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Climate Change and the Right to Life

An Intersectional Analysis of the Impacts of Climate Change on the Right to Life and the Role of Human Rights Mechanisms in Climate Change Action

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List of Abbreviations

ACHPR	African Charter on Human and Peoples' Rights
AComHPR	African Commission on Human and Peoples' Rights
CBDRRC	Common But Differentiated Responsibilities and Respective Capabilities
CESCR	Committee on Economic, Social and Cultural Rights
CMA	Conference of Parties serving as the meeting of the parties to the Paris Agreement
CMP	Conference of Parties serving as the meeting of the parties to Kyoto Protocol
COP	Conference of Parties
CRC	Committee on the Rights of the Child
ECHR	European Convention on Human Rights
ECOSOC	Economic and Social Council
ECtHR	European Court of Human Rights
GHG	Greenhouse Gases
HR Council	Human Rights Council
HRC	Human Rights Committee
IAComHR	Inter American Commission on Human Rights
IBA	International Bar Association
ICCPR	International Covenant on Civil and Political Rights
ICE	International Court of Environment
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICJ	International Court of Justice
IPCC	Intergovernmental Panel on Climate Change
LHC	Lahore High Court
NASA	National Aeronautics and Space Administration
NDC	Nationally Determined Contributions
OHCHR	Office of the High Commissioner for Human Rights
UDHR	Universal Declaration of Human Rights
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
WHO	World Health Organization

1 Introduction

The concept of climate change has evolved over the period of years from a mere scientific discussion to being recognized as a global issue. This is concerning for human beings in the sense that not only is their influence relevant in causing and addressing climate change, but they also face serious implications resulting from it. The Intergovernmental Panel on Climate Change (IPCC) has noted that there is clear evidence that human activities including the greenhouse gases (GHG) emissions have influenced climate system, causing significant changes.¹ These changes have resulted in impacts such as surface-temperature rise, sea-level rise, and extreme weather conditions.² The magnitude of the issue has brought states to come together for addressing it and a legal regime concerning climate change has, thus, gradually and through much effort come into form.

However, the impact of climate change goes beyond the above-mentioned and consequently extends to the enjoyment of human rights. The Human Rights Council (HR Council) of the United Nations (UN) has affirmed that there are several human rights that are affected by the impacts of climate change such as the rights to life, food, water, and health.³ Between 2005 and 2015, extreme weather events due to climate change have caused the deaths of 700,000 people, injuries to 1.4 million people and loss of shelter to 23 million people.⁴ Furthermore, human rights are interdependent and indivisible, meaning thereby, that the enjoyment of a specific right may be dependent on the enjoyment of several other rights.⁵ In this context the impact of climate change on numerous rights ultimately accumulates in the form of direct or indirect impact on the right to life. The violation of human rights resulting from the impact of climate change makes a rights-based approach relevant in addressing these issues. Recent years have seen an accelerated progress in invoking state responsibility for such human rights violations by employing human rights mechanisms. Despite being marked with difficulties and barriers, it is important to expand the application of human rights mechanisms to violations and issues arising from climate change. It will not only be useful for protecting human rights from being impaired by impacts of climate change but also for addressing climate change effectively.⁶

¹ IPCC, *Climate Change 2014: Synthesis Report*, p. 2.

² *Ibid.*, p. 40.

³ HR Council, *Resolution 10/4*, A/HRC/10/L.11, p. 15.

⁴ UN General Assembly, *Safe Climate 2019*, A/74/161, para 6.

⁵ HR Council, *Resolution 26/27*, A/HRC/RES/26/27, p. 2.

⁶ UN General Assembly, *Safe Climate*, n (4), para 62.

1.1 Research question and its objective

The primary research question that forms the basis of this thesis is as follows: What is the impact of climate change on the right to life and how can human rights enforcement mechanisms contribute to climate change action?

In order to answer the above question, the following important aspects will be discussed during the course of this thesis:

- The link between climate change and human rights
- The interdependence and indivisibility of human rights and their relevance to the impacts of climate change
- States' obligations under climate change and human rights legal regimes
- The trends and prospects of the application of human rights law mechanisms to address climate change issues

The first part of the research question has the objective of analyzing the contents of the right to life and the impacts of climate change on their enjoyment. Based on the findings of this analysis, the second part of the research question has the objective to explore the ways in which human rights law can or should be engaged to address climate change issues. The purpose is to establish a nexus between the concepts of climate change and human rights, more specifically, the right to life. This will involve an analysis of the evolution of the concepts of climate change and human rights and also a study of their intersecting points in terms of implications and supplementary roles. Consequently, by considering the magnitude of the impacts of climate change on the right to life, the need of an equally reciprocal and proportional human rights approach to address climate change issues will be highlighted.

1.2 Actuality of the research question

The actuality of this thesis is primarily based on two circumstances. Firstly, the drastic impacts of climate change on the right to life directly and indirectly, through impairment of other rights, based on the concept of interdependence of human rights. Secondly, holding states accountable for their human rights obligations with respect to climate change is not only necessary to adequately address these infringements but also a potentially effective contributing factor in climate change action. The IPCC has observed that climate change has strongly affected natural and human systems across the globe, by causing human mortality, disruption in water and food resources, and impact on human health.⁷ The extreme weather events caused by climate change, including heat waves, droughts, and floods make eco and human systems

⁷ IPCC, *Synthesis Report*, n (1), p. 6, 13, 53.

highly vulnerable.⁸ The climate change regime at the international level, engages states to undertake commitments for addressing these impacts and risks through mitigation and adaptation. However, these impacts extend to the enjoyment of human rights, particularly the right to life, which depends on the availability of several of these affected aspects. Considering these implications, obligations of states under human rights law also become relevant for addressing human rights issues caused by climate change.⁹ It is also concerning that the current trajectories indicate a rise in global mean temperature from the present approximate value of 1.0°C to an expected 1.5°C between 2030 to 2050, implying even higher risks for the above-mentioned aspects.¹⁰ The IPCC notes that the current states' commitments under climate change regime, even if fulfilled completely, would be insufficient to keep global warming limited to 1.5°C, and therefore it calls for making unprecedented transitions in several sectors.¹¹ This also puts the enjoyment of the right to life at stake and makes the application of human rights mechanisms all the more relevant, for ensuring effective state action towards climate change.

1.3 Methodology and structure

The primary methodologies employed in this thesis are analytical and comparative. From the perspective of law, the analysis begins with *lex lata* (what the law is) and relying upon the findings gradually builds up to *lex ferenda* (what the law should be). The thesis relies upon a comparative analysis of the nature of climate change treaties and their compliance mechanisms. There is also a comparative approach in analyzing the application of human rights mechanisms to claims arising from climate change impacts at national, regional, and international levels in terms of present effectiveness and prospects. The thesis is mainly qualitative i.e. based on analysis of different legal sources including treaties and case law. At relevant points, it is supplemented by quantitative information i.e. statistics and figures from such data sets that are applicable to a particular aspect of discussion. Approach to a given legal point will be guided by the application of the standard available sources including statutes and precedents. Where applicable, the nature or necessity of a legal aspect will be elaborated in light of interpretative sources e.g. UN resolutions, reports, scholarly opinion, and commentary.

In this regard, Chapter 2 will assess the evolution of climate change and human rights, from early developments to contemporary statuses under their respective regimes. Considering which, their intersecting points will be focused upon, recognizing climate change implications

⁸ Ibid., p. 8.

⁹ HR Council, *Resolution 41/21*, A/HRC/RES/41/21, p. 4.

¹⁰ IPCC, *Global Warming of 1.5°C: Summary*, p. 6, 11.

¹¹ Ibid., p. 17, 20.

for human rights. Based on this discussion, the impact of climate change on the right to life will be analyzed directly and, in terms of interdependence on other human rights. Chapter 3 will evaluate state obligations with respect to human rights at national and international level, focusing on the rights discussed in chapter 2. Chapter 3 will then present an overview of climate change compliance mechanisms, with the purpose of assessing the adequacy of these mechanisms for ensuring state action. The discussion will then move on to human rights mechanisms which will firstly, discuss the current trends in terms of rights-based climate change litigation at various levels, and secondly, analyze the prospect and necessity of a more effective expansion of these mechanisms to climate change issues.

1.4 Scope and limitations

The thesis will primarily focus on the UN treaties adopted internationally, to explain climate change and corresponding state commitments. The right to life will be elaborated in the light of international and regional treaties and their respective treaty-bodies' interpretations. The impact of climate change on the right to life will be evaluated from the stance of treaty bodies and scholarly opinion. After a general overview of the impact of climate change on the right to life, the scope of the impact will be limited to a particular country example i.e. Pakistan. The interdependence of the right to life on other human rights will be limited to the study of the impacts of climate change on the right to food and the right to water in Pakistan. States' obligation with respect to human rights will primarily be assessed based on UN bodies' elaboration and interpretation. These obligations will then be evaluated as a cause of climate change litigation at national, regional, and international levels. The need of expanding human rights mechanisms will be analyzed from an international perspective. The overall scope of the thesis is limited by a rights-based approach towards climate change and mainly centers on international aspects with occasional analysis of regional and national aspects.

2 Climate Change and Human Rights

This chapter will establish the link between climate change and human rights by elaborating the various aspects of both. The development of climate change as a concept will be evaluated considering the relevant science, causes and the potential risks. An overview of the climate change regime will, then, be provided to assess the global approach of sovereign states in recognizing the concept of climate change and their commitments to address it. To draw a link between climate change and human rights, it is important to understand the nature of human rights. Thus, the main sources of contemporary international human rights law will be discussed for elaborating the contents of rights and their interdependence. Based on this discussion the impact of climate change will be assessed on the right to life broadly and, considering the interdependence of human rights, on the right to food and water specifically.

2.1 Introduction to the concept of climate change

In the early stage of its study, various factors and processes were analyzed by researchers for their possible impact on climate change. For instance, John Tyndall assessed the impact of the greenhouse effect i.e. the absorption of heat by the atmospheric gases causing rise in the earth's temperature.¹² It was presented by Svante Arrhenius that more specifically, among other factors, the increase of carbonic acid (carbon dioxide solution) consequently increased the atmospheric temperature.¹³ In 1958, Charles David Keeling provided accurate measurements of the variations in concentration of the atmospheric carbon dioxide (CO₂), which suggested the role of human activities mainly fossil fuel burnings, in the rise of the annual rate of CO₂.¹⁴ Further research and accurate measurement models proved that the rate of increase in mean-temperature and the change in climate could not be explained by natural processes alone, thus, evidencing human influence.¹⁵

The debate expanded to the public for the first time in the United States (US), in the late 1980's, when the possibility of decrease in agricultural yield due to hot temperatures was considered.¹⁶ In 1988, the US National Aeronautics and Space Administration (NASA) attributed possible extreme weather conditions to the greenhouse effect and thus, sparked a debate among the scientific community, most of which disagreed with NASA's position due to lack of the required data and study.¹⁷ Moreover, political debate was also inevitable and crucial in

¹² Rademaekers, Johnson-Sheehan, "Climate Change to the Public", p. 6.

¹³ Arrhenius, "On the Influence of Carbonic Acid in the Air upon the Temperature of the Ground", p. 15.

¹⁴ Le Treut et al., *Climate Change 2007: The Physical Science Basis*. p. 100.

¹⁵ *Ibid.*, p. 103.

¹⁶ Bolin, *A History of the Science and Politics of Climate Change*, p. 49.

¹⁷ *Id.*

addressing the issue of climate change. This context of public, scientific and political debate called for an interactive process of making a joint and efficient assessment.¹⁸ The debate, between the different sectors, on this issue would be more streamlined and purpose-oriented on such a platform. Hence, the Intergovernmental Panel on Climate Change (IPCC) was formed in 1988.

It is worth mentioning that IPCC's *First Assessment Report* (1990) clearly stated climate change as a global issue and further attributed it mainly to the emissions from industrial activities, thus, confirming the human induced characteristic of this change.¹⁹ The findings of this report contributed in reaching an important milestone, i.e. the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. The UNFCCC, defines climate change as a "change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods".²⁰ The definition of GHG emissions can also be deduced from the UNFCCC, as the release of such gases into the atmosphere that are capable of "absorbing and reemitting infrared radiation".²¹

The IPCC's *Fifth Assessment Report* reflects the above discussion and states that anthropogenic (influenced by human activity) GHG emissions have exhibited a significant rise since the pre-industrial era and have reached a level higher than ever before.²² Population growth and economic interests are considered to be the main incentives behind this. The report significantly highlights that this rise in emissions has led to record high levels of concentrations of the GHG, such as carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), in the last 800,000 years.²³ The IPCC, thus, regards these factors to be the main causes of change in climate system. The effects of this change are visible in the rise in temperature of the atmosphere and the ocean, acidification of ocean due to absorption of large quantities of CO₂, decrease in ice extent in the Arctic, decrease in snow cover in Northern Hemisphere, shrinkage of glaciers worldwide and rise in sea levels.²⁴

¹⁸ Bolin n (16), p. 47, 49.

