific mention of the CBDR-RC principle, which was viewed by some as a deliberate omission.¹⁹³ The following year at the 2012 COP however the principle returned and in the Doha agreement stating that member states:

Have a shared vision for long-term cooperative action, including a long-term global goal for emission reduction, to achieve the ultimate objective of the convention in particular the principle of common but differentiated responsibilities and respective capabilities...¹⁹⁴

The shift in thinking within the member states illustrates what some authors have argued to be the evolving nature of the CBDR-RC principle.¹⁹⁵ The principle cannot be said to have a stagnant specific definition, but can be said to have different definitions at different stages of negotiations. In the UNFCCC and the Kyoto era, the principle could be defined as a principle allocating responsibility to states based on past emissions, one that required developed states to take the lead in mitigation, while in the post-Kyoto agreements the principle could be defined as one demanding global participation. The Paris agreement then demonstrated a further evolution in the definition of the CBDR-RC principle, as will be shown below.

3.3.4 The CBDR-RC principle in the Paris Agreement

In 2015 COP 21 was convened in France where the 2015 Paris Agreement was established as the binding agreement succeeding the Kyoto Protocol. The Paris

¹⁹¹ Bodansky, the Copenhagen conference: A post-mortem 10.

¹⁹² Lee 2015 Vermont Journal of Environmental Law 36

¹⁹³ Lee 2015 Vermont Journal of Environmental Law 36

¹⁹⁴ Lee 2015 Vermont Journal of Environmental Law 36

¹⁹⁵ Bushey and Jinnah Berkeley Journal of International Law Publicist 1

Agreement was the result of negotiations between states dating back to the COP in Durban.

An IPCC report published in 2013¹⁹⁶ confirmed that the effects of climate change had become eminent and visible in then world.¹⁹⁷The report further stated that the 2-degree Celsius limit agreed upon by the states would be detrimental to the climate. The IPCC instead encouraged the member states to aim to keep the limit of global warming below 1.5 degrees. In 2015 the member states agreed to adopt an agreement that would impose emission reductions on all member states in order to achieve the required 1.5 degrees' limit.

The Paris Agreement marks the last binding agreement adopted under the UNFCCC legal regime. The Lima call for climate action which was drafted at COP 20 just before the Paris Agreement was drafted states that the ad hoc working group for enhanced action is mandated to create a negotiating text for the agreement to be adopted in Paris in 2015, which agreement will be applicable to all parties.¹⁹⁸

Decision 1 adopted in the Lima call for climate action also referred to the principle of common but differentiated responsibilities and respective capabilities in the light of different national circumstances.¹⁹⁹ This gives developing countries with high emission levels and capabilities to address such emissions the, leeway to actively do so without allowing them to use the CBDR-RC principle as a scapegoat. As illustrated in the years leading up to the Paris COP, countries such as China, India and Brazil refused to limit their emissions on the basis of the CBDR-RC principle.²⁰⁰ They argued that the principle placed no emission reduction commitments on developing countries and as such they had no obligation to limit emissions.²⁰¹ The introduction of Intended Nationally

¹⁹⁶ Rebecca Willis Paris 2015: getting a global agreement on climate change 12.

¹⁹⁷ The 2013 Intergovernmental panel on climate change 5th assessment

¹⁹⁸ The Lima call for climate action decision-/CP.20.page 2

¹⁹⁹ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 14

²⁰⁰ Bortscheller 2010 Sustainable Development Law and Policy 50.

²⁰¹ Bortscheller 2010 Sustainable Development Law and Policy 50

Determined Contributions (hereafter the INDC) to the climate change arena by the Warsaw COP led to a new perspective on differentiation.²⁰²

The Paris Agreement was the first legal instrument to demand action towards climate change from all member states.²⁰³ This had been expected from the Copenhagen COP, where the member states had failed to agree upon a binding legal instrument. The Agreement has been signed by 191 countries and ratified by 84.²⁰⁴ The Paris Agreement aims to limit global warming to a limit of 1.5 degrees especially because the IPCC reports have demonstrated that all global warming is dangerous.²⁰⁵ Although the agreement has been reported to be plagued by shortcomings, in the sphere of differentiation much success has been achieved.²⁰⁶

To begin with, the Paris Agreement states in its preamble that the agreement will be guided by all the principles of the UNFCCC, including equity and differentiation.²⁰⁷ The Agreement further makes reference to common but differentiated responsibilities and respective capabilities in the light of different national circumstances,²⁰⁸ which is an attempt to bridge the gap created by the UNFCCC and its Kyoto Protocol by categorising countries into annex 1 and non-annexed countries. The new phrase added "in light of different national circumstances," is an attempt by the member states at striking a balance between a global agreement applicable to all, on the one hand, and the maintenance of equitable differentiation²⁰⁹ on the other.

The added phrase brought within it a less strict application of the CBDR-RC. What it essentially means is that the principle will differentiate between states, not based on the Kyoto annexes, but by taking into consideration their different national

²⁰² Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 14.

²⁰³ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 3.

²⁰⁴ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 3.

²⁰⁵ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 3

²⁰⁶ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for climate, Environment and Energy 3

²⁰⁷ Voigt and Ferreira Differentiation in the Paris agreement 65.

²⁰⁸ The Paris agreement to the UNFCCC preamble.

²⁰⁹ Voigt and Ferreira Differentiation in the Paris agreement 64.

circumstances.²¹⁰ Therefore the countries will no longer be allocated emission reduction obligations based on their being developed or developing. Instead the states will self-categorise, based on their different economic capabilities/national circumstances in the form of INDC's.²¹¹ Voigt and Ferreira further elaborating on the added phrase in the Paris Agreement, state that:

It allows for a larger array of criteria, such as past, current, and projected future emissions, but also financial and technical capabilities, human capacity, population size and other demographic criteria, abatement costs, opportunity costs and so on.²¹²

Secondly the Paris Agreement makes all legally binding obligations mandatory on all members not just the on developed countries. This was a concept taken from the Copenhagen negotiations as well as the Durban platform, in which the intention was for COP21 to establish a legally binding agreement applicable to all members. The agreement, unlike the Kyoto Protocol, does not require one group of countries to act alone. This is because of the fact that low stabilisation targets can no longer be met without the participation of the developing countries.²¹³

What the agreement does is to mandate all countries to submit their INDC's and adopt contributions that best fit their individual circumstances.²¹⁴ This means in essence that there is no annex 1 or non-annexed countries, or developed and developing countries because the agreement itself does not make use of these terms.²¹⁵ The most

²¹⁰ Voigt and Ferreira Differentiation in the Paris agreement 64.

²¹¹ Voigt and Ferreira Differentiation in the Paris agreement 66

²¹² Voigt and Ferreira Differentiation in the Paris agreement 66

²¹³ McManus The principle of common but differentiated responsibility and the UNFCCC 3.

²¹⁴ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for climate, Environment and Energy 16.

²¹⁵ The Paris agreement 2015

substantial changes to differentiation in the 2015 agreement are also visible in the finance and reporting mechanisms to be discussed below.

