The Interlink between Environmental Justice and Climate Change under National, International, and Islamic Law

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Abstract

The notion of environmental justice suggests that every community enjoys the right to equitable treatment, equal opportunity for involvement, and equal safeguards in the development, adoption, and execution of environmental rules and laws. Islamic law also has the idea of environmental justice ingrained into it. However, presentday everyone's physical and mental health is at risk from climate change, while economically and socially disadvantaged population is at more risk than others. The predicted effects of global warming on the well-being and health of people have begun to appear in some cases. The Constitutional law in Pakistan does not explicitly recognize one's right to the environment. However, in Supreme Court decisions, the basic right to life guaranteed by Article 9 of the Constitution of Pakistan, 1973 has been expanded to include the pursuit of environmental justice. In addition, the Pakistan Climate Change Act, 2017 was published for the first time in 2017. This article explores aspects concerning environmental justice, and offers remedies from an Islamic viewpoint. It concludes that the government and the populace should take proactive measures to mitigate climate change by using the International Bill of Rights and the Islamic Law by inculcating the Prophet's (PBUH) Sīrah.

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1. Introduction

The ongoing shift in weather patterns as well as temperatures is referred to as climate change. These modifications might sometimes result from biological activities, like fluctuations in the solar cycle. However, since the middle of the nineteenth century, human activity particularly through the combustion of fossil fuels like coal, oil, and gas has been the primary source of climate change. 1 Climate justice has now been conceived in large part as a result of the environmental justice movement, which is a major operational discourse in the field of environmental politics.² Everyone's mental and physical health, as well as their access to nutritious nourishment, clean water, and a place to live, is at risk due to climate change, but those who are economically and socially disadvantaged are most at risk.³ These individuals are more likely to confront other challenges like poor health, nutritional deficiencies, and language barriers because they frequently lack the means to plan for it or recover completely from climate-related hardships and because they inordinately live and work in regions that are more vulnerable to specific climate-related disasters.⁴

The basic right of every person to a healthy and clean environment lies at the heart of environmental justice. On a local, national, and international level, this right is frequently denied to those who are most at risk and have the least resources. The poorest members of society are

¹ "What is Climate Change?," *United Nations*, accessed March 17, 2022, https://www.un.org/en/climatechange/what-is-climate-change.

² David Schlosberg and Lisette B. Collins, "From Environmental to Climate Justice: Climate Change and the Discourse of Environmental Justice," *WIREs Climate Change* 5, no. 3 (2014): 359, doi:10.1002/wcc.275.

³ Renee Cho, "Why Climate Change Is an Environmental Justice Issue-Climate Week NYC," *State of the Planet*, September 22, 2020, https://news.climate.columbia.edu/2020/09/22/climate-change-environmental-justice/.

⁴ "Environmental Justice and Climate Change - SciLine," *SciLine*, January 27, 2021, https://www.sciline.org/climate/climate-change/environmental-justice/.

frequently disproportionately impacted, whether it is due to exposure to air pollution or floods, the placement of hazardous facilities, or just not having access to the environment. According to Islamic doctrines, all living things, not just humans, have a right to the environment's basic elements of soil, water, fire, wood, and light. Islam has placed a great emphasis on the protection of the ecosystem and its contents are necessary. Hence in light of Islamic teachings and global laws, this study draws attention to environmental justice and its effects, as they deal with climate change within the context of Pakistan.

2. The Role of International Law in Environmental Protection

Over the past few decades, despite intensified diplomatic efforts the government has united in their commitments to limit climate change. However, if this warming continues unchecked, the world may soon experience catastrophic repercussions of changing climate, including, elevated sea levels, unparalleled droughts, floods, and widespread animal extinctions. States have taken several actions to reduce the effects of climate change through numerous conventions, protocols, and accords, keeping in consideration the alarmingly fast prevalence of climate change and the growing amount of carbon di oxide (CO₂) in the atmosphere.⁶ The international instruments that are essential for reducing the impacts of climate change are discussed below:

2.1. The United Nations Framework Convention on Climate Change

The UNFCCC, 1922 is the first multilateral forum for international collaboration between national governments on the issue of greenhouse

⁵ Labeeb Bsoul et al., "Islam's Perspective on Environmental Sustainability: A Conceptual Analysis," *Social Sciences* 11, no. 6 (June 2022): 228, doi:10.3390/socsci11060228.