¹⁹ *Climate Change, The IPCC Response Strategies*, p. xxvi, 51.

²⁰ UNFCCC, Article 1 (2).

²¹ UNFCCC, Article 1 (4), (5).

²² IPCC, *Synthesis Report*, n (1), p. 4.

²³ Id.

²⁴ IPCC, *Synthesis Report*, n (1), p. 40, 41, 42.

Over the period of time and development of the concept of climate change, states have recognized the need to address it and thus, adopted various international legal instruments in this regard.

2.2 Overview of the international climate change regime

This section discusses the three main legal instruments of the international climate change regime in terms of their main principles, structures, and approach towards state commitments in addressing climate change.

2.2.1 United Nations Framework Convention on Climate Change

The UNFCCC was the first major achievement in the international climate change regime. The report *Our Common Future*, headed by Gro Harlem Brundtland was an important development in the process. It noted that the environmental trends and the greenhouse effect were likely to result in rise of average global temperature and thus have serious impacts on life on earth.²⁵ The role of the UN was regarded highly important in taking global institutional initiatives and data collection and assessments.²⁶ Furthermore, it recommended the preparation of a convention on environmental protection and sustainable development.²⁷ The UN General Assembly (UNGA) established the Intergovernmental Negotiation Committee for carrying out formal negotiating process for the framework convention, consisting of commitments based on consideration of proposals of parties, work of the IPCC and the results of Second World Climate Conference.²⁸

Consequently, the completed draft of the UNFCCC was opened for signature at the UN Conference on Environment and Development in 1992, at Rio De Janeiro.²⁹ The UNFCCC being a framework convention was an important milestone as it acquired the agreement of the states, initially 50 and presently 199, on a definite objective.³⁰ Some important aspects of the UNFCCC are discussed as follows.

i) Objective

The objective of the UNFCCC is the “stabilization of greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the cli-

²⁵ World Commission on Environment and Development, *Our common Future*, para 7.

²⁶ *Ibid.*, paras 34, 50.

²⁷ *Ibid.*, para 86.

²⁸ UNGA, A/RES/45/212, para 1.

²⁹ UNGA, A/AC.237/18(Part II)/ Add. 1, p.1, *see also* Article 20, p. 23.

³⁰ <<https://unfccc.int/process-and-meetings/the-convention/status-of-ratification/status-of-ratification-of-the-convention>>

mate system”, considering the factors of time frame for adaptation, food production and sustainable economic development.³¹ It reflects not only the scientific aspects but also accommodates social and economic interests and the involved politics.³²

ii) General principles

The UNFCCC provides general principles in Article 3 including:

- a. Common but Differentiated Responsibilities and Respective Capabilities (CBDRRC)- Determining the responsibility of the states not only in terms of their contribution to climate change but also considering their respective capabilities, thus, ensuring that both the developed and developing countries will have to respond.³³
- b. Precautionary and Cost-Effectiveness Principle- Providing that causes of climate change should be anticipated and prevented through precautionary measures and that such measures should be cost-effective.³⁴
- c. Principle of Sustainable Development- Providing that national development programs and economic development should be considered while addressing climate change.³⁵
- d. Supportive and Economic System- Emphasizing on an open and supportive international economic system for the better realization of the above-mentioned principles.³⁶

iii) Lists of parties

The UNFCCC provides two lists of parties i.e. Annex I and Annex II. The Annex I parties include developed countries e.g. Australia, The United Kingdom, The US, Switzerland, and Germany along with countries whose economies are in transition including Czech Republic, Hungary, Latvia, and Poland.³⁷ The Annex II list consists only of the developed countries provided in Annex I list.³⁸

³¹ UNFCCC, Article 2.

³² Bodansky, Brunnée, and Rajamani. *International Climate Change Law*, p. 126.

³³ Bodansky, n (32), p. 128, *see also* UNFCCC, Article 3 (1).

³⁴ UNFCCC, Article 3 (3).

³⁵ *Ibid.*, Article 3 (4).

³⁶ *Ibid.*, Article 3 (5).

³⁷ *Ibid.*, Annex I.

³⁸ *Ibid.*, Annex II.

iv) General and specific commitments

Bodansky et al. comment that the commitments under UNFCCC may be classified as general and specific.³⁹ The general commitments apply to all the parties, i.e. both the developing and developed countries. These include but are not limited to; submitting periodic national inventories to the Conference of Parties (COP), implementing national and regional mitigation programs, and cooperating in adaptation to the impacts of climate change.⁴⁰ The specific commitments regarding mitigation, financial resources and transfer of technology, apply to the parties in Annexes I and II, reflecting the spirit of the principle of CBDRRC.⁴¹ The UNFCCC also provides a target for Annex I parties, i.e. achieving the GHG emissions levels of 1990, and a timeframe to meet the target i.e. by the year 2000.⁴²

Despite the heavily qualified and in some instance non-binding nature of the commitments, the UNFCCC proved to be an important achievement, one that formalized the issue and the required corresponding responses, and that paved way for further progress and negotiations.⁴³

2.2.2 The Kyoto Protocol

To establish more specific targets and time frame for the reduction of GHG emissions under the UNFCCC, the Kyoto Protocol was adopted by the COP in 1997.⁴⁴ For the negotiating process of Kyoto Protocol, “Berlin Mandate”, adopted by the first COP in 1995, created the Ad hoc Group on the Berlin Mandate.⁴⁵ The Berlin Mandate provided to aim for setting Quantified Emission Limitation and Reduction Objectives for Annex I parties of the UNFCCC.⁴⁶ It also provided that no new commitments should be introduced for non-Annex I parties of the UNFCCC, thus strengthening the differentiation principle.⁴⁷ These provisions are reflected in the Kyoto Protocol as well.

One of the important features of the Kyoto Protocol is its legally binding character and the preciseness of the target and time frame. It requires that Annex I parties shall ensure that their aggregate GHG emissions remain within their assigned amount with an overall target of re-

³⁹ Bodansky et al., n (32), p. 130.

⁴⁰ UNFCCC, Article 4 (1)

⁴¹ Bodansky et al., n (32) p. 130.

⁴² UNFCCC, Article 4 (2) (a), (b).

⁴³ Farber and Carlarne. *Climate Change Law*, p. 59.

⁴⁴ Id.

⁴⁵ COP1, *The Berlin Mandate*, FCCC/CP/1995/7/Add. 1, para 6.

⁴⁶ Ibid., para 2 (a).

⁴⁷ Ibid., para 2 (b).

ducing emissions by at least 5 percent of the 1990 level in the first commitment period.⁴⁸ In this regard, it provides the list of six greenhouse gases in Annex A and the Quantified Emission Limitation and Reduction Commitments in Annex B. Annex B consists of individual targets for each Annex I party.

The negotiations for the extension of the protocol began in 2005 resulting in the Doha Amendment, for renewal of the protocol for a second commitment period (2013-2020).⁴⁹ However, the Doha Amendment requires 144 instruments of acceptance by parties to enter into force and as of June 2020, 140 instruments of acceptance have been submitted.⁵⁰ While negotiations for the Doha Amendment were underway, simultaneously negotiations were also carried out under the UNFCCC process for a long-term instrument with a broader applicability i.e. The Pairs Agreement.⁵¹

2.2.3 The Paris Agreement

In the timeline leading to the new agreement several COP meetings under the UNFCCC played a pivotal role. The *Bali Action Plan* (COP13) decided to start the process for a long-term cooperative action for better realization of the UNFCCC.⁵² The *Cancun Agreements* (COP16) adopted and formalized the *Copenhagen Accord* which was a political agreement between developing and developed countries to reduce global emission for keeping the increase in global temperature under 2-degree Celsius.⁵³ The *Durban Platform* (COP17), provided that the negotiation should lead to “a protocol, another legal instrument or an agreed outcome with legal force” by 2015, which would be applicable to all parties.⁵⁴ As a result of these COP negotiations, the Paris agreement was adopted in 2015. The key features of Paris Agreement include the following.

i) Goals

The goals of the agreement cover the basic aspects of climate change i.e. mitigation and adaptation along with financial aspect. Respectively, it aims to keep the rise in global average temperature well under 2 degree Celsius and limiting it to 1.5 degree compared to pre-industrial levels, to enhance adaptability and to extend financial support for achieving these goals.⁵⁵

⁴⁸ Kyoto Protocol, Article 3 (1).

⁴⁹ Meeting of the Parties to the Kyoto Protocol, *Decision 1/CMP.8*, FCCC/KP/CMP/2012/13/Add.1.

⁵⁰ <<https://unfccc.int/process/the-kyoto-protocol/the-doha-amendment>>

⁵¹ Bodansky et al. n (32), p. 108.

⁵² COP13, *Bali Action Plan*, FCCC/CP/2007/6/Add.1*, para 1.

⁵³ Farber and Carlarne, n (43), p. 65.

⁵⁴ COP17, *Ad Hoc Working Group on the Durban Platform*, FCCC/CP/2011/9/Add.1, para 2, 4.

⁵⁵ Paris Agreement, Article 2(1).

ii) Nationally Determined Contribution

The significant tool of Nationally Determined Contributions (NDCs) is introduced for achieving the mitigation goal. Each party is bound to “prepare, communicate and maintain NDCs successively”.⁵⁶ The successive NDCs are to show progression and reflect the highest ambition of a party while considering the principle of CBDRRC, in the light of different national circumstances.⁵⁷ A set of other mandatory obligations are provided relating to NDCs that includes, providing transparent information in the NDCs, communication of NDCs every five years and parties’ obligation to account for their NDCs.⁵⁸

iii) Adaptation

Adaptation is also provided as a binding obligation whereby parties are bound to plan and implement adaptation processes and actions considering climate change impacts.⁵⁹ To ensure efficiency in the fulfilment of obligations, a transparency framework is established to track progress of the NDCs and adaptation actions.⁶⁰ It is supplemented by a periodic assessment of collective progress known as the global stock take with the aim of providing information to the parties regarding enhancement of their NDCs.⁶¹

The varied nature of the NDCs of the parties makes the goals of the Paris Agreement seem too aspirational and hardly likely to be achieved. Nevertheless, the key characteristics of the Paris Agreement makes it of great significance in the international climate change regime with its platform hopefully useful in introducing stronger emission reduction targets for future.⁶²

2.3 The implications of climate change for human rights

After an overview of climate change and states’ commitments for mitigation and adaptation under the climate change regime, it is useful to highlight the implications of climate change for human rights. The IPCC observes that the effects of climate change are not only limited to natural systems but extends to human systems as well.⁶³ The variation in precipitation, shrinkage of glaciers and melting of snow and ice affects the quantity and quality of water resources.⁶⁴ The impact of climate change on agricultural yield is also mainly negative, particu-

⁵⁶ Ibid., Article 4 (2).

⁵⁷ Ibid., Article 4 (3).

⁵⁸ Ibid., Article 4 (8), (9), (13).

⁵⁹ Ibid., Article 7 (9).

⁶⁰ Ibid., Article 13 (5).

⁶¹ Ibid., Article 14.

⁶² Farber and Carlarne, n (43), p. 71.

⁶³ IPCC, Synthesis Report, n (1), p. 49.

⁶⁴ Ibid., p. 51.

larly on wheat and maize crops.⁶⁵ It, therefore, becomes evident that climate change negatively affects water and food resources. In addition, there is a fair agreement, that climate change has resulted in increased mortality due to heat-related impacts and it has also affected the distribution of water-borne diseases due to variations in rainfall.⁶⁶ This implies that climate change has, to a certain extent, an impact on human health as well. These aspects of human systems are even more vulnerable to the impacts of extreme weather events caused by climate change including droughts, floods, heatwaves, and wildfires.⁶⁷

The above-mentioned impacts of climate change extend to have negative implications for human rights. The Office of the High Commissioner for Human Rights (OHCHR) notes that climate change not only impacts human lives but endangers several human rights.⁶⁸ Moreover, the OHCHR notes, that the impacts are severe for those who have the least contribution in climate change.⁶⁹ Prior to further elaboration on this topic in the upcoming sections, it is useful to first present an overview of the sources of human rights.

2.4 Introduction to the sources of international human rights law

The human right that is the focus of this thesis is the right to life. However, before the assessment of the right to life can be made, it is desirable to present an overview of the relevant sources of human rights law. Olivier De Schutter traces the development of contemporary international human rights regime to the conventions adopted at international and regional level.⁷⁰ Thus, for the purpose of this section, the sources of international human rights law that bear the most relevance for the right to life will be discussed.