3.4 Measurement, Reporting and Verification and Finance in the Evolution of the CBDR-RC principle

The issue of the measurement, reporting and verification of state's mitigation efforts or Nationally Appropriate Mitigation Actions (hereafter referred to as NAMA's) is also an aspect that has demonstrated the evolution of the CBDR-RC in the post Kyoto conventions. This is illustrated by the change of the burden of reporting from the Kyoto protocol to the 2015 Paris Agreement.

Like the duty to mitigate, the issue of reporting and verification was thought by the developing states to be the task of the developed states, as they were to blame for the bulk of the problem.²¹⁶ After the Kyoto Protocol the Copenhagen Accord was a most promising document that made a significant change to the application of the CBDR-RC principle by mandating developing states to submit NAMAs and dividing the developing countries into those that had to implement mitigation actions and those that could do so with financial assistance from the international community.²¹⁷ The Paris Agreement went a step further, making progress with regards to the reporting of NAMAs and verification.

Article 4 of the Paris Agreement²¹⁸ mandates developed countries to continue to take the lead in implementing economy wide absolute emission reduction targets while it allows the developing countries to continue to enhance their efforts until they too can move to economy-wide emissions reductions.²¹⁹ The article further requires all member states to submit nationally determined contributions (every five years) that reflect the

²¹⁶ Bushey and Jinnah Berkeley Journal of international law. Publicist 6.

²¹⁷ Bushey and Jinnah Berkeley Journal of international law. Publicist 6

²¹⁸ A 4 The Paris Agreement 2015

²¹⁹ A 4(4) The Paris Agreement 2015

highest possible ambition of the individual country in the light of the CBDR-RC principle.²²⁰

Although the agreement does not contain any legally binding obligations relating to emissions reduction or finance²²¹the legally binding obligation to communicate the individual country's national contributions, indicates a further change in the countries' application and definition of the CBDR-RC principle. All the states are now obliged to act under the new application of the principle but to act in the light of their different national circumstances. This seems to have bridged the North South divide that the CBDR-RC principle was purposed to bridge from its inception.

Further with regard to financial assistance, in terms of the UNFCCC and the Kyoto Protocol the duty to provide financial assistance and technology rested solely on the developed states. The UNFCCC based its differentiation between states on the CBDR-RC principle and on the notion, that developed states are to blame for the prevailing problem and should therefore take the lead in the mitigation of climate change²²²as discussed above. However, in contrast to the past climate change agreements, the Paris Agreement has brought with it some changes in the provision of finance.

The requirement to provide finance no longer rests solely on the developed nations. The agreement continues to make it mandatory for developed states to provide financing to developing states. This is viewed as the most effective way to ensure compliance on the part of the developing states. Article 9 of the Agreement states that developed states are expected to continue to provide financial assistance to the

²²⁰ A 4(3) The Paris Agreement 2015

²²¹ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for climate, Environment and Energy 14

²²² Voigt and Ferreira Differentiation in the Paris Agreement 58

developing states.²²³ The article goes further, however to state that other parties may provide such assistance voluntarily.²²⁴

Although this may not amount to much of change, as the provision of finance is still mandatory only to the developed states the fact that the other member states may provide such assistance indicates a shift from the UNFCCC's initial assertion pertaining to the developed states, where they were burdened with much of the responsibility because of their supposed historical contribution to climate change. There is demonstrable shift to a more global approach of working together to solve the problem, keeping in mind that there are a number of developed countries that may be able to provide financial assistance to the least developed countries.

3.5 Conclusions

The Paris Agreement has continued to take the bottom-up approach, that was adopted in Lima, where the Lima decision recognised "complementary support by other parties (i.e. those that are not developed countries)."²²⁵ However, it has removed the developed/ developing divide that was used by the developing states such as China, Brazil and India as an excuse to avoid taking up mitigation measures.

As illustrated in this chapter, the CBDR-RC principle cannot be said to have an unchanging, rigid definition or application. The Principle takes on different forms in the different eras of the UNFCCC instruments. The principle as it stands in the Paris agreement has seemed to bridge the gap that was created by the Kyoto Protocol in its creation of the annexes. It no longer mandates only one group to act instead it allocates responsibilities to all states based on the CBDR-RC principle, in the light of different circumstances of the countries.

The next chapter of this dissertation will look into the CBDR-RC principle as a normative construct in climate change mitigation. As illustrated above the CBDR-RC principle is

²²³ Article 9The Paris Agreement 2015

²²⁴ Article 9The Paris Agreement 2015

²²⁵ Voigt and Ferreira Differentiation in the Paris Agreement 62.

an ever-evolving principle, but the question of how much it can be relied upon in climate change mitigation remains to be investigated. The issue remains as to how the principle can be applied to effectively address climate change mitigation.

CHAPTER 4

4.1 Introduction

On the 1 June 2017, the 45th President of the United States announced his country would be withdrawing from the 2015 Paris Agreement. His reason for the withdrawal was amongst others, that the Landmark 2015 Pact imposed widely unfair environmental standards on American businesses and workers.²²⁶ Although the Paris Agreement avoided the developed/developing dichotomy invoked by the Kyoto Protocol, it seems that once again the differentiation applied by the Climate agreement is not satisfactory to all member states. The United States (hereafter the US) is the second largest emitter in the world.²²⁷ Its withdrawal from the Agreement though not yet effected, could diminish the global efforts that spurred the creation of the Pact. The reason for this exit by the US is, amongst others the differentiation applied by the Agreement.

As it is, the IPCC has already reported that the INDCs submitted by the individual states will not be enough to meet the 1.5 degrees' Celsius target set by the Paris agreement;²²⁸ this will be more difficult with the absence of the US in the global agreement. An investigation as regards the normative construct of the CBDR-RC mandates an understanding of the best interpretation of the principle that would best be placed to address climate change. This state of affairs is particularly relevant given the reach of climate change, which reach extends climate change as a phenomenon that not only affects individual states but one that affects every state. This places climate change within the purview of a global concern that mandates collective international action and not just the mandate of some states that agree on the adverse effects that climate change brings.

This chapter will attempt to investigate which application of the CBDR-RC (as discussed in chapter3) is best suited to assist the realization of the ultimate goal of the climate

²²⁶ Shear The New York times. June 1, 2017.

²²⁷ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 3

²²⁸ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 3

change regime. The chapter will begin by focusing and elaborating on the application of responsibility under international law. Which will be followed by an investigation of differentiation under IEL (4.4). This focus will provide a proper understanding of how responsibility is shared/differentiated amongst states in the international arena, which will then highlight the application of the CBDR-RC that can be said to be ideal in advancing the need to address climate change.

Chapter 4 in its entirety will be dedicated towards furnishing the most comprehensive understanding of the CBDR-RC and its claim to normative reality. This claim to normative reality is directed towards avoiding a conflict such as that which the 45th President of the US is claiming because we are attempting an ideal understanding of the CBDR-RC, a holistic understanding that lays claim to an interpretation that will see the primary intention behind the CBDR-RC being fulfilled in the climate change mitigation arena.

4.2 Responsibility under International Law

4.2.1 Introduction

In the quest towards defining the place of the CBDR-RC principle within climate change mitigation, which quest would ultimately define its normative construct²²⁹ an understanding of responsibility under international law becomes pertinent. This understanding will necessitate consensus on the most ideal interpretation of the CBDR-RC.