⁶ "Global Climate Agreements: Successes and Failures | Council on Foreign Relations," *Council on Foreign Relations*, accessed September 14, 2023, https://www.cfr.org/backgrounder/paris-global-climate-change-agreements.

gases (GHG) induced climate change. The UNFCCC consists of 197 parties as of January 1, 2020, including the United States which have ratified, acknowledged, or acceded to the international agreements. The goal of the UNFCCC is to "stabilize the level of GHG in the environment at the amount that will hinder harmful human intervention with the earth's climate, in a period that will allow biodiversity to properly adjust and enable SDG" and binding the parties to act "based on equity and adhering to their respective talents and common but distinct tasks". The UNFCCC also aims that the developed States should take the initiative in putting an end to climate change.⁷

According to the UNFCCC, States that rely more heavily on natural resources for their daily needs are more susceptible to the dire consequences of climate change. Additionally, these communities frequently have the least ability to respond to natural disasters like hurricanes, landslides, floods, and droughts. The UNFCCC also highlights that the preponderance of women in this category and their unequal representation and participation in decision-making, which exacerbates disparities frequently precludes women from fully contributing to the policy creation and execution related to climate.⁸

2.2 Kyoto Protocol

The worldwide level of GHG emissions kept increasing even after the UNFCCC was adopted in 1992. It became increasingly clear that the only way to persuade corporate communities and people to take action on climate change would be for industrialized States to make firm and legally binding commitments to decrease emissions. The UNFCCCC members started

Jane A. Leggett, "The United Nation Framework Convention on Climate Change, the Kyoto Protocol and the Paris Agreement: A Summary," Congressional Research Service (USA, 2020), https://crsreports.congress.gov/product/pdf/R/R46204.

⁸ Justice Ayesha A. Malik, *The Handbook on Environmental Law* (Pakistan: Punjab Judicial Academy, 2016), 92.

deliberating on a protocol, or an international agreement related to the existing treaty, as a result, the Kyoto Protocol was ratified in 1977.⁹

Furthermore, the developed nations of the world were given enforceable goals for minimizing their GHG emissions to be achieved during the commitment period 2008-2012 by the Kyoto Protocol. This agreement specified three methods for achieving the emission-reduction objectives, with the choice to apply any of them. The Clean Development Mechanism (CDM), one of the Protocol's essential instruments for emissions reductions, requires industrialized countries to build projects to cut GHG emissions to satisfy their pledges.¹⁰

A large section of the global carbon trading scheme will be disrupted if the Kyoto Protocol is not extended, hence the UNFCCC parties, NGOs, and global warming campaigners have been working tirelessly to prolong it. As a result, member States of UNFCCCC and the Protocol decided to begin a second period of 8 years, 2013-2020, with the main goal of lowering GHG emissions by at least 18 per cent beneath the levels of 1990, at the UN Climate Change Conference in Doha, Qatar. ¹¹

2.3. Paris Agreement

At the 21st UNFCCC (COP21) in Paris on December 12, 2015, parties to the UNFCC reached a new global agreement after nearly 17 years of impasse. In the context of SDG and the step to end poverty, the treaty seeks to improve the international response to the challenge of climate change.¹² Parties aim to promote adaptation to climate impacts and build resilience, keep global temperature rise beneath 2°C, make efforts towards a 1.5°C

⁹ Vikash Ramiah and Greg N. Gregoriou, *Handbook on Environmental and Sustainable Finance* (Dubai: Elsevier Inc Research Gate 2016), 479.

¹⁰ Ibid.

¹¹ Ibid.