2.4.1 Universal Declaration of Human Rights

In the aftermath of the World War II, the formation of the UN and the adoption of its charter in 1945, may be deemed as the starting point leading to the most significant international human rights conventions existing today. In its preamble, the UN charter provided human rights and fundamental freedoms as one of the main aims of the organization. In light with this aim, the UN General Assembly adopted the Universal Declaration of Human Rights (UDHR) in 1948.⁷¹ The rights provided by the UDHR may broadly be categorized into:

⁶⁵ Id.

⁶⁶ Id.

⁶⁷ IPCC, Synthesis Report, n (1), p. 53.

⁶⁸ OHCHR, *Management Plan 2018-2021*, p. 44.

⁶⁹ Id.

⁷⁰ De Schutter, *International Human Rights Law*, p. 11.

⁷¹ UNGA, A/RES/217(III)[A].

i) Civil and Political:

These rights include: the right to life, liberty, prohibition of slavery, torture, inhuman and degrading treatment, rights to recognition and equality before the law, rights to effective remedy and fair trial, right to be presumed innocent until proven guilty, and the right to seek asylum.⁷² P. Sun observes that these rights have a particularly significant value in substantive and procedural criminal laws as well as administrative laws, setting the bar for safeguarding human integrity and dignity.⁷³

ii) Economic, Social and Cultural:

These are the rights that focus more on the standards and development of social, economic, and cultural aspects of life. For instance, the right to an adequate standard of living that includes an adequate availability of food, clothing, housing, health facilities, and social services.⁷⁴ Sun highlights that analysis of the contents of these rights clearly shows that they are closely related and their realization and enjoyment is dependent upon each other.⁷⁵

De Schutter and Sun are of the view that majority of the rights provided in UDHR have acquired the status of customary international law by being incorporated in international, regional and national laws and procedures.⁷⁶ They are also employed in state practice and judicial processes as well.⁷⁷ In the above context, the UDHR significantly laid down a foundation for common standard of achievement for all peoples and all nations.⁷⁸

2.4.2 International Covenants on Civil and Political Rights and Economic, Social and Cultural Rights

The next phase was the transformation of the UDHR into legally binding instruments. The Economic and Social Council (ECOSOC) decided to adopt two international covenants for the civil and political rights and the economic, social and cultural rights provided by the UDHR.⁷⁹ After a long negotiating process spanning over fourteen years, the two covenants i.e. the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR) were finally adopted through UN General Assembly (UNGA) resolution 2200A, in 1966.

⁷² UDHR, Articles 3-14.

⁷³ Sun, *Historic Achievement of a Common Standard*, p. 340.

⁷⁴ UDHR, Article 25.

⁷⁵ Sun, n (73), p. 342.

⁷⁶ Sun n (73), p. 349 see *also* De Schutter, n (70), p. 50.

⁷⁷ *Id.*

⁷⁸ UDHR, Preamble.

⁷⁹ UNGA, *Resolution on Two Drafts International Covenants on Human Rights*, A/RES/543(VI).

The covenants incorporated mainly but not exclusively the rights provided in the UDHR, some rights were omitted e.g. the right to seek asylum and the right to nationality, while some new rights were added such as the right to self-determination.⁸⁰ As the rights have been mentioned previously, it is more useful to have a comparative analysis of important features of both the covenants as that is more relevant to the thesis.

i) Structure

Both covenants are similar in structure and at some points similar in content of articles.⁸¹ Both the preambles highlight the interdependence of human rights and emphasize on achieving conditions which may allow the enjoyments of these rights.⁸² In both the covenants, part I identically provides the right to self-determination and the right to free disposition of natural wealth and resources,⁸³ part II provides for ensuring a non-discriminatory approach in the exercise of the covenants' rights,⁸⁴ while part III elaborates the substantive provisions of each covenant's respective rights.

ii) Obligations

The obligations set in both covenants differ significantly. The ICCPR requires an immediate implementation from the states by respecting and ensuring the availability of its rights to all individuals within a state's territory and jurisdiction.⁸⁵ In contrast, the general obligation under ICESCR is not as specific and leaves a considerable room for states in determining the extent of their obligations e.g. it requires the states to achieve progressive realization of the rights it provides depending on the maximum available resources.⁸⁶

iii) Reporting and monitoring systems

The ICCPR established a monitoring body i.e. Human Rights Committee (HRC), under Article 28, consisting of independent human rights experts. It is mandatory for states to submit reports on progress to the HRC when requested.⁸⁷ The HRC has the power to make general comments on the reports as it deems appropriate.⁸⁸ The HRC also has the function of hearing and resolving inter-state complaints regarding compliance to the covenant's obligations, sub-

⁸⁰ Randall, "The History of the Covenants," p. 14-15.

⁸¹ OHCHR, Fact Sheet No. 30, *Human Rights Treaty System*, p. 7.

⁸² *Id.*

⁸³ ICCPR and ICESCR, Article 1.

⁸⁴ ICCPR, Article 2 (1), *see also* ICESCR, Article 2 (2).

⁸⁵ ICCPR, Article 2 (1).

⁸⁶ ICESCR, Article 2 (1).

⁸⁷ ICCPR, Article 40 (1).

⁸⁸ *Ibid.*, Article 40 (4).

ject to the consent of the concerned parties.⁸⁹ The monitoring body of the ICESCR, i.e. the Committee on Economic, Social and Cultural Rights (CESCR) by the ECOSOC in 1985 and it is an independent-experts body for carrying out monitoring functions.⁹⁰

The ICCPR and ICESCR are two of the core human rights treaties, which comprehensively elaborate and transform the two main sets of rights under UDHR into legally binding instruments, supplemented by their respective monitoring systems and procedures. The UDHR together with the ICCPR and ICESCR are referred to as the International Bill of Human Rights.⁹¹

Apart from conventions/treaties, customary international law and general principles of international law are also sources of human rights law.⁹² De Schutter explains the resolutions of international organizations such as the UN, clearly setting out commitments can be identified as custom despite instances of inconsistent state practice.⁹³ For example, as mentioned earlier the UDHR is considered to have the status of customary international law. Another source of human rights law is the general principles of international law that most states agree upon and are usually reflected in the declarations and proclamations.⁹⁴ De Schutter observes that the International Court of Justice (ICJ), has extensively referred to fundamental, underlying, well recognized, or essential principles of human rights in a number of cases concerning human rights issues, treaties or declarations.⁹⁵

2.5 Indivisibility and interdependence of human rights

The two main categories of human rights under contemporary international human rights law are the civil and political rights and economic, social, and cultural rights. At the international level, these two sets of rights are incorporated in two separate core human rights treaties i.e. ICCPR and ICESCR. However, the rights provided under both the covenants are indivisible and interdependent. Highlighting this aspect is important to establish the interdependency of the right to life, which comes within the ambit of civil and political rights, on other human rights which are classified as economic, social, and cultural rights. For this purpose, the arguments and counter arguments relating to indivisibility and interdependency of human rights under the two core treaties are as follows.

⁸⁹ Ibid, Article 41.

⁹⁰ ECOSOC, RES/1985/17.

⁹¹ OHCHR, *Factsheet No. 30*, n (81), p. 7.

⁹² OHCHR, *Human Rights: A Basic Handbook*, p. 5.

⁹³ De Schutter, n (70), p. 52.

⁹⁴ OHCHR, *A Basic Handbook*, n (92), p. 5.

⁹⁵ De Schutter, n (70), p. 54.

i) Negative and positive obligations

Joseph and Castan point out that the perception of associating negative and positive obligations to ICCPR and ICESCR respectively is a simplified and flawed approach.⁹⁶ The obligation under ICCPR is not merely negative, as the general comment of HRC expressly provides that this obligation is positive as well.⁹⁷ States must not only refrain from violating these rights but must also take necessary measures for protection of these rights.⁹⁸ Furthermore, states must adopt appropriate measures through legislature, judiciary, and administration to fulfil these obligations.⁹⁹ Similarly, while the obligation of the state under ICESCR is to take steps for realizing the rights progressively, the state generally has to refrain from causing lapses in the enjoyment of these rights.¹⁰⁰

ii) Justiciability and non-justiciability

The argument that rights under ICCPR are justiciable i.e. capable of being adjudicated while those under ICESCR are non-justiciable, is challenged by various scholars. They observe that the CESCR has maintained that these rights are justiciable and treating them as non-justiciable is an arbitrary approach that will obstruct the protection of these rights in courts.¹⁰¹ At regional level, the African Charter on Human and Peoples' Rights (ACHPR) treats these rights as equally justiciable as civil and political rights, which is also reflected in its corresponding jurisprudence.¹⁰² Even in domestic application, decisions of several national courts confirm the justiciability of these rights.¹⁰³ Thus, the characteristic of justiciability is not merely confined to civil and political rights.

iii) Immediate and progressive applicability

Rights under ICCPR have often been construed of immediate applicability because of the corresponding negative obligations as mentioned earlier. On the other hand, rights under ICESCR, have often been seen through the lens of "progressive realization". The CESCR has countered this argument by elaborating that there are some rights under ICESCR such as Articles 3, 7 (a) (i), 8, and 10 (3) that are capable of immediate applicability.¹⁰⁴ Furthermore, Baderin and McCorquodale highlight that obligations under the ICESCR are categorized as i) the

⁹⁶ Joseph and Castan. *The International Covenant on Civil and Political Rights*, p.40.

⁹⁷ HRC, *General Comment No. 31*, CCPR/C/21/Rev.1/Add. 13, para 6.

⁹⁸ Id.

⁹⁹ HRC, *General Comment No. 31*, n (97), para 7.

¹⁰⁰ Baderin and Ssenyonjo. *International Human Rights Law*, p. 58.

¹⁰¹ Baderin and McCorquodale, *Economic Social and Cultural Rights in Action*, p. 11.

¹⁰² Ibid.

¹⁰³ Baderin and Ssenyonjo, n (100), p. 54.

¹⁰⁴ CESCR, *General Comment No. 3*, E/1991/23, para 5.

obligation of conduct i.e. to take measures for realization of rights and ii) the obligation of result i.e. achieving the realization of the rights.¹⁰⁵ The former obligation is implied to be immediately applicable while the latter is to be realized progressively.¹⁰⁶

iv) Cost-free and cost-incurring

Asbjørn Eide holds that it is a widely misinterpreted argument that civil and political rights are cost-free i.e. not requiring the use of state's resources while economic, social and cultural rights are perceived to be cost incurring i.e. requiring the use of resources of state.¹⁰⁷ Civil and political rights, at times require the resources and assistance of state while in many instances economic, social and cultural rights are realized through the freedom of using individual's resources provided that the state does not interfere in the enjoyment of such freedom.¹⁰⁸

The collective gist of the above two sections is that human rights are indivisible and interdependent which has also been affirmed by the international community in the World Conference on Human Rights, 1993.¹⁰⁹ Often, the enjoyment of civil and political rights necessitates the provision of economic, social and cultural rights. Similarly, often the violation of one right may result in the violation of several other human rights. The UN has always maintained this rhetoric and has manifested it through its instruments, general comments, and decisions of judicial bodies. The crux of this conclusion is demonstrated by the following sub-section.

2.5.1 The right to life depending on other human rights

The right to life is a fundamental human right and its significance is evident from the fact that it is not only guaranteed at international level but also at regional and national levels. Internationally, it is recognized and guaranteed in the UDHR (Article 3) and in core human rights treaties such as ICCPR (Article 6). Regionally, this right is enshrined in human rights instruments such as African Charter on Human and Peoples' Rights (Article 4), Arab Charter on Human Rights (Articles 5 and 6), American Convention on Human Rights (Article 4), and European Convention for the Protection of Human Rights and Fundamental Freedoms (Article 2). At national level, this right is mostly incorporated in constitutions around the world. Due to its relevance to this section, the right to life under ICCPR (Article 6) and its dependence on other rights particularly economic, social, and cultural rights will be elaborated in the following discussion.

¹⁰⁵ Baderin, McCorquodale, n (101), p. 12.

¹⁰⁶ CESCR, *General Comment no. 3*, n (104), para, 2, 3, 9.

¹⁰⁷ Eide et al., *Economic, Social and Cultural Rights: A Textbook*, p. 23.

¹⁰⁸ *Ibid.*, p. 25.

¹⁰⁹ Vienna Declaration and Program of Action, A/CONF.157/23, para 5.