At the fore is the fact that the CBDR-RC itself draws attention to the need to outline responsibility. This it does by itself stipulating its content as embracing "responsibility." This chapter will illustrate that the aim of the principle in the climate change regime is not to merely outline the CBDR-RC as a principle subject to consensus by the different signatories to an agreement, rather the intention is to grant to it the force and

²²⁹ This it would do by demonstrating the most ideal understanding and conception of the principle that would best suit climate change mitigation and enhance collective action towards addressing climate change.

reverence that is granted to a principle of law. Such force having been granted to it will of necessity enhance and mandate collective action to address climate change. This is because the principle will carry within it the force of law that is so granted to principles of law that are understood and conducted as such.

4.2.2 Responsibility as an institution in international law

4.2.2.1 Introduction

The form and substance of responsibility in international law, has to be understood from the same context as which justice is understood in municipal law. Justice, just like responsibility is not a characteristically legal concept.²³⁰ Instead, responsibility has to be understood as more of a regulative concept than anything else. A regulative concept that shares its substance and form with other disciplines that may use the same terminology.²³¹ This means then that an understanding of responsibility is not done in isolation of all other disciplines. This state of affairs is rendered all the more true and significant by a contemporary understanding of the CBDR-RC principle itself which does not leave aside the influence of other disciplines such as economics and politics. In the same way that the ultimate purpose underlying law is justice, responsibility will mark the core of any system of law.²³² The foundational structures of responsibility under international law even though largely imperceptible or unseen are clothed and given authority by legal principles.²³³

Planck²³⁴ defines an institution as an accumulation of ideas that are so constituted to form normative reality. Normative because the intention is to have all those ideas so constituted to form a reality that best suits for instance human conduct, that is to say

²³⁰ Planck Responsibility in international law
²³¹ Planck Responsibility in international law
²³² Planck Responsibility in international law
²³³ Planck Responsibility in international law
²³⁴ Planck Responsibility in international law

the most ideal human conduct that guarantees that all those that are so party to the ideas live in harmony. Planck further states that:

Institutions are not agents for the free production of legal norms. Rather law recognises institutions as necessary conditions for its normative content. Institutions are laws contact points with social reality. An institution requires convincing power on the level of ideas, it needs social recognition, and it depends on normative guarantees at all levels from principles through rule-making to concrete decisions of cases. International law presupposes or reconfirms such institutions, integrating them with the international political system and assigning them functions. For instance, the International Court of Justice recognised this for the institution of the self-determination of a people.²³⁵

This begs the question therefore whether responsibility is an institution in international law. It is my assertion that this question has to be answered in the affirmative. A rudimentary understanding of responsibility is the proposal that we can identify action that is subject to certain consequence and the eventual control of such consequence.²³⁶ Responsibility is said to delineate the relation as it exists between subject, object and an assigned body that carries out and possesses certain sanctioning powers.²³⁷

International law is by its very nature decentralised. It possesses a different character from municipal law in the sense that there is no apex document that guarantees the enforcement of provisions of law. There is a need to guarantee therefore the institution that is international responsibility and because of the decentralised nature of international law such guarantee only happens with the use of the enactment of

²³⁵ Planck Responsibility in international law 105

²³⁶ Planck Responsibility in international law

²³⁷ Planck *Responsibility in international law* p 105 the learned author goes further to state that: "All matters of responsibility play out within this matrix made up of three vectors of who is responsible, for what, to whom. Responsibility is in particular the normative core of all public organisation in society, so that the art of organisation in essence becomes the art of the clear delimitation and attribution of responsibilities"

principles and their concretisation through rule-making as well as the decisions passed by international bodies tasked with such decision-making.²³⁸

An instance of this process of law making can be gleaned from the advisory opinion by the sea-bed dispute chamber of the international tribunal for the law of the sea. The chamber was therein discussing the precautionary principle and linking the said principle to the Rio Declaration. The facts therein are not relevant, however the Chamber stated that the Rio Declaration became a point of departure in the process towards concretising the precautionary principle and making it binding law.²³⁹

The Chamber observed that there is a possibility that there could exist multiple forms of legal implementations of the law of the sea, starting from treaties to subsidiary laws adopted by the Sea Bed authority.²⁴⁰ Such an appreciation of the effect of including within treaties certain principles could cause the specific principle so included to develop into a customary international law principle that has and possesses the requisite force. The Chamber in this advisory opinion stated that the precautionary principle was well on its way to becoming a customary international law principle that is worthy of observance as such especially when its force is tested against the environmental impact assessment requirement which the Chamber held was a principle of customary international law.²⁴¹

In the final analysis, therefore the Chamber elucidated a process that permits in the first instance the adoption of a broad principle that has its roots in a binding political document. This principle as enumerated in the politically binding document takes on

²³⁸ Planck *Responsibility in international law* 108. The learned author goes further to state that: "In a world of sovereigns, what rather matter is the ability of states dynamically to produce authoritative texts on international responsibility along the matrix outlined above. Guaranteeing international responsibility is thus intimately wedded to the contemporary process of international law making. This process is grounded in foundational documents, which serve as reference points for subsequent law making encompassing instruments ranging from treaty law to alternative forms of law making including administrative-style rule making."

²³⁹ The sea-bed disputes chamber of the international tribunal for the law of the sea – advisory opinion on *responsibilities and obligations of states sponsoring persons and entities with respect to activities in the area* at 656.

²⁴⁰ Planck *Responsibility in international law* Para 126 – 135.

²⁴¹ Planck *Responsibility in international law* Para 135.

different characteristics so that it possesses in the finality a legally binding character which becomes concretised in the rationale that underlies the principle.

The process as outlined above is also available for international responsibility which will by the same token extend to the CBDR-RC. In this regard the sentiments of Planck become relevant, although discussing responsibility strictly the learned author states that:

The process takes as its starting point a foundational document which for a new area under consideration adopts terminology of responsibility and assigns relevant actors with responsibilities. This foundational document will be of a non-binding political nature. The document of universal or near universal acceptability is then concretised through binding international law. Such binding law can be treaty law, secondary law adopted by international organisations, or alternative forms of international law making. The collective self-attribution of responsibility by states is rooted in the consent principle that traditionally underpins legitimacy of international law. But responsibility may also be attributed by a group of states to third states. The consent principle cannot legitimise responsibility attribution to a non-consenting state. Such external responsibility attribution can however, derive legitimation from the group of states claiming to be acting in the interests of the international community. This presupposes that these states constitute a representative group of states which includes those most interested in the matter and that there is an objective justification for also attributing responsibility to the non-represented state. The creation of responsibility related norms of international law is thus in essence a deductive process. This differentiates it from the other well-established categories of public interest norms in international law: *ius cogens* and *erga omnes* norms which develop essentially inductively through converging state practice.²⁴²

Responsibility if understood as an institution under international law will mandate an understanding of principles such as the CBDR-RC in a more progressive light which by necessary extension will mandate collective action on the part of the international community.