¹²Marie-Claire Cordonier Segger, "Advancing the Paris Agreement on Climate Change for Sustainable Development," *Cambridge Journal of International and Comparative Law* 5, no. 2 (2016): 202.

limit, and utilize financial flows for development that are low in GHG emissions and climate-resilient.¹³

Moreover, the Agreement seeks to enhance international efforts to the dire consequences of climate change. The international regime interactively evolved over decades as nations struggled to build an adequate international framework for cooperation while also attempting to domestic climate concerns.¹⁴ In essence, this agreement defines an essential triangle of commitments:

- For climate mitigation as well as adaptation, nations must implement domestically decided, quantified, and progressive measures.
- 2. These initiatives are prompted by modifications in finance flows and associated transfer of technology, improvement of capacity, education, and various other cooperative efforts.
- 3. Public engagement, peer review, routine stock takes, accessibility, and reporting are some of the methods used to accomplish enforcement.¹⁵

The Paris Agreement also aims to improve how the UNFCCC is put into practice, which stipulates that the ultimate goal is to stabilize the concentration of GHG in the environment at an extent that would avoid hazardous human interference with the environment within a timeframe that would allow the environment to naturally shift, guarantee that the production of food is not compromised, and to allow economic growth to continue in an orderly and secure way. The UNFCCC's performance in carrying out its task is also improved by the Paris Agreement.¹⁶

¹³ "Paris Agreement," (2015), art 2.

¹⁴ Segger, "Advancing the Paris Agreement," 202.

¹⁵ Ibid

¹⁶ Ibid.

2.4 The Vienna Convention for the Protection of Ozone Layer

To preserve the environment for both current and future generations, convention emphasizes the necessity to conserve the O₃ layer. The Convention was ratified on March 22, 1985, and it became effective in 1988.¹⁷ Following scientific concerns that the ozone layer's depletion was a threat to both human health and the environment; the Convention established the fundamentals for ozone layer depletion. The primary aim of the Convention was to foster global collaboration.¹⁸

However, according to some scientists, the causes of the depletion are that ozone absorbs solar energy and ozone is a GHG. As a result, there is a close connection between ozone layer depletion and climate change leading to skin cancer, eye damage, and local and systemic immune suppression, and eye damage are the dangers linked with ozone layer depletion. In addition to the climate change problem, the environmental problems linked to ozone layer depletion include changes in land productivity and effects on plants and animals. So the State parties are required to take the necessary precautions to safeguard human health and the environment against harmful effects caused by human actions that deplete the ozone layer. For effective implementation member States are required to adopt legislative and administrative measures based on pertinent

¹⁷ Malik, The Handbook on Environmental Law, 92.

¹⁸ "Vienna Convention on the Protection of the Ozone Layer and the Montreal Protocol on Substances That Deplete the Ozone Layer," *Sustainable Development Knowledge Platform*, accessed September 14, 2023, https://sustainabledevelopment.un.org/index.php?page=view&type=30022&nr=2716&m enu=3170.

¹⁹ Aliaksandr Krasouski and Siarhei Zenchanka, "Ozone Layer Depletion, Climate Change, Risks and Adaptation," in *Theory and Practice of Climate Adaptation*, ed. Fátima Alves, Walter Leal Filho, and Ulisses Azeiteiro, Climate Change Management (Cham: Springer International Publishing, 2018), 137–50, doi:10.1007/978-3-319-72874-2_8.

scientific and technical considerations and collaborate on systematic observation, research, and information exchange.²⁰

2.5 Montreal Protocol

The manufacturing and consumption of 100 synthetic chemicals that are designated as Ozone Depleting Substances (ODS) are governed by the international environmental agreement known as the Montreal Protocol. The production, utilization, and emissions of ODS have been successfully decreased on a global scale. ODS and chlorofluorocarbons (hence referred to as CFCs) have a part in the radiative forcing of climate change in addition to being GHGs. The principal reasons behind the ozone layer's observed thinning are now universally acknowledged to be CFCs and other ODSs. As a result, the Montreal Protocol offered a framework for reducing and eventually eliminating ODS production and consumption worldwide. The production, use, emission, and atmospheric concentrations of CFCs, methyl chloroform, and numerous other ODSs have significantly decreased as a result of the Montreal Protocol and there is growing evidence that stratospheric ozone is recovering.²¹