Article 6 of the ICCPR guarantees the right to life as an inherent right of every human being that shall be protected by the law.¹¹⁰ It provides that there shall be no arbitrary deprivation of this right. It is worth noting that the HRC has described the right to life, as the “supreme right” upon which the enjoyment of all other human rights relies.¹¹¹ The HRC explains the obligations of the state with respect to this right which include not only refraining itself from acts leading to arbitrary deprivation of this right but also protecting it against the detriments posed by other persons or entities and even life threatening situations.¹¹²

The HRC also holds that the right to life should not be subjected to a narrow interpretation and extends its scope even to include enjoyment of life with dignity.¹¹³ Sara Joseph observes that the general conditions for ensuring this notion as provided by the HRC, involve social and economic aspects.¹¹⁴ The HRC provides that the right to life also entails that the state should take measures to address life threatening diseases, extreme poverty, malnutrition, and homelessness.¹¹⁵ Adequate conditions required for the protection of the right to life includes ensuring facilities such as access to food, water, and health facilities.¹¹⁶

It is evident from the above, that the right to life is dependent upon other rights including economic, social and cultural rights. The right to food, for instance, has been linked to the right to life not only by HRC as explained above but also by the ICESCR in the context of the right to adequate standard of living.¹¹⁷ Furthermore, elaborating the right to food, the CESCR provides that being indivisibly linked to inherent dignity, the right to food is crucial for ensuring the enjoyment of all rights, implying the right to life as well.¹¹⁸

The right to health provided by the ICESCR is another example of such interdependence.¹¹⁹ The HRC has referred to it in context of the right to life under ICCPR, in terms addressing life threatening diseases such as AIDS and tuberculosis, providing access to health care, emergency health services, and reducing maternal and infant mortality by employing medical treatments.¹²⁰ The CECSR holds the right to health to be indispensable for the enjoyment of other

¹¹⁰ ICCPR, Article 6 (1).

¹¹¹ HRC, *General Comment No. 36*, CCPR/C/GC/36, para 2.

¹¹² *Ibid.*, para 7.

¹¹³ *Ibid.*, para 3.

¹¹⁴ Joseph, “Extending the Right to Life under ICCPR”, p. 356.

¹¹⁵ HRC, *General Comment No. 36*, n (111), para 26.

¹¹⁶ *Id.*

¹¹⁷ ICESCR, Article 11.

¹¹⁸ CESCR, *General Comment No. 12*, E/C.12/1999/5, para 1, 4.

¹¹⁹ ICESCR, Article 12.

¹²⁰ HRC, *General Comment No. 36*, n (111), para 26

human rights and elaborates the necessary measures regarding health that are also referred to by the HRC.¹²¹

The interdependence of the right to life on other rights is important to understand how the right to life is impacted through the realization or violation of other rights and how the impacts of climate change on other human rights affect this right.

2.6 Intersection of climate change and human rights

The first highlight of the intersection between climate change and human rights can be traced to the *Stockholm Declaration 1972*. The *Stockholm Declaration* clearly points out that environment, in both its natural and man-made aspects is necessary for the enjoyment of all human rights, while adding a separate emphasis on the right to life.¹²² It provides that it is a fundamental right of man to have freedom, equality and adequate conditions of life in an environment, permitting a life of dignity and well-being.¹²³

Looking at the international climate change regime, no express reference is made to human rights either in the UNFCCC or the Kyoto Protocol. The Paris Agreement, however, does make an explicit reference to human rights in its preamble and requires parties to consider their respective human rights obligations when taking action to address climate change.¹²⁴ According to Bodansky et al., though Paris Agreement does not refer to human rights in its operative part and does not create new human rights obligations, it is certainly significant in drawing a link between human rights and climate change regime by paving receptivity for the former in the latter.¹²⁵

This intersection is reiterated by general comments of the HRC and CESCR. For example, with respect to the right to life, the HRC refers to degradation of environment as general condition that may pose a direct threat to life and thus to enjoyment of the right to life.¹²⁶ Similarly, the CESCR while elaborating the right to highest attainable standard of health, states that the scope of this right includes a healthy environment as an underlying determinant of health.¹²⁷

¹²¹ CESCR, *General Comment No. 14*, E/C.12/2000/4, para 1, 16, 17, 21, 22.

¹²² Declaration of the UN Conference on the Human Environment, A/CONF.48/14/Rev.1, Proclamation, para 1.

¹²³ *Ibid.*, Principle 1.

¹²⁴ Paris Agreement, Preamble, Recital 11.

¹²⁵ Bodansky et al. n (32), p. 312.

¹²⁶ HRC, *General Comment No. 36*, n (111), para 26.

¹²⁷ CESCR, *General Comment No. 14*, n (121), para 4.

The OHCHR, in its report, reaffirms this intersection as it provides a significant detail of the implications of climate change for human rights. It details how climate change specifically impacts the right to life, the right to adequate food, the right to water, and the right to health.¹²⁸ It also outlines another important aspect of this intersection i.e. states' human rights obligation in the context of the negative impacts of climate change on human rights. It notes, that regardless of the difficulties in qualifying climate change impacts as human right violations, human rights obligations do provide important protection for the rights affected by climate change.¹²⁹

It is evident from the above that climate change and human rights are interlinked, and the intersection thus established will serve as a foundation for further explanation of impact on the right to life in the following section, and state obligations in the next chapter, respectively.

2.7 Impacts of climate change on the right to life

The UN report *Safe Climate* observes that the impact of climate change on the right to life is both direct and indirect. Extreme weather conditions caused by climate change such as floods, droughts, heatwaves, disruption of water and food resources, and air pollution result in loss of life.¹³⁰ It notes that at least 150,000 premature deaths per annum are attributed to climate change impacts. Moreover, the report highlights that climate change has drastic impacts on other human rights including the right to food and the right to water.¹³¹ It has been discussed in section 2.5.1 that the right to life is interdependent on other human rights. Thus, the impact of climate change on other human rights for instance the right to food and the right to water will ultimately impact the right to life.

In order to present a clearer elaboration within the scope of this section, it is befitting to narrow down the focus to the impacts of climate change on the right to life in a specific country. Considering that such impacts are particularly severe for developing countries,¹³² this section will analyze the example of Pakistan. Pakistan has also ratified both the ICCPR and ICESCR, therefore, the standards and contents of rights in these instruments are relevant for analyzing Pakistan's case. In the context of the right to life, the impact on the right to food and water will also be part of the discussion.

¹²⁸ OHCHR, *Report on the relationship between climate change and human rights*, A/HRC/10/61, pp. 8-13.

¹²⁹ *Ibid.*, para 70, 71.

¹³⁰ UNGA, *Safe Climate*, n (4), para 29.

¹³¹ *Ibid.*, para 34, 35, 38, 39.

¹³² *Ibid.*, para 8.

Pakistan's geo-economical position makes it highly vulnerable to the risks associated with climate change. Qamar Uz Zaman Chaudhry summarizes Pakistan's climate threats to include the following factors:¹³³

- i) the geographical location of Pakistan lies in a region (South Asia) that it is likely to have a higher temperature increase than the global average
- ii) the variation in the behavior of monsoon rains resulting in floods and droughts
- iii) the rise in sea level endangering its extended coastline,
- iv) the increased temperature affecting the sources of its rivers i.e. the Hindukush, Karakoram and Himalayan glaciers,
- v) its economy, that is mainly based on agriculture, being climate sensitive.

Considering the above, an analysis of the extreme weather behaviors in the recent years reveals that the right to life in Pakistan has been impacted both directly and indirectly by climate change. Following are some illustrations of the direct impact of climate change on the right to life:

- i) Increased temperature as a result of climate change has caused more rapid melting of the ice masses in the Karakorum Mountain Range above Pakistan and consequently it has increased the flow in the rivers of Pakistan.¹³⁴ This in turn has resulted in a series of disastrous floods.¹³⁵ For example in 2010, one of the worst monsoon floods killed more than 1700 people in Pakistan and affected 20 million people by causing damage and destruction to infrastructure, agriculture, livestock, and other family assets.¹³⁶
- ii) Climate change may also result in lack of precipitation and consequently lead to drought.¹³⁷ Pakistan faces an increased risk of drought due to climate change.¹³⁸ In this regard, Tharparkar desert is one of the most affected areas in Pakistan as it relies heavily on monsoon rainfalls.¹³⁹ In 2014, due to severe drought, 180 people died in Tharparkar primarily due to lack of water.¹⁴⁰

¹³³ Chaudhry, *Climate Change Profile of Pakistan*, pp. 1-2.

¹³⁴ Schell, "Glaciers, Water Security, and Asia's Rivers", pp. 199-200

¹³⁵ Id.

¹³⁶ Ahmad, "Social Safety Nets", p. 221.

¹³⁷ Ahmed et al., "Impacts of Climate Variability and Change on Seasonal Drought Characteristics of Pakistan", p. 373.

¹³⁸ Id.

¹³⁹ Rizvi, *Loss and Damage from Drought in Pakistan*, p. 4.

¹⁴⁰ Id.

iii) Another example of direct effect of climate change in Pakistan is the loss of life due to heat waves. Heat waves are extended period of hot weather, which may be accompanied by high humidity.¹⁴¹ In 2015, severe heat waves resulted in 2000 deaths in the area of Karachi alone i.e. the largest city of Pakistan.¹⁴²

The following sections show how the right to life is affected by climate change in the context of interdependence of human rights.

2.7.1 Impacts on the right to food

A rise in temperature due to climate change threatens the agricultural yield of Pakistan to reduce by 8%-10% by 2040 and the most alarming decrease in yield will be seen for wheat.¹⁴³ Punjab is the province of Pakistan with the highest population and the largest agricultural yield accounting for 60% share in the country's agricultural exports which is the main export of the country.¹⁴⁴ Due to high temperatures, the crops' yield in Punjab has reduced because of earlier grain formation and shrinking of crop cycles.¹⁴⁵ Additionally, climate change has direct effect on agriculture in the form of extreme weather events. For instance, in the 2010 floods in Pakistan, over 2 million hectares of standing crops were either lost or damaged and over 1.2 million head of livestock died due to the flood.¹⁴⁶ In Punjab alone, floods have caused direct damage to vast agricultural areas e.g. 746.9 thousand hectares in 2010 floods and 406.6 thousand hectares in 2014 floods.¹⁴⁷

These conditions and future projections pose food insecurity in Punjab, the most populated province of Pakistan, where 48.6 % of the population already does not have access to adequate food.¹⁴⁸ Food insecurity also poses a risk of under-nutrition which is a major cause of stunting in children and was recorded in 2013 to have affected 45% of the children under age 5 in Pakistan.¹⁴⁹ Thus, food insecurity caused by climate change affects the enjoyment of the right to food and by extension, the right to life.

¹⁴¹ Ministry of Climate Change, Government of Pakistan. *Technical Report on Karachi Heat wave June 2015*, p. 1.

¹⁴² ACAPS, *Sindh Heatwave April-May 2017*, p. 3.

¹⁴³ Chaudhry, n (133), pp. 24-26.

¹⁴⁴ Government of Punjab. *Punjab Agriculture Policy 2018*, p. 9.

¹⁴⁵ Aslam et al., "Integrated Climate Change Risk Assessment and Evaluation of Adaption Perspective in Southern Punjab, Pakistan", p. 1423.

¹⁴⁶ Ahmad, n (136), p. 222.

¹⁴⁷ Aslam et al., n (145), p. 1423.

¹⁴⁸ Ibid., p. 1424.

¹⁴⁹ WHO, UNFCCC. *Climate and Health Country Profile- 2015, Pakistan*, p. 4.

2.7.2 Impacts on the right to water

The right to water is fundamental for the realization of other rights. It is a right under the scope of right to adequate standard of living and the right to highest attainable standard of health.¹⁵⁰ The right to water provides entitlement to sufficient, accessible, safe, acceptable and affordable water for personal and domestic use.¹⁵¹

The water sector in Pakistan is highly prone to the impacts of climate change.¹⁵² Due to rise in temperature, the natural reservoirs in the form of glaciers are melting at an increased rate, the high evaporation results in increased demand for irrigation water, and there is an increased degradation in water quality due to floods and droughts.¹⁵³ Climate change is affecting the two main sources of water in Pakistan i.e. the river inflows and the monsoon rainfalls by disturbing the patterns and making them highly varied.¹⁵⁴ The increase in the river-flows because of the melting process is projected to be followed by a decrease of 30% to 40 % over a period of 50 years. This is matter of grave concern for the agricultural sector, a significant factor for economy and food, that uses 92% of the water consumption. Moreover, it endangers the already stressed per capita availability of water which since 1947, has reduced by 400 percent in Pakistan.¹⁵⁵ The degradation and disruption of water resources impacts the right to water and by means of it, the right to life.

It is worth noting that while the right to life is provided by Article 9 of the constitution of Pakistan, the components of the right have not been defined in the constitution. However, the interpretation of the Supreme Court of Pakistan significantly extends the scope of this right, beyond merely the right to existence, to all such facilities which a person is entitled to enjoy with dignity including a safe environment, the right to water and the right to basic health care.¹⁵⁶ In this context, it is evident that climate change has serious implications for the right to life in Pakistan.

¹⁵⁰ CESCR, *General Comment No. 15*, E/C.12/2002/11, para 1, 3.

¹⁵¹ *Ibid.*, para 2.