The exposition given above relating to responsibility attempts to shed light on the scope and aspects that should be paid attention to when attempting to instigate global climate change action. In its current stature, clearly the global climate change regime does not seem to be going at any length to address climate change. What underlies

²⁴² Planck Responsibility in international law Para 135.

this entire debacle is the fact that action is necessary in light of the earth's changing facets.

An understanding of responsibility under international law points to the fact that for aspects of international law, specifically international environmental law collective action can only be achieved if all states put aside their interests for the benefit of the greater good. The current global climate change regime is not geared towards that and is in need of alteration in that regard. This is the case notwithstanding the fact that global climate change action is the responsibility of all those that form the population of this planet.

As has been established by this part of the paper, the responsibility to protect the environment is that of all states, the international community however have applied differentiation to this responsibility in an attempt to fairly distribute this responsibility to states in accordance with their capabilities, taking into account the blame of the developed states for the current phenomenon.

The following part of the dissertation highlights differentiation which is a very key aspect when regard is had to the CBDR-RC and the manner of distribution of obligations is carried out.

4.3 Differentiation under International Environmental law

As illustrated above, the International community has the responsibility to act together for the protection of the environment. The responsibility of states cannot be the same however, because their circumstances differ. Under international law, differentiation of responsibilities is used to even out the international stage for the different countries, and create fairness or equity and equality.

This next part of the chapter will investigate the application of differentiation under international law. This will enable an understanding of the importance of the CBDR-RC

in the climate change regime and how it can be effectively applied to mitigate ghg emissions.

Differentiation under International Environmental Law (IEL) is defined as "the instances where the principle of sovereign equality is side-lined to accommodate extraneous factors, such as divergences in levels of economic development or unequal capacities to tackle a given problem."²⁴³ Differentiation of responsibilities in IEL can be traced back to the 1970's,²⁴⁴ and can be said to be a result of colonialism.²⁴⁵ After countries were decolonised the differences in economic power became more evident, and for international law to be successfully applied these differences had to be taken into consideration.²⁴⁶

The developed countries approached the UN general assembly in 1974 to adopt a declaration on the establishment of a new economic order (NIEO)²⁴⁷ and to incorporate a principle of "preferential treatment to the benefit of developing countries"²⁴⁸ within such order. Although the NIEO was never a success (due to amongst other factors, the lack of bargaining power of the developing states)²⁴⁹ it marked the introduction of

²⁴³ Scholtz, Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle 113

²⁴⁴ Scholtz, Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle 115.

²⁴⁵ Scholtz, Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle 115

²⁴⁶ Scholtz, Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle 115

²⁴⁷ Scholtz, Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle 115

²⁴⁸ Scholtz, Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle 116

²⁴⁹ Scholtz, Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle 117

differential treatment of states in the economic field, which was later revived in the international environmental law field.²⁵⁰

Historically, international law was premised on the principle of sovereign equality of states²⁵¹this being due to the fact that the only members at the time were developed states. The globalisation of environmental issues led to the need for legal tools that would allow for international law to be applied equally and fairly, which includes taking into account "the existing disparities and inequalities among states..."²⁵² Differential or preferential treatment of some states over others, was then adopted under international law, in an attempt to bridge the gap between the North and South that is caused by (amongst other factors) the economic disproportions between the two sides, And to further increase the successes in implementation of international instruments.²⁵³

Under IEL the application of the differentiation principle seeks to place states at the same footing, not to unfairly favour one state over another. It seeks to "adopt the legal system to social and economic realities and is not akin to charity, differential treatment seeks to find firmer basis for re-distributive measures whose eventual aim is the empowerment of weaker actors."²⁵⁴ Sovereign equality can therefore not suffice as fair in a situation such as that faced by the climate change regime, because the responsibility of states is not equal for climate change and the countries do not have

²⁵⁰ Scholtz, Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle 117

²⁵¹ Cullet, Differential treatment in international law: Towards a new paradigm of interstate relations 549

²⁵² Cullet, Differential treatment in international law: Towards a new paradigm of interstate relations 549

²⁵³ Cullet, Differential treatment in international law: Towards a new paradigm of interstate relations 549

²⁵⁴ Cullet, Differential treatment in international law: Towards a new paradigm of interstate relations 561

the same capacity to address the problem, as such differentiation is necessary if the problem is to be solved²⁵⁵

Differential treatment of states has been applied in several international treaties,²⁵⁶ the most relevant being the UNFCCC and its Kyoto protocol, as well as the Paris agreement. Which Peel²⁵⁷ argues have been "used as the laboratory for testing different and evolving understandings of the principle and its consequences..."

The main aim of differential treatment of states under IEL, can be described as "to seek equitable and effective results within a system."²⁵⁸ Under IEL and the climate change regime, differentiation is made in favour of developing countries. This is because the developed countries are viewed as more to blame for climate change due to their levels of emissions during their industrialisation,²⁵⁹ and the developed countries have more financial capacity to be able to deal with the problem as well as be able to financially assist the developing states in mitigating climate change. Cullet further states that "if the overall share of developing countries' emissions is to rise substantially; their per capita emissions will remain far below those of developed countries for the foreseeable future."²⁶⁰

According to Scholtz "the principle used to reflect the essence of differentiation is the CBDR."²⁶¹ It has been argued that holding the developing and developed states equally responsible for climate change would not be "morally, legally or economically feasible."²⁶² It follows therefore that the differential treatment in the climate change

²⁵⁵ Cullet, Differential treatment in international law: Towards a new paradigm of interstate relations 561

²⁵⁶ Cullet, Differential treatment in international law: Towards a new paradigm of interstate relations 549

²⁵⁷ Peel, Re-evaluating the principle of CBDR in Transnational climate change law 249

²⁵⁸ Cullet, Differential treatment in international law: Towards a new paradigm of interstate relations 551

²⁵⁹ Cullet, Differential treatment in international law: Towards a new paradigm of interstate relations 562

²⁶⁰ Cullet, Differential treatment in international law: Towards a new paradigm of interstate relations 562

²⁶¹ Scholtz, Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle 113

²⁶² Cullet, Differential treatment in international law: Towards a new paradigm of interstate relations 561

regime, in favour of the developing states is based mainly on the historical contributions made by the developed states to climate change, it is thus their responsibility to take on more responsibilities in climate change mitigation.

IEL recognises differential treatment/the differentiation principle as a means to acquire equality under the climate change regime, it is however important that the differentiated treatment not only fosters equality amongst states, but that it allows for the problem to be effectively eradicated. The main aim of the UNFCCC is to stabilize ghg emissions, the Paris agreement also aims to keep ghg emissions well below 1.5degrees Celsius. The question is then whether the differentiation applied under the regime will foster equality and enable states to effectively lower global temperatures as is the aim of the regime.

The next part of this chapter will evaluate the application of the CBDRRC principle under the climate change regime, and determine which application of the principle best suits the normative reality which the regime aims to attain, being the reduction and ultimately elimination of greenhouse gases in the atmosphere.

4.4 The current application of the CBDR-RC principle in the climate change regime

As illustrated in chapter 3, the CBDR-RC principle has had different meanings at different stages of the climate change regime. Under the UNFCCC and its Kyoto Protocol the CBDR-RC allocated responsibilities based on past emissions and

capabilities,²⁶³ while the Paris agreement took cognisance of the need for a global approach to the mitigation of climate change.