Additionally, the parties to this agreement must carry out specific obligations related to the elimination of different ODS groups, laws governing trade, each year's data reporting, and national licensing structure for ODS import and export regulation, among other things. Both developed and developing States have obligations that are equal but distinct, but most importantly, both groups of countries have actual, legally binding commitments that are time-bound and specific. All of these initiatives appear to be crucial in reducing the effects of climate change.²²

²⁰ Edith Brown Weiss, "The Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer" (United Nations, 2009), https://legal.un.org/avl/pdf/ha/vcpol/vcpol_e.pdf.

²¹ Guus JM Velders et al., "The Importance of the Montreal Protocol in Protecting Climate," *Proceedings of the National Academy of Sciences* 104, no. 12 (2007): 4814–19.

²² Ibid.

2.6 6th Assessment Report of the UN Inter-governmental Panel on Climate Change (IPCC)

An overview of the present state of knowledge about climate change has been delivered in the IPCC Sixth Assessment Report, which was published in March 2023 and highlights new findings from the previously published assessment report. The aforementioned report relies on the findings of the three working groups of the IPCC.²³

Following are the findings of the IPCC report:

- A. There is no doubt that human action has contributed to the warming of the atmosphere, seas, and land. Extensive and sudden changes have occurred in the biosphere, cryosphere, atmosphere, and ocean. Therefore, the paper stresses that human behavior can still have a significant impact on how the climate will develop in the future, particularly by reducing emissions to net zero.
- B. Human-induced climate change has already had an influence on weather and climatic extremes on every continent. Numerous changes have been noticed since the fifth assessment report.
- C. Several human and natural systems will face more serious consequences if temporary climate change exceeds 1.5°C and the same will be disastrous to more than 3 billion people who live in places highly vulnerable to climate change.²⁴
- D. Major changes are needed to reduce GHG emissions across the whole energy sector. These changes include a significant decrease in the total use of fossil fuels, the deployment of low-emission energy sources, a change to alternate energy carriers, and increased energy efficiency and conservation.

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²³ Sophie Boehm and Clea Schumer, "Top Findings from the IPCC Climate Change Report 2023," *World Resources Institute*, March 20, 2023, https://www.wri.org/insights/2023-ipcc-ar6-synthesis-report-climate-change-findings.

²⁴ Ibid.

- E. According to reports effects of climate change, in a future where the temperature exceeds 1.5°C, can soon transition from an environmental issue to an economic hazard. For instance, if a protracted drought leads to a lost harvest, supply chains will be less available, and prices will increase. Climate change's effects can also heighten risks, erode society's capacity to withstand pandemics or conflicts, or even trigger climate tipping points like the demise of coral reefs or the melting of ice sheets covering green land.
- F. Resilience can be effectively increased through adaptation strategies, however scaling up solutions requires greater funding. It is estimated by IPCC that it would cost about \$400 Billion to make changes to agriculture, forestry, and other land uses essential to limit GHG emissions.25

2.7 Ethical Principles of Climate Change

The UNESCO Proclamation of Ethical Guidelines in Connection to Climate Change emphasizes UNESCO Member States' grave concern that climate change may cause ethically unacceptable harm and injustice. This Declaration lays forth a brief list of universally agreed-upon ethical standards that should drive decision-making and strategy-making at all levels, as well as assist people in combating climate change. This UNESCO Declaration's ethical counsel is intended to supplement governments' existing multilateral initiatives, such as negotiated obligations under the UNFCCC and scientific assessments established by the IPCC.²⁶

The new Declaration emphasizes that harm reduction is a key ethical principle in climate change. To comply with it, States shall work to anticipate, avoid, or lessen damage from global warming, as well as the

²⁶ "Declaration of Ethical Principles about Climate Change," UNESCO, accessed 11, 2023, https://en.unesco.org/themes/ethics-science-and-technology/ethicalprinciples.