¹⁵² Chaudhry, n (133), p. 28

¹⁵³ *Ibid.*, p. 30

¹⁵⁴ *Ibid.*, p. 28

¹⁵⁵ Saleem et al., "Status of Drinking Water Quality and its Contamination in Pakistan", p. 1.

¹⁵⁶ Supreme Court of Pakistan, *Human Rights Case NO.17599 of 2018*, p. 5, 6.

3 The Role of Human Rights Law in Climate Change Action

This chapter will highlight the intersection between human rights and climate change by analyzing the role of human rights law in addressing climate change. In this regard, it is important to understand state obligations under human rights law and climate change regime. The chapter will proceed by elaborating the typology of states' obligations with respect to human rights. It will then present an overview of the climate change compliance mechanisms to evaluate their nature and efficiency. Based on this analysis, it will focus on how the impact of climate change on human rights and the corresponding state obligations may serve as a cause of action in climate change litigation at various levels. Considering the intersection between the two fields, the purpose of the discussion will be to highlight the prospects, challenges, and necessity of employing human rights enforcement mechanisms in climate change action.

3.1 Obligations of state with respect to human rights

The corresponding obligations of human rights are significant as they elaborate what the rights entail and what the role of the state is, in realizing them. This section will provide a detail of the general obligations of states with respect to human rights both at national and international levels. For this purpose, it is useful to resort to Asbjørn Eide's widely-employed tripartite typology, classifying state obligations into three types i.e. the obligation to respect, protect and fulfil.¹⁵⁷ State obligations at national level are, thus, analyzed through this typology as follows.

3.1.1 The obligation to respect

The obligation to respect requires the state to refrain from interfering in an individual's exercise and enjoyment of rights. Eide explains that this is the primary level obligation by which the state should respect an individual's resources, freedom and knowledge, in taking necessary measures and designing the best use of these factors to exercise his/her rights.¹⁵⁸ Following are a few instances of the affirmation of this obligation with respect to various rights.

- i) The right to life- state has an obligation to refrain from such conduct that will lead to arbitrary deprivation of life.¹⁵⁹ Its scope also extends to foreseeable threats, life-threatening situations and deportation, extradition or transfer of individuals to other

¹⁵⁷ ECOSOC, *Report on the Right to Adequate Food*, E/CN.4/Sub.2/1987/23, p. 24.

¹⁵⁸ Eide et al., n (107), p. 23.

¹⁵⁹ HRC, *General Comment No. 36*, n (111), para 7.

countries where there are substantial grounds to believe that a real risk poses to their right to life.¹⁶⁰

- ii) The right to food- state is required to refrain from such measures that will result in prevention of the existing access to food.¹⁶¹
- iii) The right to water- state is required to refrain from direct or indirect interference in the enjoyment of this right that will limit the access to water, e.g. arbitrary interference in traditional allocation, and contamination of water due to state-owned facilities.¹⁶²

Besides the UN treaty bodies, the obligation to respect has been reiterated by regional human rights conventions and their respective forums. For instance, the African Commission on Human and Peoples' Rights (ACoMHPR) emphasized on the obligation to respect in the case of *Social and Economic Rights Centre and the Centre for Economic and Social Rights v. Nigeria*, which involved alleged violations of human rights to life, housing and food.¹⁶³ Similarly, the European Convention on Human Rights (ECHR) affirms the obligation to respect human rights in its Article 1.¹⁶⁴ From a climate change perspective, Bodansky et al. observe that the obligation to respect would apply to state activities that have a direct contribution in climate change e.g. state strategies allowing public or private sectors to carry out projects resulting in CO₂ emissions.¹⁶⁵

3.1.2 The obligation to protect

According to Eide, the obligation to protect is the secondary level of obligations that requires a state to take measures to protect an individual's rights from violations by third parties.¹⁶⁶ The ACoMHPR elaborates in the *Nigeria* case that this obligation includes protection of rights from political, economic and social interferences and that such protection, generally, is in the form of effective frameworks, laws and regulations.¹⁶⁷ This obligation may further require specific actions from states with respect to various rights as analyzed below.

- i) The right to life- state is required to exercise due diligence along with adopting appropriate laws and preventive measures to protect the right to life of an individual against

¹⁶⁰ Ibid., para 7, 30.

¹⁶¹ CESCR, *General Comment No. 12*, n (118), para 15.

¹⁶² CESCR, *General Comment No. 15*, n (150), para 21.

¹⁶³ ACoMHPR, *The Social and Economic Rights Centre and the Centre for Economic and Social Rights v. Nigeria*, ACHPR/COMM/A044/1, para 45.

¹⁶⁴ ECHR, Article 1.

¹⁶⁵ Bodansky et al., n (32), p. 304.

¹⁶⁶ Eide et al., n (107), p. 24.

¹⁶⁷ ACoMHPR, n (163), para 46.

threats of infringement from third parties, misuse of powers by institutions and public authorities, violence, organized crime, etc.¹⁶⁸

- ii) The right to food- state has the obligation to prevent third parties, enterprises, or entities from hindering an individual's enjoyment of this right and from depriving them of access to food.¹⁶⁹
- iii) The right to water- state obligation entails that third parties including individuals and corporations must be restrained from impairing the enjoyment of an individual's right to water and where necessary, to regulate third-party conduct to ensure equal access to safe water.¹⁷⁰

The ECtHR provides that the obligations of the state in Article 1 of the ECHR also include the obligation to protect, whereby states are required to protect the rights guaranteed in the ECHR from being infringed by other parties.¹⁷¹ Bodansky et al. highlight that the obligation to protect in the context of climate change would not only mean to regulate third-party conduct regarding CO₂ emissions which might be detrimental to human rights, but also to take measures to reduce the harmful effects of climate change on the enjoyment of human rights.¹⁷²

3.1.3 The obligation to fulfil

At tertiary level, Eide presents that state has an obligation to fulfil human rights and it may be in the form of either direct provision or facilitation of the rights.¹⁷³ He further notes that this obligation may vary in nature depending on the instrument under which the rights are guaranteed or the right itself. Generally, however, it requires state to take such administrative, judicial, legislative, and financial measures that are appropriate for the realization of the rights.¹⁷⁴ The obligation to fulfil is illustrated with respect to the following human rights.

- i) The right to life- state has an obligation to take appropriate measures to ensure the enjoyment of the right to life with dignity, to provide adequate general conditions for the protection of this right against environmental degradation, life threatening diseases, extreme poverty etc.¹⁷⁵ State obligation in this regard also includes promotion and facilitation of relevant services.

¹⁶⁸ HRC, *General Comment No. 36*, n (111), para 7, 18-25.

¹⁶⁹ CESCR, *General Comment No. 12*, n (118), para 15.

¹⁷⁰ CESCR, *General Comment No. 15*, n (150), para 23, 24.

¹⁷¹ ECtHR, *Guide on Article 1*, paras 9, 51, 69.

¹⁷² Bodansky et al., n (32), p. 305.

¹⁷³ Eide et al., n (107), p. 24.

¹⁷⁴ CESCR, *The Maastricht Guidelines (1997)*, E/C.12/2000/13, para 6.

¹⁷⁵ HRC, *General Comment No. 36*, n (111), para 26.

- ii) The right to food- state has an obligation to facilitate access to food by employing relevant means and resources, and also to provide this right directly to individuals who, owing to disaster or reasons beyond their control, are not able to enjoy this right.¹⁷⁶
- iii) The right to water- state obligation includes recognition of the right to water in political and legal systems, ensuring equitable affordability for all, designing sustainable consumption strategies and progressively extending this right to deprived areas with special regard to women and children's needs.¹⁷⁷

The AComHPR, in the case of *Nigeria*, provides that this obligation requires the state to utilize its machinery to achieve actual realization of the rights and freedoms that it has agreed to undertake under various human rights instruments.¹⁷⁸ Considering climate change, the obligation to fulfil may require the state to facilitate, provide and promote such environmental conditions that are required for the enjoyment of various rights, as explained above; and the absence of which may result in the impairment of these rights due to the adverse effects of climate change.¹⁷⁹

The tripartite typology is a useful framework for understanding the obligations of state with respect to human rights, and climate change approached from a human rights perspective. Considering the above, the CESCR has, in various observations, expressed its concern over climate change impacts on human rights; and in light of state obligations it has recommended reduction in GHG emissions by setting “time-bound targets”, transition to renewable energies and to adopt measures protecting vulnerable groups from the adverse effects of climate change.¹⁸⁰

3.2 Extraterritorial obligations of state with respect to human rights

The multilateral binding treaties and declarations that incorporate and adopt human rights have expounded that human rights are universal in character. State's extraterritorial obligations under human rights law are elaborated by the jurisprudence developed by international and national courts, and human rights treaty bodies.¹⁸¹

¹⁷⁶ CESCR, *General Comment No. 12*, n (118), para 15.

¹⁷⁷ CESCR, *General Comment No. 15*, n (150), para 25-29.

¹⁷⁸ AComHPR, n (163), para 47.

¹⁷⁹ Bodansky et al., n (32), p. 306.

¹⁸⁰ Center for International Environmental Law, *Synthesis Note*, pp. 8-10.

¹⁸¹ Milanovic, *Extraterritorial Application of Human Rights Treaties*, p. 56.

Core human rights treaties including the Convention on the Rights of the Child, Convention against Torture, and ICCPR refer to the jurisdiction of states regarding their respective scopes of application.¹⁸² The ICJ, in its advisory opinion on the *Legal Consequences of the Construction of a wall in the Occupied Palestinian Territory*, held that while primarily territorial, state's human rights obligations may become extraterritorial where the state exercises jurisdiction outside its territory.¹⁸³

The basis of the rule of extraterritorial obligations also includes the concept of *erga omnes* nature. As held by the ICJ in *Barcelona Traction, Light and Power Company, Limited*, *erga omnes* obligations are owed to the international community as a whole and are derived from basic human rights, recognized in general international law and embodied in international and regional treaties.¹⁸⁴ The ICJ noted that the rights to which such obligations correlate are of significant importance and therefore all states can have a legal interest in their protection.¹⁸⁵

States, thus, have extraterritorial obligations with respect to human rights. However, it must be noted that these obligations are neither absolute nor unqualified,¹⁸⁶ meaning thereby, that they may vary in nature depending on various factors from case to case. Considering the scope of this thesis, it is useful to refer to the *Maastricht Principles on Extraterritorial Obligations of States in the area of Economic, Social and Cultural Rights*, which clarifies the concept based on the existing *corpus juris* of international law. Following are some of the significant principles relevant to the scope of this thesis:

i) The obligation to respect, protect and fulfil extraterritorially

The extraterritorial obligations of state with respect to all human rights have three layers i.e. obligation to respect, protect and fulfil, as in the case of territorial obligations.¹⁸⁷ De Schutter et al. comment that this principle does not imply that each state has the obligation to ensure the human rights of every person, rather it is subject to several factors including the scope of application and state jurisdiction.¹⁸⁸

ii) Definition and scope of extraterritorial obligations

Extraterritorial obligations include obligations of the state arising from acts or omissions that affect the enjoyment of human rights outside of its territory as well as the obligation of inter-

¹⁸² CRC, CAT and ICCPR, Article 2.

¹⁸³ ICJ, *The Wall*, I.C.J. Reports 2004, 136, para. 109.

¹⁸⁴ ICJ, *Barcelona Traction*, Judgment, I.C.J. Reports 1970, p. 3, para 33- 34.

¹⁸⁵ Id.

¹⁸⁶ ICJ, *Barcelona Traction*, n (184), para 33.

¹⁸⁷ Maastricht Principles, Principle 3.

¹⁸⁸ De Schutter et al., "Commentary to the Maastricht Principles", p. 1090.

national cooperation to realize human rights, provided by the UN charter and other human rights instruments.¹⁸⁹ The scope of these obligations is determined by state's control and authority, foreseeability of impact and state's ability to influence the realization of rights extraterritorially.¹⁹⁰

iii) Obligation to avoid causing harm (due diligence)

States must abstain from such conduct that may result in risking the nullification or impairment of rights extraterritorially.¹⁹¹ Regarding this principle, De Schutter et al. refer to the ICJ's advisory opinion on *Legality of threat or use of Nuclear Weapons*, in which the court emphasized that state conduct must respect the environment of other states or of other areas outside of national control.¹⁹² States must observe due diligence in avoiding the use of their territory causing harmful effects, where there is knowledge of risk and foreseeability of result.¹⁹³

iv) Obligation to create an enabling environment

State must take appropriate measures separately and through international cooperation, in the fields of trade, environmental protection, and development cooperation, to create an international environment making it possible to realize the universal fulfilment of rights.¹⁹⁴

v) Obligation to provide international assistance/international cooperation.