This part of the paper will evaluate the different applications of the CBDR-RC and their likely contributions to the mitigation of climate change.

4.4.1 The Kyoto Protocol

As illustrated in a chapter 3 the Kyoto application of the CBDR-RC principle was the most controversial. Under the Protocol which contains the substantive obligations relative to climate change, the developing member states had no obligations while the developed states were mandated to reduce their ghg emissions by 5% below their 1990 levels, in the 2008 to 2012 commitment period.²⁶⁴

This application of the CBDR-RC sparked a lot of criticism amongst authors, many arguing that the principle is in fact hobbling the fight against climate change by allowing the developing states to emit with no limits and placing the burden solely on the developing countries.²⁶⁵ Atapattu also argued that "the obligation to protect the environment is placed on all states whether developed or developing, this general obligation may be quantified by differentiated responsibilities based on different contributions to the problem,"²⁶⁶ this she argues "does not however mean that the general obligation to cooperate to conserve and protect the environment becomes nullified as a result of differential obligations."²⁶⁷ This means therefore that the application of the CBDR-RC adopted in the Kyoto Protocol, by not placing any binding obligations on developing states aims to dissolve the developing states from the common responsibility of protecting the environment. Authors have argued also that "failing to realise that by allowing developing states to continue producing high levels

²⁶³ 1997 Kyoto Protocol to the United Nations Framework Convention on Climate Change

²⁶⁴ Atapattu, Human development Report 2007/2008,7

²⁶⁵ Bortscheller 2010 Sustainable Development Law and Policy 50.

²⁶⁶ Atapattu, Human development Report 2007/2008,8

²⁶⁷ Atapattu, Human development Report 2007/2008,8

of ghg emissions irrevocable damage to the environment is done, the CBDR is marred by a near-sighted bias."²⁶⁸

Further scientists argue that more than two thirds of the cuts in greenhouse gas emissions which are needed by 2030 must come from developing countries,²⁶⁹ meaning the application of the CBDR-RC in the Protocol will yield no positive results if the developing states are under no obligation to take on mitigation measures. It is worth noting that the USA pulled out of the Kyoto protocol based on the unfair application of the CBDR-RC which mandates action from developed states and places no obligations on the developing.

Authors such as Scholtz, were however of the view that the application of the CBDR-RC under the protocol poses no issues as far as climate change mitigation is concerned. He argues that:

sovereignty was used as a mechanism to exclude uncivilised nations from participating in the development of the earlier stages of international law accordingly, measures must exist in order to promote restitution so as to enable a more fair and equitable world, CBDR may be viewed as a means to address the inequality in international law. Colonialism and the resulting inequality may justify the existence of the CBDR.²⁷⁰

The author effectively argues that colonialism forms the backbone of international law as it is because of the colonial history that the economic disparities between the developed and developing states exist. He therefore argues that the CBDR needs to be applied in a way that takes cognisance of these disparities and this history for it to

²⁶⁸ Scholtz, *Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle* 127

²⁶⁹ Scholtz, *Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle* 114

²⁷⁰ Scholtz, *Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle* 132

be able to equitably share responsibilities, as is the case with the CBDR-RC application under Kyoto.

The application of the CBDR-RC under the Kyoto protocol did not consider countries such as china, India and brazil, which although were developing countries they were high emitters. Although the Kyoto emission targets were met and surpassed by the member states, the rise of ghg emissions from countries such as china rendered the protocol a failure. There was a need therefore to re-evaluate and apply the CBDR-RC in a manner that would allow for the attainment of the normative reality the regime strives for.

4.4.2 The Paris Agreement

The 2015 Paris agreement, which marks the last binding agreement under the climate regime, seemed to have identified an approach that would equitably share responsibility amongst states, taking into account economies in transition. The agreement was expected to apply the CBDR-RC in a manner that would reduce ghg emissions and ultimately abolish them.

As illustrated in chapter 3, the Paris agreement added the phrase "in light of different circumstances" to the CBDR-RC principle, this, authors argued was a new approach to differentiation under the climate change regime.²⁷¹Christina Voigt and Felipe Ferreira, argue that the new application under the CBDR-RC "has the potential to function as a catalyst for a race to the top on climate action rather than merely a burden-sharing concept."²⁷²Peel further argues that most authors view the application of differentiation

²⁷¹ Peel Re-evaluating the principle of common but differentiated responsibilities in transnational climate change law 249

²⁷² Peel Re-evaluating the principle of common but differentiated responsibilities in transnational climate change law 249

under the Paris agreement as a "positive development, at least as a way of overcoming negotiation deadlock to foster agreement on the global climate change action."²⁷³

The application of differentiation under the Agreement takes cognisance of the economic changes that countries have experienced,²⁷⁴ by mandating all members to submit their INDCs the agreement is of global application, making sure countries like china can no longer refuse to reduce their ghg emissions hiding behind the CBDR-RC principle. Authors have also argued that the new application of the CBDR-RC under the Paris agreement bridges the north south divide that had previously been widened by the Kyoto protocol.²⁷⁵

Although authors have categorised the agreement as "merely victory in the face of the no- agreement option"²⁷⁶ with regards to differentiation and the application of the CBDR-RC the agreement seems to have closed out the loopholes left by the Kyoto Protocol. This will be discussed in detail below.

4.5 Achieving greenhouse gas emissions mitigation: the normative reality

The developed/developing dichotomy that was adopted under the Kyoto protocol seemed to be the main issue raised for its failure to reduce ghg emissions. Cullet goes even further and suggests that for differentiation to work equitably under the climate change regime 2 criteria must be met:

- i) identification of beneficiaries of differentiation on the basis of environmental and social indicators rather than the economic development criterion implied by the developed/developing country categorization.
- ii) treating the environment as common

²⁷³ Peel Re-evaluating the principle of common but differentiated responsibilities in transnational climate change law 249

²⁷⁴ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 41

²⁷⁵ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 41

²⁷⁶ Peel Re-evaluating the principle of common but differentiated responsibilities in transnational climate change law 250

heritage and addressing environmental problems at the global level in order to devise equity measures that transcend the notion of state.²⁷⁷

The application adopted by the Paris agreement seems to meet this criterion. The agreement recognises that the environment is the common heritage of mankind hence the global application of the INDCs. The agreement does not make any mention of developed or developing states and by so doing one could argue it has done away with the categorisation. This it does in favour of the new application of the CBDR-RC which will be applied considering differing circumstances.

Authors have argued further that the INDCs submitted under the agreement have indicated that the 1.5degrees Celsius target which was the agreements goal, will not be met. It has been contended that temperatures are likely to increase by 2.7 to 3.5 degrees Celsius.²⁷⁸In light of the foreseeable shortcomings of the Paris agreement, Obergassel et al²⁷⁹ have stated that the focus in relation to the agreement should not be whether the agreement can or will deliver the emission reductions targets that are necessary, but rather, whether the agreement has the potential to catalyse further changes.²⁸⁰

The answer in that regard seems to be in the negative. This is because the agreement not only lacks the binding nature that is necessary to effect implementation²⁸¹ (and by extension much needed action) but like the Kyoto protocol, the US has once again

²⁷⁷ Peel, Re-evaluating the principle of common but differentiated responsibilities in transnational climate change law 250.