environmental mitigation and adaptation measures and actions, wherever it may emerge. One of the other ethical standards is only concerned with scientific knowledge and honesty in decision-making. According to it, decisions ought to be founded on and guided by the greatest knowledge available from the scientific and social sciences. It goes on to say that states should make efforts to defend and sustain science's independence and the validity of the scientific process. Cooperation, sustainability, justice and fairness, and a cautious approach are among the other ethical concepts listed. This proclamation draws on UNESCO's past work on ethical standards in climate change.²⁷

3. Human Rights and Climate Change

A major worldwide concern is climate change which needs a solution, as the UN Human Rights Council underscored in its Resolution 26/27. The Council requested international cooperation to accomplish the goals established by UNFCCC.²⁸ Human rights are adversely impacted by climate change. As per the IPCC and the Council of Human Rights, specifically in their resolution 41/21, climate change affects, among many other things, the legal guarantees for life, awareness, development, wellness, food, water, sanitation, adequate housing, and a variety of cultural rights.²⁹ It might be difficult to put them all here, though.

3.1 Right to Life

The Universal Declaration of Human Rights (hereafter referred to as UDHR) declares that everyone has the right to life, freedom, and personal security. As per provisions of the International Covenant on Civil and

²⁷ Ibid.

²⁸ Ron Dudai, Climate Change and Human Rights Practice: Observations on and Around the Report of the Office of the High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights," *Journal of Human Rights Practice* 1, no. 2 (2009): 294, http://dx.doi.org/10.1093/jhuman/hup009.

²⁹ Ibid.

Political Rights (hereafter referred to as the ICCPR), every individual has the inherent right to life. This implies that the States should at the very least take effective precautions against foreseen and avoidable loss of life.³⁰

In light of worldwide climate change, severe weather conditions could pose the most glaring and dramatic threat to the exercise of one's right to life, but these threats are by no means the only ones. Climate change deaths are a result of many variables, including drought, rising temperatures, the expansion of infectious diseases, and many more.³¹

3.2 Right to Self-Determination

Article 1 of the UN Charter mandates adherence to the fundamental right of individuals to self-determination. Per Common Article 1 of the international agreements, ICCPR, and ICESCR, everyone is entitled to the above-said right. This right is protected under Article 3 of the UNDRIP. This entails pursuing their political, social, and cultural development as well as exercising their right to personal freedom. Important elements of one's right to self-determination include the obligation of States to support its realization, particularly for those living beyond their borders, and the right of individuals to not have their means of livelihood taken from them.³²

The IPCC cites some issues related to climate change on tiny islands, including rising sea levels, tropical and extratropical cyclones, increasing air and sea surface temperature, altering patterns of rainfall, and diminished ecosystem services. This has an impact on the right to self-determination since citizens of small island states and indigenous communities struggle to uphold their freedom to dwell on their ancestral

³⁰ "Frequently Asked Questions on Human Rights and Climate Change" (New York & Geneva: United Nations Human Rights Office for the High Commissioner, 2021), https://resourcecentre.savethechildren.net/document/frequently-asked-questions-human-rights-and-climate-change/.

³¹Dudai, "Climate Change and Human Rights Practice," 295.

³²"Frequently Asked Questions on Human Rights and Climate Change." 5.

territories and autonomously seek their own economic, social, and cultural growth.³³

3.3 Right to Development

The UN Charter's Article 55 mandates that States shall support conditions that foster social and economic growth. According to ICCPR and ICESCR, all peoples have the right to "freely choose their political framework and voluntarily pursue their economic, social, and cultural development." The Proclamation on the inalienable right to development offers a comprehensive framework for pursuing the three UN Charter tenets peace, security, and human rights. It outlines that a complete person and individuals are required to participate in economic, cultural, social, and political growth to contribute to and benefit from the full realization of all fundamental freedoms and human rights.³⁴ Hence, states should, in particular, act both individually and together to ensure that everyone can benefit from economic, social, cultural, and political progress. People's ability to exercise their right to development is imperiled by climate change.