States must, through separate or joint measures, provide international assistance ensuring the realization of rights.¹⁹⁵ De Schutter et al. observe that this obligation comes under the broader ambit of international cooperation.¹⁹⁶ The obligation of international cooperation is provided by Article 56 of the UN charter, Article 22 of the UDHR and various core human rights instruments. For instance, the ICESCR specifically emphasizes on this obligation in Article 2 (1).

It is worth noting that the *Maastricht Principles* do not exclude application of extraterritorial obligations to civil and political rights; while primarily elaborating the principles with respect

¹⁸⁹ Maastricht Principles, n (187), Principle 8.

¹⁹⁰ Ibid., Principle 9.

¹⁹¹ Maastricht Principles, n (187), Principle 13.

¹⁹² De Schutter et al., n (188), p. 1112.

¹⁹³ Ibid., p. 1114

¹⁹⁴ Maastricht Principles, n (187), Principle 29.

¹⁹⁵ Ibid., Principle 33.

¹⁹⁶ De Schutter et al., n (188), p. 1157.

to economic, social and cultural rights it does emphasize on the universality, interdependence and indivisibility of all human rights.¹⁹⁷

3.3 Climate change compliance mechanisms and procedures

The UN climate change regime including the UNFCCC, Kyoto Protocol and the Paris Agreement provide certain commitments and obligations for state parties as discussed in section 2.2. It is therefore desirable to analyze and compare their respective compliance mechanisms to understand their potential and efficiency in ensuring state action with respect to climate change. The various features of the compliance mechanisms under the said three instruments are discussed as follows.

3.3.1 Compliance mechanism under the UNFCCC

The UNFCCC mandates the COP to review and promote the implementation of the convention by the parties.¹⁹⁸ Regarding the individual implementation of states' commitments, the UNFCCC provides that each party shall communicate information to the COP, on its national GHG emissions and the corresponding addressing measures that it takes according to its capacities.¹⁹⁹ The Annex I parties including the developed country parties are required to provide a detailed account of the policies and measures undertaken to meet their commitments along with the estimated effectiveness of such policies and measures.²⁰⁰ Furthermore, parties are required to settle their disputes regarding the application or interpretation of the convention through negotiation or other peaceful means preferred by them.²⁰¹

It is evident that the UNFCCC implementation and compliance mechanism is not strong in the sense that it leaves matters significantly to be determined by parties depending on their circumstances. While observing this opinion, Bodansky et al. state that the dispute settlement mechanism has been ineffective as it has never been employed.²⁰² Despite the general and mostly non-binding nature of the mechanism, the communication of information does help scrutinize state action regarding climate change at national level.

3.3.2 Compliance mechanism under the Kyoto Protocol

The Kyoto Protocol provides for a relatively detailed, strong, and efficient compliance and enforcement mechanism. It requires the COP serving as the meeting of the parties to Kyoto

¹⁹⁷ Maastricht Principles, n (187), Principle 5.

¹⁹⁸ UNFCCC, Article 7 (2) (a), (e).

¹⁹⁹ Ibid., Article 12 (1).

²⁰⁰ Ibid., Article 12 (2).

²⁰¹ Ibid., Article 14 (1).

²⁰² Bodansky et al., n (32), pp. 148-149.

Protocol (CMP) to furnish effective procedures and mechanisms to tackle issues of non-compliance.²⁰³ It provides for development of methodologies for estimating GHG emissions and their removal by sinks at national level, employing IPCC's role in designing them and the CMP having the authority to review and revise such methodologies.²⁰⁴ Each state party in Annex I is required to include necessary supplementary information, as determined by the CMP, in its annual inventory exhibiting compliance with its commitments under the protocol.²⁰⁵

The CMP established a compliance committee consisting of two branches i.e. the facilitative branch and the enforcement branch.²⁰⁶ The role of the facilitative branch is to extend facilitation and advice for promoting compliance with the protocol.²⁰⁷ It also has the mandate to apply predetermined consequences including financial and technical assistance, and transfer of technology, in addressing compliance matters.²⁰⁸ The task of the enforcement branch is to determine non-compliance of Annex I parties with their commitments of emission limitation and reduction under the protocol.²⁰⁹ In case of non-compliance, its role also includes the application of the predetermined consequences taking into account the nature and degree of non-compliance. These consequences include, developing a plan for the concerned party, requiring it to submit progress reports, suspending its eligibility under certain articles of the protocol concerning emission trading, and reducing its assigned amounts for the next commitment period.²¹⁰

The Kyoto Protocol compliance mechanism is more comprehensive, stronger, and distinguishable due its feature of enforcement of compliance as opposed to being merely facilitative in nature.²¹¹

3.3.3 Compliance mechanism under the Paris Agreement

The Paris Agreement provides a facilitative mechanism for the implementation and promotion of compliance with its provisions, establishing a committee of experts carrying out its functions in a transparent, non-conflicting, and non-punitive manner.²¹² The Paris Agreement

²⁰³ Kyoto Protocol, Article 18.

²⁰⁴ *Ibid.*, Article 5.

²⁰⁵ *Ibid.*, Article 7.

²⁰⁶ CMP, Decision 27/CMP.1, Section II, para 1, 2.

²⁰⁷ *Ibid.*, Section IV, para 4, 5.

²⁰⁸ *Ibid.*, Section XIV.

²⁰⁹ *Ibid.*, Section V, para 4.

²¹⁰ *Ibid.*, Section XV.

²¹¹ Bodansky et al., n (32) p. 196.

²¹² Paris Agreement, Article 15.

Rulebook adopted in a Katowice 2018 includes a detailed elaboration of the mechanism provided by the Paris Agreement.

The committee so formed can consider issues of implementation and compliance of a party based on a written submission of the party.²¹³ The committee can initiate the process itself in case the party fails to fulfil its binding obligations i.e. failure to submit its NDC or other mandatory communication or information under various articles of the Paris Agreement.²¹⁴ The committee may, subject to the consent of the concerned party, initiate a facilitative consideration regarding significant and persistent inconsistencies in the information submitted by the party.²¹⁵ The measures that the committee may take in the disposal of its functions to facilitate implement and promote compliance include identifying challenges, making recommendations, and sharing information through dialogue with the concerned party.²¹⁶ It also includes assisting the concerned party financially, technologically or through other arrangements, providing assistance in developing a plan of action, and issuing fact-finding regarding implementation and compliance.

The compliance mechanism under the Paris Agreement, though facilitative in nature, significantly promotes transparency in communications regarding compliance.²¹⁷ The third-party review provision i.e. the technical expert review further strengthens the transparency. The mechanism accommodates states' national processes and priorities. This approach along with the features of transparency, assistance and expert review may prove to be helpful in yielding better compliance with the Paris Agreement.²¹⁸

It is evident that climate change mechanisms mainly focus on states' climate change commitments under their respective treaties and do not have the capacity to address the associated human rights issues. These mechanisms are mostly facilitative, which may prove to be ineffective in ensuring the required level of state compliance with climate change commitments, let alone human rights implications. Thus, they are not adequate platforms for addressing climate change impacts on human rights which necessitates the following discussion.

²¹³ COP serving as the meeting of the parties to the Paris Agreement, Decision 20/CMA.1, Annex, Section III, para 20.

²¹⁴ *Ibid.*, para 22 (a).

²¹⁵ *Ibid.*, para 22 (b).

²¹⁶ *Ibid.*, para 30.

²¹⁷ Streck et al., "From Paris to Katowice", p. 185.

²¹⁸ *Ibid.*, p. 187.

3.4 Human Rights as cause of action in climate change litigation

An important aspect of the intersection between human rights and climate change is the rights-based climate change litigation on various levels and forums. It is interesting to analyze how this aspect considers the impact of climate change on human rights; and holds states accountable for their obligations under human rights law in terms of their climate change action. It is also integral to the discussion under this thesis i.e. highlighting the avenues that human rights law may provide for ensuring state action towards climate change.

In this regard, there is significant progress at national level and a promising response at regional level, which may also be considered international to the extent that it is a foreign level of adjudication setting precedents for other countries. At the more international level e.g. the UN treaties bodies and judicial platforms, there is still a considerable lack of the application and result of this approach. This is further elaborated as follows.

3.4.1 National litigation

This section will discuss the following illustrations of climate change litigation based on human rights at the national level.

i) *Leghari v. Federation of Pakistan*

The petitioner, Asghar Leghari, filed a petition for the enforcement of his fundamental rights in Lahore High Court (LHC).²¹⁹ The petitioner, who was an agriculturist by profession, submitted that the drastic impacts of climate change violated his constitutional right to life (Article 9) in context of water, food and energy insecurity along with the right to dignity of man (Article 14).²²⁰ He also contested that the inaction on the part of the government of Pakistan to implement its Climate Change Policy 2012 and the Framework for Implementation of Climate Change Policy 2014-2030 also offends his rights; as in the absence of such action he may lose his livelihood due to climate change.²²¹

The LHC significantly held that the delayed implementation of the above-mentioned framework offended the fundamental rights of the citizens.²²² The court noted the high vulnerability of Pakistan considering the consequences of extreme weather conditions such as floods and droughts caused by climate change.²²³ A Climate Change Commission was established by the court for the purpose of expediting the implementation of the said framework by engaging the

²¹⁹ LHC, *Asghar Leghari v. Federation of Pakistan*, Judgement, para 1.

²²⁰ *Ibid.*, para 3.

²²¹ *Id.*

²²² LHC, *Ashgar Leghari v. Federation of Pakistan*, Order of 4th September 2015, para 8.

²²³ *Leghari*, n (219), para 11.

concerned departments through a coordinative process.²²⁴ The court further emphasized the need of adaptation and mitigation to reduce the vulnerability and risks associated with climate change.²²⁵

Another important outcome of the case was the establishment of Standing Committee on Climate Change to act as an interface between the court and the executive for this purpose.²²⁶ The committee was given the power to approach the court for appropriate orders regarding the enforcement of fundamental rights and the petition was consigned to the committee rather than being disposed of so that when required it could be revived.²²⁷

ii) *Urgenda v. The Netherlands*

Stichting Urgenda, an NGO working for preventing climate change by developing measures, filed a case against the government of the Netherlands on its own behalf and the behalf of 886 Dutch citizens in the Hague District Court.²²⁸ Urgenda claimed that the climate change caused by worldwide GHG emissions and the increased temperatures of the earth by 2°C or more, were a threat to the people and their human rights.²²⁹ Highlighting the high level of emissions produced by the Netherlands, Urgenda sought an order from the court directing the state to reduce the GHG emission by at least 25% by the end of 2020, compared to the level of 1990.²³⁰ The human rights issue raised by Urgenda stated that the hazardous climate change impacts infringed the right to life (Article 2) and the right to respect for private and family life (Article 8) under the ECHR.²³¹

The District Court upheld Urgenda's claim regarding emission reduction and ordered the state to reduce the GHG emissions by at least 25% compared to the 1990 level, by the end of 2020.²³² Regarding the human rights claim, the court held that Urgenda being a legal person was not entitled to such claim and as far the individuals are concerned there was a lack of sufficient information for determining the violation of these rights.²³³

²²⁴ Ibid., para 19.

²²⁵ Ibid., para 21.

²²⁶ Ibid., para 25.

²²⁷ Ibid., para 27.

²²⁸ Hague District Court, *Urgenda v. The Netherlands*, p. 1.

²²⁹ Ibid., section 3.1, para 1,2.

²³⁰ Ibid., para 3,7.

²³¹ Ibid., section 3.2.

²³² Ibid., section 5.1.

²³³ Ibid., section 4.109.

The Supreme Court, however, took a different position with respect to the human rights claims and significantly held that climate change being a real and immediate risk puts the state under an obligation to take measures pursuant to the rights provided by Article 2 and Article 8 of the ECHR.²³⁴ Recognizing that climate change threatens human rights, the court held that *Urgenda* could invoke state obligations in this regard and that the state was obliged from a human rights perspective to address the threats from climate change.²³⁵

iii) *Juliana v. USA*

In *Juliana v. USA*, 21 young plaintiffs and an environmental organization filed a case against the US government on the grounds that the US government's pro-fossil fuel policies despite being aware of its contribution in climate change violated the right of the plaintiffs.²³⁶ The plaintiffs prayed for declaratory relief and an order of the court directing the government to initiate a plan of phasing out fossil fuels and reducing the CO₂ levels.²³⁷

The Court of Appeals held that sufficient evidence proved that climate change posed a risk of resulting in life-threatening calamities and endangering food and water resources if the current trajectories were left unaddressed.²³⁸ The Court noted that it is not merely inaction on the government's part but also an active promotion of the use of fossil fuel that contributes to climate change.²³⁹ However, the court dismissed the case primarily on the ground that the relief sought by the plaintiffs of ordering the government to formulate a plan was beyond the court's authority and that the correct forums for this were the executive and political branches.²⁴⁰

The case was still regarded as an important development from human rights perspective as the district court in the first instance had held that the drastic impacts of climate change on the human life resulted in violation of the fundamental rights of the plaintiffs and entitled them to due process.²⁴¹ Although the Court of Appeals overturned this decision, its findings were significant in terms of recognizing the impacts of climate change on human life and the need for the executive to take necessary actions.