²⁷⁸ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 3.

²⁷⁹ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 3.

²⁸⁰ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 3.

²⁸¹ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 2.

threatened to pull out of the agreement based on the application of the CBDR-RC principle.

It is the argument of this chapter that climate change regime should gradually clothe the principle with the binding nature of a customary law principle. This state of affairs, it is contended has the potential to instigate much needed action because being a customary law principle its contents will not easily be derogated from. The creation of further agreements is not likely to yield any results since states will still contend that the principle is still not fair in its application even though the contents of the principle have been constantly revised to attempt to give effect to the contentions by all states and come up with a single all-encompassing interpretation of the principle that all states are happy with.²⁸²

The Paris agreement attempted to bridge this gap by removing the developed/developing state differentiation that plagued the climate change regime since the its inception through the Kyoto Protocol.²⁸³ The understanding was that the removal of the developed/developing differentiation would cure what was deemed as being unfair about the principle. However, it has become evident that mandating global climate change action will not happen through states collectively agreeing to a specific interpretation of the principle as being the fairest, case in point, the US's purported withdrawal from the Paris agreement.²⁸⁴ The removal of the division as done in the Paris agreement does not solve the problem. It is just the top of the deeply imbedded problem in the climate change regime which authors have attributed to the fact that developed states refuse to take responsibility for the problem that they have created.

4.6 Conclusions

Action is crucial if global climate change is going to be addressed. This action that is so incremental to changing the fortunes of the planet is being constantly flouted by

²⁸² Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 41.

²⁸³ Obergassel, Arens and Hermwille 2016 Wuppertal Institute for Climate, Environment and Energy 41.

²⁸⁴ Shear The New York times. June 1, 2017.

states attempting to advance their own independent mandates. This necessitates a different understanding of global climate change action if ever the fortunes of the planet are going to be changed.

The present negotiations and applications of the CBDR-RC principle fail almost dismally in assisting to address climate change. It is contended that the CBDR-RC will manifest gradually into a customary international law principle worthy of reverence which will do away with the international community's ability to constantly renege (this recommendation will be discussed in detail in chapter 5). There is a need to address climate change and the said need to address climate change happens only through collective action on the part of the international community.

CHAPTER 5

5.1 Overview of the research question

This dissertation set out to investigate the normative content of the CBDR-RC principle. It aimed to trace the origins and history of the principle in order to understand how the principle can assist in the mitigation of global ghg emissions. In order to do this, the dissertation focused on climate change mitigation under the UNFCCC and its legal regime.

Understanding the UNFCCC and its structure assists in interpreting the CBDR-RC principle in many ways. Relevant for purposes of this Dissertation is its emphasis on climate change mitigation. The UNFCCC should be understood as a type of Constitution. It is an apex document that outlines a legal framework for climate change. It is crucial therefore to understand that all successive climate change instruments have to be in compliance with it.²⁸⁵

At the heart of the UNFCCC is climate change mitigation.²⁸⁶ The intention underlying the UNFCCC is to attempt to stabilize ghg concentrations in the atmosphere.²⁸⁷ This is done with the intention of keeping the greenhouse gas concentrations in the atmosphere to a level that does not intrude on with the earth's systems. It becomes pertinent, therefore to understand the structure of the UNFCCC and, how it was envisioned to apply especially to successive instruments that address climate change. It goes without saying, therefore, that we are faced with a specific need to assess the CBDR-RC and how it will play out in the global climate change arena.

Climate change mitigation took centre stage in the climate change debate for many reasons but the most obvious is the that from a policy as well as scientific perspective, mitigation is much easier to achieve than adaptation.²⁸⁸ Mitigation requires at least the

²⁸⁵ See Paragraph 2.1

²⁸⁶ See Paragraph 2.1

²⁸⁷ See Paragraph 2.1.1

²⁸⁸ Fussel and Klein climate change vulnerability assessments: an evolution of conceptual thinking.4.

stabilization of greenhouse gas concentrations in the atmosphere. Taking into account policy considerations as well as scientific considerations, mitigation is the central factor factor to consider when assessing the CBDR-RC principle. This is especially the case when regard is had to the contributions of the principle to climate change mitigation.

Developing states such as China, Brazil and India are among the largest emitters of greenhouse gases today.²⁸⁹ The application of the CBDR-RC principle has gone a long way towards assisting these states to retain their high emissions while it is required in terms of the CBDR-RC principle for developed states to reduce their greenhouse gas emissions. This is because the UNFCCC and the Kyoto Protocol to the UNFCCC required no emissions reductions from developing countries. This seems to fly in the face of the aims that underpin the UNFCCC and its Protocols.

Realising the need to retain the underlying aim of the UNFCCC, (that is to say, mitigation), a gradual development of the CBDR-RC was attempted. This was to arrive at an interpretation and understanding of the CBDR-RC principle that would foster climate change mitigation by achieving the stabilization of greenhouse gas emissions. This gradual evolution can be seen in the formulation of such documents as the Copenhagen Accord.²⁹⁰

Subsequent to the Copenhagen Accord, many other instruments came into effect, some with binding obligations, while others did not have such binding obligations. The Paris Agreement, for the purposes of this dissertation, is the most positive with regard to climate change mitigation, and modifies the CBDR-RC in such a way that it may become a binding principle in years to come.

The Paris Agreement in effect modifies the CBDR-RC principle by exemplifying something approaching an international consensus that all member states need to contribute to the global reduction of greenhouse gas emissions. This is a far cry from

²⁸⁹ See Paragraph 2.2

²⁹⁰ Very key in this Accord was the fact that states would both endeavour mitigation obligations and not just developed states would carry out such an exercise.

such founding documents as the Kyoto Protocol, which mandated only developed states to take the lead in climate change mitigation. The Paris Agreement requires mitigation from both developed and developing states, and with regard to the latter it does so by requiring that they set and communicate intended national mitigation targets. This is an aspect that was lacking in previous documents and, given the binding nature of the Paris Agreement, more progress is likely to be achieved.

5.1.1 Summary of the analysis

The aim of this dissertation is to attempt an investigation of the CBDR-RC principle and its role in climate change mitigation. As indicated in chapter 1²⁹¹ the CBDR-RC principle plays a rather crucial role in climate change mitigation. This is because it is on the strength of this principle that responsibility is allocated under the MEA's that deal with climate change.²⁹² This dissertation seeks to investigate the normative content of the CBDR-RC principle as a central pillar of climate change mitigation. This it does by isolating distinct issues that apply to the CBDR-RC principle. This has been done by a division of the dissertation into different topics that permit the reader to follow the application or definition of the Principle from its inception to its current form.

Chapter 2 dealt with the UNFCCC and climate change mitigation. This chapter endeavoured to assess the UNFCCC as a zenith document and its intentions concerning climate change mitigation. An in-depth investigation was made into the UNFCCC, its origins and its history. These investigations revealed the intention behind the UNFCCC specifically its place in the attempts to regulate climate change mitigation, at the heart of which rests the CBDR-RC principle.²⁹³ All of this was done on the understanding that this document is of the nature of a Constitution for climate change and all subsequent constitutive documents subscribe to it. This chapter revealed that although at the reduction of greenhouse gas emissions was at the heart of the CBDR-RC principle, the reverse effect seemed to come about, in that new emitters were created instead of

²⁹¹ See Paragraph 1.1

²⁹² Multi-lateral environmental agreements such as the UNFCCC, The Kyoto Protocol and the Paris Agreement

²⁹³ See Paragraph 2.3

the reduction of emitters, which had been the intention behind the formulation of the Principle in the first place.²⁹⁴ The chapter concludes with the rider that by signing the UNFCCC, states effectively conceded that climate change was a global problem that required a global approach. This meant that action was necessary from all stakeholders, both developing and developed. It was necessary, then, to find a way of interpreting and implementing the CBDR-RC so that it would yield the results it was intended to yield, i.e. greenhouse gas emissions reduction.

The third chapter of the dissertation discussed the CBDR-RC principle in depth. This it did by delving into the history and origins of the principle. The investigations into the CBDR-RC revealed that it is a principle borne out of the principle of equity²⁹⁵ and by its very nature denotes a fair sharing of responsibility amongst states. It was further revealed that although when being applied it would seem as though the CBDR-RC principle ran counter to the aims that underpin the climate change regime, the MEA's that were spawned post-Kyoto illustrate that there was a clear change in thinking among states, while they retained the very essence of the CBDR-RC principle. The change in thinking manifests itself in the manner in which the said agreements are supposed to apply in practice. All member states are now mandated regardless of their categorisation as developed or developing, to play a part in climate change mitigation.²⁹⁶ The chapter traces the evolution of the CBDR-RC from the Kyoto Protocol right through to the Paris Agreement which adds the words "in light of different circumstances" to the previous formulation, this easing the rigidity that once plagued the CBDR-RC principle. The chapter concludes that the rigidity that once characterised the Principle, the same rigidity that did not yield results in practice has now been clothed with an element of flexibility. Seems partially to address the need to engage

²⁹⁴ See paragraph 2.2

²⁹⁵ See Paragraph 3.1

²⁹⁶ See Paragraph 3.3.2

in actions aimed at mitigating climate change. This is the case although it is yet to be seen how it translates in reality.

Chapter 4 considers the research question and suggests an answer to it. The character of responsibility under international law is investigated in this chapter. This assessment brings us one step closer to understanding the significance of the reference to differentiation in the CBDR-RC and the way such differentiation has been interpreted in other international treaties.²⁹⁷ The chapter then discusses the application as well as, which interpretation would best suit normative reality of the CBDR-RC principle, i.e. the reduction of greenhouse gas emissions. The chapter considers the application and interpretation of the CBDR-RC principle from the UNFCCC at its inception to its application and interpretation presently in the Paris Agreement. The chapter settles on the ideal interpretation of the CBDR-RC principle, an interpretation that would best address the purpose for its formulation.

In the final analysis, it is concluded that the application and interpretation of the CBDR-RC principle that would best suit the aims of the CBDR-RC is the one that is currently provided for under the Paris Agreement. However, if it is to have the authority to actually effect change, this version has to become a principle of customary international law. The concretisation of the CBDR-RC principle is advocated so that it will have the ability to address the change it intends to promote.

5.2 Recommendations

5.2.1 Concretising the CBDR-RC as a customary international law principle

It is recommended that the CBDR-RC principle be gradually interpreted as a customary international law principle. It is not disputed that for the purposes of addressing climate change, there is a need to concretise the CBDR-RC and grant to it the binding authority it needs to instigate positive change to the climate system. This is because the current interpretation of the principle in agreements grants to states such as the US the ability

²⁹⁷ See Paragraph 4.1

to detract from it whenever it suits them to do so. This is the case, despite scientific evidence that climate change is a pressing issue that needs to be addressed immediately.

This concretisation could happen, in that we use the interpretation of the CBDR-RC in its current form in the Paris Agreement as a point of departure.²⁹⁸ It is contended that the CBDR-RC principle has taken on multiple shapes as enumerated in the preceding chapters. It has over the years evolved and crystallised into the most generally acceptable form that we see in terms of the Paris Agreement today. The CBDR-RC principle's crystallisation into a customary international law principle will of necessity mandate its observance for the purposes of addressing climate change. It is my contention that it is time to view the CBDR-RC principle as a customary international law principle that has so crystallised, and which as a result is worthy of observance. It is recommended therefore that subsequent interpretations of the CBDR-RC have to be in line with this understanding. Any interpretation in isolation of this appreciation will inevitably render the CBDR-RC obsolete and revert the international community back to the conflicting interpretations of the principle, which have done nothing for the climate system.

5.2.2 Differentiation amongst developing countries

As indicated in chapter 3, one of the main reasons for the USA's refusal to ratify the Kyoto Protocol was that it deemed the application of the CBDR-RC principle to be unfair, because it obliged only the developed states to reduce their emissions while placing no obligations on the developing states.²⁹⁹ In an attempt to cure this, the Paris Agreement instituted a global approach which mandates all members to submit INDC's

²⁹⁸ This is similar to the manner in which the advisory opinion by the sea-bed dispute chamber of the international tribunal for the law of the sea, discussed the inception of the Precautionary principle to accept its becoming a principle of customary international law that cannot be easily detracted from.

²⁹⁹ See Paragraph 3.3.2

proposing ways in which they may be able to do their share in climate change mitigation.³⁰⁰

While this may be well intentioned, the agreement still seems a little overindulgent to the developing countries and still maintains that the developed states must take the lead. This has once again led to the pulling out of the agreement by the US, which was discussed under chapter 4.³⁰¹ It would seem, therefore, that a way of addressing the concerns voiced about the application of the CBDR-RC may be to further differentiate amongst the developing states. This is to say that, countries such as the China, Brazil, India and South Africa should be put in a category of their own as developing countries with high emissions and should be amongst the states that take the lead in climate change mitigation. This may persuade the international community to accept that the application of the principle is fair. Reports have further indicated that developing states are soon to become the highest emitters.³⁰² Requiring developing states with high emissions to mitigate now rather than later would reduce the effects and/ lower their ghg emissions in the future.

5.3 Conclusions

Climate change has proven itself to be a phenomenon in need of a global effort. If states are to solve this problem the only way forward is to deal with it together. The CBDR-RC principle, as indicated above, is an ever-evolving principle best fitted to deal with this ever-changing phenomenon. The principle has no fixed definition. Its capable of change and can be moulded by states when necessary. Developed and developing states can no longer blame one another for action or inaction in solving to the problem. States have over the years wasted good time going back and forth with blame and

³⁰⁰ See Paragraph 3.3.2

³⁰¹ See paragraph 4.1

³⁰² See Paragraph 4.3.1

refusal to take on responsibilities to deal with climate change, the result of which is that the problem has got worse.

The application of the CBDR-RC principle under the Paris Agreement takes into consideration the different capabilities of states, while keeping the need to act globally to the fore. This may be argued to be the best way of dealing with climate change, as was indicated in chapter 4.