²³⁴ Supreme Court of the Netherlands, *Urgenda v. The Netherlands*, section 5.6.2.

²³⁵ *Ibid.*, section 5.7.9., 5.9.1., 5.9.2.

²³⁶ US Court of Appeals Ninth Circuit, *Juliana v. USA*, p. 12.

²³⁷ *Id.*

²³⁸ *Juliana*, n (236), p. 15.

²³⁹ *Id.*

²⁴⁰ *Juliana v. USA*, n (236), p. 25, 29, 30, 32.

²⁴¹ Peel and Osofsky, "A Rights Turn in Climate Change Litigation", p. 56.

Apart from the above, the *Greenpeace Nordic Association v. Ministry of Petroleum and Energy* is also worth mentioning as it received international attention by contesting that Norway's decision of granting oil and gas leases violated the right to environmental protection under Article 112 of the constitution and Norway's commitments under the Paris Agreement.²⁴² However the District Court and Court of Appeal's decisions were not in favor of the plaintiffs, an appeal against which has been made to the Supreme Court, scheduled for hearing in November 2020.²⁴³

3.4.2 Regional litigation

There is a considerable share of rights-based climate change litigation at regional level. This includes cases brought under the various regional human rights instruments at their respective forums and in some instances, in the national courts of state parties.

i) The Inter American Commission on Human Rights

The Inter American Commission on Human Rights (IACoMHR) has received petitions concerning the violations of human rights as a result of climate change, including the Inuit petition and the Athabaskan petition. The Inuit petition was the first of its kind i.e. specifically concerning climate change and its impacts on human rights, brought before an international tribunal.²⁴⁴ The Inuit peoples, living in the arctic regions of the USA and Canada, claimed that they faced severe impacts of climate change caused by the acts and omissions of the USA regarding GHG emissions; affecting several of their rights including the rights to life, preservation of health, benefits of culture, property, residence, and movement.²⁴⁵ The petition was dismissed by the IACoMHR on the grounds that it failed to establish the specific acts and omissions of the USA that amounted to the violation of rights under the American Declaration of the Rights and Duties of Men.²⁴⁶

The Inuit petition, though dismissed, was an early and significant development in this regard as it created an instance of litigation based on the links between climate change and human rights. Besides the Inuit petition, the IACoMHR has received the Athabaskan petition (still pending) against Canada in 2013, seeking relief for the violations of human rights of the arctic Athabaskan peoples caused by climate change resulting from emissions of black carbon.²⁴⁷ The IACoMHR also held a hearing requested by civil society organizations in May 2020 on

²⁴² <https://elaw.org/NO_OsloDistCt_4Jan18 >

²⁴³ Id.

²⁴⁴ Bodansky et al., n (32), p. 302.

²⁴⁵ IACoMHR, *Petition submitted by Sheila Watt-Cloutier*, p. 5.

²⁴⁶ Alogna and Clifford, "Climate Change Litigation", p. 14.

²⁴⁷ IACoMHR, *Petition submitted by Athabaskan Arctic Council*.

the impact of climate change and human rights. Among other points, the petitioners presented that the IAComHR should promote petitions relating to climate change and enhance its response measures in this regard.²⁴⁸

ii) The European Court of Human Rights

The ECtHR has a considerably established jurisprudence on the harmful impacts of environmental degradation on human rights.²⁴⁹ The court has not yet given a decision on the impacts of climate change on human rights, however, its jurisprudence in several environmental harm cases may become instrumental in bringing forward claims of human rights infringements.²⁵⁰ The ECtHR's rulings in the environmental harms cases significantly highlight human rights implications in context of environmental pollution and degradation. In *López Ostra*, the applicant had alleged a breach of the prohibition of degrading treatment (Article 3) and the right to respect for private and family life (Article 8) under the ECHR on account of noise and air pollution caused by a treatment plant for liquid and solid waste situated near her home.²⁵¹ The court while finding that there had been a violation of Article 8, observed that severe environmental pollution may result in interference in the enjoyment of rights relating to private and family life.²⁵²

However, the ECtHR held in *Kyrtatos v. Greece*, that violation of the rights cannot be established by exhibiting mere deterioration of the environment, rather it has to established that such condition are having a harmful impact on an individual's protected rights.²⁵³ Regarding the right to life under Article 2 of the ECHR, the ECtHR highlighted in *Budayeva v. Russia*, that state obligation extends to substantively and procedurally safeguarding this right against the life-threatening risks posed by dangerous activities.²⁵⁴

iii) The African Commission on Human and Peoples' Rights

The ACHPR provides the right to a general satisfactory environment under Article 24. The African Commission on Human and Peoples' Rights (AComHPR) has recognized through its resolutions, the impact of climate change on the rights of people, particularly various vulnerable groups including indigenous communities and women.²⁵⁵ The AComHPR, however, does

²⁴⁸ Translated from Diaz et al., "Cambio Climático", p. 80.

²⁴⁹ Bodansky et al., n (32) p. 301, *see also*, Peel and Osofsky n (241), p. 64.

²⁵⁰ Alogna and Clifford n (246), p. 15.

²⁵¹ ECtHR, *López Ostra v. Spain*, para 34.

²⁵² *Ibid.*, para 51, 58.

²⁵³ ECtHR, *Kyrtatos v. Greece*, para 52.

²⁵⁴ ECtHR, *Budayeva v. Russia*, para 129-131.

²⁵⁵ AComHPR, Resolution 417 (LXIV), 2019, para 4, 10.

not have a considerably well-established jurisprudence regarding climate change at regional level.²⁵⁶ The only significant instance is the human rights violation claim based on environmental degradation submitted by The Social and Economic Rights Action Centre against Nigeria, alleging that the Nigerian government and Shell Petroleum carried operations that resulted in contamination and degradation of the environment and led to violation of the rights of the Ogoni people.²⁵⁷ The AComHPR, importantly referred to the typology of state obligations with respect to human rights.²⁵⁸ It also mentioned the interdependence of human rights while elaborating the contents of various contested rights including the rights to health, healthy environment, and food under the ACHPR.²⁵⁹ In light of its assessment, the AComHPR held that in this case the Nigerian government was in violation of several rights including the right to a healthy environment.

3.4.3 International litigation

Recent developments at the international level, primarily at the UN human rights platforms, regarding right-based climate change litigation shows progress, discussed as follows.

i) *Ioane Teitiota v New Zealand*

In the *Ioane Teitiota v New Zealand* communication, submitted to the Human Rights Committee, the author specified that he had migrated to New Zealand from the island of Tarawa in the Republic of Kiribati. The reasons for this migration included rising sea levels due to global warming, scarcity of fresh water, land disputes resulting from shrinkage of inhabitable land and ineffective response by the government to address these issues.²⁶⁰ The author applied for asylum in New Zealand, on account that the above mentioned reasons made Kiribati a violent environment for him and his family, which was denied.²⁶¹ The author claimed in the HRC communication that by denying him asylum and removing him to Kiribati, New Zealand had violated his right to life under Article 6 of the ICCPR.²⁶²

The HRC did not find a violation of the right to life, holding that the author could not establish clear arbitrariness, error or injustice on the part of New Zealand in assessing his claim for asylum.²⁶³ However, the significant observations made by the HRC in its views on this matter

²⁵⁶ Alogna and Clifford n (246), p. 16.

²⁵⁷ AComHPR, “Comm. No 155/96,” para 1.

²⁵⁸ Ibid., para 44-47, 52.

²⁵⁹ Ibid., para 50-52, 65.

²⁶⁰ HRC, “Views adopted on Communication No. 2728/2016,” para 2.1.

²⁶¹ Ibid., para 2.2.

²⁶² Ibid., para 3.

²⁶³ Ibid., para 10.

are worth noting. The HRC recalled that climate change is one of the most serious threats to the enjoyment of the right to life and that environmental degradation could lead to a violation of the right to life.²⁶⁴ Most significantly, the HRC held that the lack of appropriate national and international action for addressing climate change situation in a state could potentially result in violation of the right to life under ICCPR.²⁶⁵ Thus, it would apply the non-refoulement principle on the state where the asylum is sought meaning thereby, that applicants could not be removed to the state from which they migrated.²⁶⁶

ii) *Torres Strait Islanders v. Australia*

In 2019, an instance of what is regarded to be the first climate change-human rights case by inhabitants of low-lying islands, the *Torres Strait Islanders v. Australia* was submitted with the HRC. It was filed by the organization ClientEarth acting on behalf of a group of indigenous Australians of the Torres Strait region.²⁶⁷ The complaint is submitted by eight islanders on the basis of lack of appropriate policies and measures by the government to address climate change.²⁶⁸ The complainants allege that the government's inaction is violating their rights to culture, family and life. The severe impacts of climate change mentioned by the complainants include floods affecting homes, lands and cultural sites, rising sea temperature affecting marine life, and acidification of the ocean.²⁶⁹ While the matter is pending before the HRC, one of the Torres Strait Islanders' key demands i.e. financial aid for the purpose of adaptation has been met by the Australian government.²⁷⁰ The complainants still pursue an increase in emission reduction targets by the government from the current 26-28% to at least 65% below 2005 levels by 2030.²⁷¹

iii) Complaint submitted in the Committee on the Rights of the Child (CRC)

Another case that is the first of its kind, is the complaint submitted in 2019, by 16 young individuals from various nationalities to the CRC under the Convention on the Rights of the Child.²⁷² The complaint was filed on behalf of these individuals by the international law firm Hausfeld LLP and the non-profit environmental organization Earthjustice.²⁷³ The petitioners

²⁶⁴ Ibid., para 9.4, 9.5.

²⁶⁵ Ibid., para 9.11.

²⁶⁶ Id.

²⁶⁷ <<https://www.clientearth.org/human-rights-and-climate-change-world-first-case-to-protect-indigenous-australians/>>

²⁶⁸ Id.

²⁶⁹ Id.

²⁷⁰ <<https://www.clientearth.org/torres-strait-islanders-win-key-ask-after-climate-complaint/>>

²⁷¹ Id.

²⁷² CRC, "Communications no. 104,105,106,107,108/2019."

²⁷³ <<https://www.hausfeld.com/news-press/16-young-people-file-un-human-rights-complaint-on-climate-change>, see also, <https://earthjustice.org/blog/2019-september/greta-thunberg-young-people-petition-UN-human-rights-climate-change>> (accessed on 07/08/2020)

refer to the impacts of climate change including, increased temperatures, droughts, storms, and unhealthy air quality; affecting their life, health, livelihood, homes and sense of safety.²⁷⁴

The authors claim that the respondent States i.e. Argentina, Brazil, France, Germany and Turkey have failed to safeguard human rights considering the foreseeable impacts of climate change marked by their lack of highest possible ambition to reduce emission levels.²⁷⁵ The respondents are also alleged to have delayed the reduction in carbon emissions which is required to protect the lives and welfare of children nationally and internationally.²⁷⁶

The currently pending petition is regarded to be an important development with respect to future possibilities and progress, as it engages the provisions of the Convention on the Rights of the Child, the most widely-ratified convention on human rights, containing an explicit reference to the environment.²⁷⁷

3.5 Prospect of human rights mechanisms

The impact of climate change on human rights in general and the right to life in particular has been discussed in the above sections, which clearly shows that climate change poses grave risks to the enjoyment of human rights. The recent years have witnessed the integration of climate change and human rights on various national and international forums. Both nationally and internationally, there is much ground to cover to achieve reciprocity between the implications and integration of the climate change and human rights. Analyzing the prospect, this section will discuss the limitations of human rights approach towards climate change and the growing necessity of why human rights mechanisms should be extended effectively to climate change.

3.5.1 Potential challenges

The application of human rights mechanisms to the impacts of climate change is not without challenges. Although, the link between climate change and human rights is widely recognized by human rights instruments and bodies, key limitations persist in giving full effect to a human rights approach towards climate change.

According to the International Bar Association (IBA), climate change had not been recognized as a global concern at the time of the evolution of contemporary human rights law, thus,

²⁷⁴ Id.

²⁷⁵ CRC, “Communications,” n (272).

²⁷⁶ Id.

²⁷⁷ Alogna and Clifford n (246), pp. 18-19.

the application of human rights law to climate change impacts is not easy.²⁷⁸ The lack of a free standing and formally recognized right of a safe, clean, healthy and sustainable environment also makes it difficult to establish liability and accountability.²⁷⁹ While there are instances of its recognition by regional human rights instruments e.g. ACHPR, various national constitutions, and other sources, there still exists a gap between theory and practice when it comes to the realization of this right.²⁸⁰ It is also difficult to extend the provisions of the core human rights treaties to assess liability arising from “transboundary” human-rights violations caused by the climate change situation in a particular state.²⁸¹ The multilateral treaties in some instances call for extraterritorial obligations in terms of international cooperation, however, the scope and applicability of such obligations involve political and legal controversies.²⁸²

The previous section analyzed climate change litigation based on human rights approach. This litigation process also faces several procedural limitations leading to either inadmissibility or dismissal of cases as mentioned in the given examples. Some of these limitations as highlighted by the OHCHR and elaborated by several scholars include the following.

i) Causation

It is hard to specifically trace the causation of the impacts of climate change on human rights so as to establish that the state’s contribution in GHG emissions has resulted in a particular direct or indirect effect on human rights.²⁸³ This means that state’s lapse in negative and positive obligations corresponding to respecting and protecting human rights is not easy to establish with respect to climate change implications. For instance, the ECtHR has held the stance that a claim of violation of human rights would require the proof of harm to an individual’s protected right.²⁸⁴

ii) Attribution

It is challenging to attribute a particular climate change-impact on human rights to global warming considering that it is not the sole contributing factor in the occurrence of climatic events having such impacts.²⁸⁵ The difficulty arises in determining the extent to which such specific event may be attributed to global warming and the consequent climate change. This

²⁷⁸ IBA, *Achieving Justice and Human Rights*, p. 68.

²⁷⁹ *Id.*

²⁸⁰ UNGA, A/73/188, para 28, 29, 35.

²⁸¹ IBA, n (278), p. 68.

²⁸² *Id.*

²⁸³ OHCHR, *Report*, n (128), para 70.

²⁸⁴ Section 3.4.2.

²⁸⁵ OHCHR, *Report*, n (128), para 70.

in turn poses a problem in invoking state responsibility with respect to its human rights obligations.

iii) Addressing future projections

The future trajectories of climate change and its impact on human rights suggest even serious risks and harms to the enjoyment of human rights as discussed earlier. The OHCHR observes that human rights violation claims are usually raised after the violation has taken place, thus human rights approach may not effectively address the future harmful impacts of climate change.²⁸⁶ For instance, the violation of the right to life estimated to occur in future due to harmful impacts of climate change will be difficult to particularly attribute in the present and thus, hard to claim prior to the occurrence.²⁸⁷

Additionally, in some instances, the domestic courts while recognizing the link between climate change and human rights refrain from deciding the case on the ground that the matter comes within the ambit of the legislature and any decision of the court may amount to an interference, e.g. *Juliana v. USA*.²⁸⁸ The role of the courts in law making is limited e.g. courts may set precedents for future cases but in the absences of a substantive right, it is difficult for the courts to determine state obligations with respect to a particular aspect of that right. At the international level, courts and tribunals may also face the constraint of jurisdiction which is usually based on the consent of state parties.²⁸⁹ For instance, in the Inuit petition, the USA had not consented to the jurisdiction of the IACoMHR.²⁹⁰ Thus, apart from setting a precedent regarding the impact of climate change on human rights, a decision in favor of the Inuit would not have had any legal effect on the USA.

John Knox, observes that even though climate change has a serious impact on the enjoyment of human rights protected under international treaties, not every case may amount to a violation of a legal duty.²⁹¹ State obligations under these treaties, of addressing threats to human rights, are qualified and does not cover every existing threat. Moreover, these treaties specify very few obligations for private actors making it difficult to direct accountability to private actors with respect to climate change.²⁹²

²⁸⁶ Id.

²⁸⁷ Averill, "Linking Climate Change Litigation and Human Rights," p. 142.

²⁸⁸ See Section 3.4.1.

²⁸⁹ Alogna and Clifford n (246), p.13.

²⁹⁰ Averill, n (287), p. 145, *see also* Section 3.4.2.

²⁹¹ Knox, "Climate Change and Human Rights Law," p. 165.

²⁹² Id.

3.5.2 The need and ways to expand human rights mechanisms to climate change issues

Despite the challenges that human rights mechanisms face when applied to climate change, Knox highlights the possible ways and the need to extend states' human rights obligations to climate change. Referring to a state's duty to respect and protect human rights, Knox observes that addressing climate change would require state obligations at national level to include mitigation and adaptation.²⁹³ While these efforts may be taken at national level their effect, particularly that of mitigation's is "transnational". For instance, Maldives' contribution to global GHG emissions is 1%, a cut down on which is unlikely to make a huge difference nationally or internationally.²⁹⁴ However, a cut down on emissions of major contributors such as the US and China may yield significant reduction in global emissions and benefit other states as well.²⁹⁵ Knox also emphasizes on developing international assistance for reduction of GHG emission in pursuance of the due diligence required by states to protect rights from interference by third parties, including other states.²⁹⁶

The IBA in its report highlights that the link between climate change and human rights calls for a much more coordinated effort in terms of law-making and adjudication to address the issue. It refers to the Model Law of the UN Commission on International Trade Law, that was later adopted by the UN General Assembly in 1985 and has since influenced domestic legislation on wide scale.²⁹⁷ Relying on this instance, the IBA tasked its working Group on Climate Change to formulate a Model Statute on Legal remedies for Climate Change.²⁹⁸ According to the IBA, a Model Statute would help identify the relevant legal rights and remedies with respect to climate change and develop a consistent standard of human rights approach at international level.

The IBA went even further and drew attention to the proposals put forward by various scholars and commentators regarding the establishment of an ad hoc arbitral body i.e. International Court of Environment (ICE) Tribunal.²⁹⁹ It deemed an ICE Tribunal to further climate change justice. The proposed tribunal should streamline the application of the existing laws through its decision-making and procedures, provide standing to state and private parties, give effec-

²⁹³ Knox, n (291), p. 197.

²⁹⁴ Id.

²⁹⁵ Id.

²⁹⁶ Knox, n (291), p. 198.

²⁹⁷ IBA, n (278), p. 127.

²⁹⁸ Id.

²⁹⁹ Ibid., p. 145.

tive remedies, and bind the parties by its decisions.³⁰⁰ The IBA acknowledged that considering the political positions and interests of the states, achieving this feat may take a long time and even more severe climate change impacts.³⁰¹

Knox, in his report to the UN General Assembly, emphasized on states' human rights obligation of international cooperation to address climate change as an environmental challenge.³⁰² The report highlighted the grave risks to the human rights of the most vulnerable groups of people including indigenous peoples, women, children, people living in poverty, people with disability, and marginalized minorities.³⁰³ It stressed upon the need to specially extend states' human rights obligations to respect, protect and fulfil the rights of these vulnerable groups.³⁰⁴ It also urged the states to form a consistent practice in this regard complying with good faith firstly, by determining their obligations of international cooperation and then, by fulfilling those obligations without lapses.³⁰⁵

More importantly, the report called upon the UN to formally recognize the human right to a healthy environment pointing out to the fact that the UDHR, ICCPR and ICESCR do not contain an explicit right of this nature and that it has become an urgent need under the present circumstances.³⁰⁶

The *Safe Climate* report of the UN Special Rapporteur, David Boyd, reinforces these suggestions and points to the urgency of the matter by referring to the IPCC's report *Global Warming of 1.5°C*, which suggests that limiting global warming to 1.5°C would require "unprecedented" efforts.³⁰⁷ Boyd's report mentions the extensive use of fossil fuels and the consequent rise in GHG emissions i.e. 60% since 1990, highlighting that large investor corporations due to their vested interests in status quo use their influence to resist actions required to address climate change.³⁰⁸ It observes that despite the Paris Agreement, energy-related CO₂ emissions have rapidly increased from 2011 to 2018 and even if the current state parties NDCs were fulfilled the global temperature rise would still reach 3°C, amounting to a violation of the Paris Agreement.³⁰⁹

³⁰⁰ Ibid., p. 146.

³⁰¹ Id.

³⁰² UNGA, n (280), para 19.

³⁰³ Ibid., para 23, 24.

³⁰⁴ Ibid., para 22.

³⁰⁵ Ibid., para 20, 21.

³⁰⁶ Ibid., para 37.

³⁰⁷ UNGA, *Safe Climate*, n (4), para 4.

³⁰⁸ Ibid., para 16.

³⁰⁹ Ibid., para 17, 19.

The present and future projections of climate change and its impacts on human rights call for a rights-based approach that could form and speed up an effective effort to ensure a healthy environment.³¹⁰ A rights-based approach is also in line with states' international human rights obligations and would include provision of information regarding causes and consequences of climate change, protection of the more vulnerable groups of people, and access to effective justice and remedy.³¹¹ The report significantly concluded that failure to observe international climate change commitments amounted to a violation of human rights obligations, calling upon states to form and adopt rights-based policies in determining their climate change targets.³¹² Although climate change regime has its own compliance mechanisms as discussed in section 3.3 and though they may evaluate and decide upon the states' climate change obligations, they do not address the drastic impacts of climate change on human rights. Thus, a human rights approach is required to address climate change implications by extending the available human rights mechanisms, and possibly developing new rules and obligations.

³¹⁰ Ibid., para 26, 27.

³¹¹ Ibid., para 62, 64.

³¹² Ibid., para 74, 75.

4 Conclusion

The analysis and assessments in this thesis sought to apply the relevant findings in answering the research question of the thesis:

What is the impact of climate change on the right to life and how can human rights enforcement mechanisms contribute to climate change action?

The findings of discussion in this thesis exhibit that the right to life is affected by climate change. The impact is both direct resulting in loss of life, and indirect through the impact on the right to food and water which are necessary components of the right to life.³¹³ The negative impacts of climate change on the right to life have been affirmed by various international human rights bodies.³¹⁴

The existing climate change regime is characterized by accommodating state discretion in determining their respective climate change commitments. Accordingly, the present commitments of states, even if fully realized, are not up to the level required to keep the mean surface temperature limited below 1.5°C.³¹⁵ Failure to do so would put the world and with it, the right to life at risk of facing even severe consequences considering the present trajectories. The analysis of states' human rights obligations reveals that states are required to ensure the realization of rights by refraining from interference themselves, by protecting the rights from interference of third parties and by facilitating the enjoyment of these rights.³¹⁶ Thus, the enjoyment of the right to life requires that these obligations should be prioritized in states' action towards climate change. This means that states need to set stronger and effective GHG reduction targets for avoiding the negative impacts of climate change. It also requires states to ensure stringent compliance and adherence to such targets.

Despite the intersection of climate change and human rights including the right to life, applying human rights mechanisms to climate change issues faces many challenges, both substantive and procedural.³¹⁷ Climate change regime and compliance mechanisms do not provide an effective platform to address human rights violations caused by impacts of climate change. This is the main reason of a rising trend of invoking states' responsibility for climate change

³¹³ HRC, *General Comment 36*, n (111), para 26.

³¹⁴ HRC, *General Comment 36*, n (111), para 26, *see also Stockholm Declaration*, n (122), Proclamation, *see also OHCHR, Report*, n (128), pp. 8-13

³¹⁵ IPCC, *Global Warming of 1.5°C*, n (10), p. 6, 11.

³¹⁶ ECOSOC, *Report*, n (157).

³¹⁷ OHCHR, *Report*, n (128), para 70.

impacts with respect to their human rights obligations.³¹⁸ Particularly, rights-based climate change litigation has seen significant development. There is a growing number of such cases at regional and international levels but there still is much to accomplish in terms of removing barriers and making the process more effective. The rights-based approach towards climate change should not be limited to litigation alone. The primary task of adjudicative platforms is to assess a claim by applying the existing laws, not to make laws. States, therefore, need to step up to their human rights obligations guided by due diligence, to make effective substantive and procedural rules for addressing this matter. The extraterritorial obligation of states particularly, that of international cooperation's under the UN charter and the human rights treaties also needs to be extended to tackle climate change.

From the evaluations of this thesis, it is evident that climate change has negative impacts on the enjoyment of the right to life. An adequate response necessitates approaching such impacts from a human rights perspective not only to determine state liability but also to supplement state action towards climate change.³¹⁹ Yet, there is a lack of an internationally coordinated and reciprocal response to address the impacts of climate change from a human rights perspective. A positive progress in this regard would be the formal recognition of the right to a healthy environment, by the UN, establishing clear state obligations and accountability criteria. The very objective of protecting inherent human dignity under the international human rights laws would require similar standards for evaluating the impacts of climate change as for other acts or omissions of states causing human rights violations. Evidently, unprecedented transitions are required to address the present and future risks of climate change.³²⁰ Effective extension of human rights mechanisms to climate change action is undeniably one of the important aspects calling for an unprecedented transition.

³¹⁸ Section 3.4.

³¹⁹ *Leghari v. Federation, Urgenda v The Netherlands*, Section 3.4.1.

³²⁰ IPCC, *Global Warming of 1.5°C*, n (10) p. 17, 20, Section 3.5.2.

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