However, states are sovereign and cannot be dictated to. It is up to the individual states to implement the Paris agreement and successfully deal with climate change. Solidifying the CBDR-RC principle as a customary international law principle may assist in addressing climate change and its ever-changing demands. It is therefore incumbent upon individual states to act in unison to address climate change so as to preserve the planet we live on for the use of future generations.

BIBLIOGRAPHY

Literature

Atapattu, Human development Report 2007/2008,

Samundu Atapattu, Climate Change, Equity and differentiated responsibilities: does the present climate change regime favour developing countries, Human development Report 2007/2008, UNDP overview

Bodansky, SSRN 2010,

Daniel Bodansky, The Copenhagen Climate Change Conference: A post-mortem, university of Georgia school of law 2010

Bortscheller 2010 Sustainable Development Law and Policy (10)2

Mary J Borstcheller, "Equitable but ineffective: how the principle of common but differentiated responsibilities hobbles the global fight against climate change." Sustainable development law and policy 2010, volume 10 issue 2

Boyte New Zealand Journal of Environmental Law

Rachel Boyte, " Common but Differentiated Responsibilities: Adjusting the "Developing" / "Developed" Dichotomy in International Environmental Law" LAWENVIR 710 International Environmental Law 2009

Bushey and Jinnah Berkeley Journal of International Law Publicist

Douglas Bushey and Sikina Jinnah, "Evolving Responsibility? The Principle of Common but Differentiated Responsibility in the UNFCCC." Berkeley Journal of International Law Publicist, volume 6 2012

Chodor 2015 How can an Equitable Agreement be achieved

Marzena Chodor," How can an equitable 2015 agreement be achieved?" Clima East: support to climate change mitigation and adaptation in Russia and ENP east countries, June 2014

Cullet, Differential treatment in international law: Towards a new paradigm of interstate relations

Phillippe Cullet, "Differential treatment in international law: Towards a new paradigm of interstate relations." EJIL 1999 volume 10 number 3 pp.549-582

Freestone, The international climate change legal and institutional framework: an overview,

David Freestone, "The international Climate Change Legal and Institutional Framework: an overview" oxford University Press no. 38. 2009

Fankhauser and Stern Climate change, development, poverty and economics Grantham Research Institute on climate change and the Environment

Samuel Fankhauser and Stern Nicholas, "Climate Change, Development, Poverty and Economics." Grantham Research Institute on Climate change working paper no.253. 2012

Fussel and Klein climate change vulnerability assessments: an evolution of conceptual thinking,

Hans-Martin Fussel and Richard JT Klein, "Climate Change vulnerability assessments: an evolution of conceptual thinking." Climate Change 2005 CLIM

Gonzalez 2015 Pace Environmental Law Review

Carmen G. Gonzalez, "Environmental Justice and International Environmental Law" Routledge handbook of international environmental law, October 2015

Hunter, 2010 Sustainable Development Law and Policy (10)2

David Hunter, "Implications of the Copenhagen Accord for global Climate Governance" Sustainable Development Law and Policy

Kabani Mitigation and Adaptation strategies

Asif Kabani, "Mitigation and adaptation strategies" 2012, available at

Kotze 2014 Journal of Energy and Natural Resources Law

Louis J Kotzé (2014) Rethinking Global Environmental Law and the Anthropocene, Journal of Energy & Natural Resources Law, 32:2, 121-156

Lee 2015 Vermont journal of Environmental Law

Justin Lee, "Rooting the concept of common but differentiated responsibilities in established principles of international environmental law." Vermont Journal of Environmental Law, Volume 17 2015

McManus the principle of common but differentiated responsibility and the UNFCCC

Kelly McManus, "The principle of common but differentiated responsibility and the UNFCCC" Climatico Special Features. November 2009

Maguire 2013 CCLR

Rowena Maguire, "The Role of Common but Differentiated Responsibility in the 2020 Climate Regime: Evolving a New Understanding of Differential Commitments" CCLR 2013

Obergassel and Arens, Phoenix from the ashes- An analysis of the Paris agreement to the United Nations framework convention on climate change,

Wolfgang Obergassel et al, "Phoenix from the ashes- an analysis of the Paris agreement to the United Nations Framework Convention on Climate Change." Wuppertal institute for Climate, Environment and Energy, 1 March 2016

Pauw, Bauer et al Different Perspectives on Differentiated responsibilities,

Pieter Pauw, Steffen Bauer et al, "Different Perspectives on Differentiated Responsibilities" Discussion paper 6/2014, German Development Institute 2014

Peel, Cambridge University Press 2016,

Jacqueline Peel, "Re-evaluating the Principle of common but differentiated responsibilities in transnational climate change law," Cambridge University Press 2016

Planck Responsibility under international law

Volker Roeben "Responsibility in International Law" Max Planck yearbook of the United Nations Law volume 16 2012, pp. 99-158

Ramakrishna, The UNFCCC-history and evolution of the climate change negotiations,

Kilaparti Ramakrishna, "The UNFCCC- History and Evolution of the climate change negotiations." Woods hole research Center Massachusetts USA

Robinson 2012 Journal of Public Affairs

Nicholas A. Robinson, "Beyond sustainability: Environmental management for the Anthropocene Epoch", journal of public affairs volume 12 number 3, pp181-194 2012

Scholtz, (2008) 33 SAYIL,

Werner Scholtz, "Different countries, one environment: A critical southern discourse on the Common but Differentiated Responsibilities principle." (2008) 33 SAYIL

Shear *The New York times*. June 1, 2017

Michael D. Shear "Trump will withdraw the U.S from Paris Climate Agreement" New York times (1 June 2017)

Stone 2004 *The American Journal of International Law*

Christopher D. Stone, "Common but Differentiated Responsibilities in International Law." *American Journal of International Law*, Volume 98, Issue 2 April 2004, pp. 276-301

Voigt and Ferreira Differentiation in the Paris agreement

Christina Voigt and Felipe Ferreira, "Dynamic Differentiation': The Principles of CBDR-RC, Progression and Highest Possible Ambition in the Paris Agreement" *Transnational Environmental law* 5;2 2016 pp.285-303

Weiss Intergenerational equity and rights of future generations

Edith Brown Weiss, "intergenerational Equity and rights of future generations." 84 *AJIL* 198 (1990)

Bodansky *The History of the Global Climate Change Regime*

Bodansky D *the Art and Craft of International Environmental Law* (Harvard University Press, 2010)

Beyerlin and Marauhn *International Environmental Law*

Beylerin U and Marauhn T *International Environmental Law* (Oxford, Hart Publishers, 2011)

Yamin and Depledge *The International Climate Change regime*

F. Yamin and J. Depledge *International climate change regime* (Cambridge university press 2005)

International Instruments

The Bali Action Plan (2012)

The Copenhagen Accord (2009)

The Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997).

The Rio Declaration on Environment and Development (1992)

The Stockholm Declaration (1972)

The Treaty of Versailles (1919)

The United Nations Framework Convention on Climate Change (1992).

The Paris Agreement to the United Nations Framework Convention on Climate Change (2015)