3.4 Right to Health

The ICESCR and the UDHR both state that everyone has the right to health. According to the Covenant, state parties are required to take action to fully realize the right, including all efforts required to improve industrial and environmental hygiene in all of its forms. The Office of the High Commissioner for Human Rights (OHCHR) examined the connection between climate change and everyone's fundamental right to the best possible degree of bodily and mental health, and concluded that there were significant implications for the right to health. Research by the UNFCCC secretariat found that it affects health in three distinct ways: directly through

³³ Ibid.

³⁴ Ibid., 6.

climatic elements such as heat waves and thunderstorms, indirectly via systems of nature like illness vectors, and through channels regulated by human systems, such as undernutrition. Future health indicators like fresh air, healthy drinking water, enough food, and adequate housing are already being impacted by climate change.³⁵

3.5 Right to Food

This right is recognized in both the ICESCR and the UDHR. As per Article 11 of the ICESCR, every person has a fundamental right to be free from hunger, and States are urged to take necessary national and international action "to guarantee a balanced share of world food supply around need." The basic right to nutrition must be recognized, protected, promoted, and upheld by States just like all other human rights. The States' dedication to using all available resources will enable the right to nourishment and all other rights specified in the ICESCR to be gradually realized.³⁶

According to the IPCC, climate change imperils food security, endangering the realization of one's right to food. The World Bank estimates that a 2°C rise in the average worldwide temperature may cause between one hundred million and four hundred million more people to be in danger of starving as well as almost 3 million additional deaths due to malnutrition each year.³⁷

3.6 Rights to Water and Sanitation

The Committee on IESCR defined the right to sufficient, secure, pleasant, readily available, and reasonably affordable water for household and personal consumption in its general statement. State parties must take specific actions to guarantee that all people have access to water. In its

³⁵ Ibid., 8.

³⁶ Ibid., 10.

³⁷ Ibid

resolution 64/292, the General Assembly recognized that access to sanitary facilities and clean water is necessary for the realization of all other rights.³⁸

Since climate change reduces the predictability of water supply and increases the likelihood of floods, which have the potential to destroy water points, sanitize facilities, and pollute water supplies, the effects of global warming are frequently felt via water. Climate change already influences the quality, quantity, and accessibility of water for basic human requirements, putting the enjoyment of the right to water and sanitation in danger. According to the World Bank, if global temperatures rise by 2°C, one to two billion people may no longer have access to enough water.³⁹

4. Natural Catastrophes Demanding Climate Change Response

4.1 Cyclone Idai and Kenneth

The central part of Mozambique, which is bordered by the area of the southwest Indian Ocean where powerful cyclones are located, has seen the most severe climate dangers. When it made landfall in March 2019, Cyclone Idai was the most powerful tropical cyclone ever seen in the southern hemisphere. Its strong winds contributed to massive floods and a high number of casualties. In addition to killing over 1,000 people in Zimbabwe, Malawi, and Mozambique, Cyclone Idai uprooted millions of people from their homes and left them without access to food or other necessities. Terrible landslides destroyed homes, as well as land, crops, and infrastructure. Six weeks later, tropical storm Kenneth made landfall in parts of Northern Mozambique where none had been seen since the satellite era.⁴⁰

³⁸ Ibid., 12.

³⁹Ibid.

⁴⁰Alberto Charrua, Rajchandar Padmanaban, Pedro Cabra, Salomao Banderia and Maria M. Romeiras, "Impacts of the Tropical Cyclone Idai in Mozambique: A multitemporal Landsat Satellite Imaginary Analysis," *Remote Sensing* 13, no 2 (2021): 389.

4.2 Australian Wildfires

More than 17 million acres of land were burned by bushfires that raced over Australia between July 2019 and February 2020. The Australian Capital Territory, New South Wales, Queensland, South Australia, Victoria, and Western Australian inhabitants were the most severely impacted by the fire in November as its size quickly increased. Long-lasting drought, sweltering heat, and powerful winds fed them. Smoke caused problems for more than 50% of Australia's adult population, killed or forced to flee billions of animals, and claimed the lives of 33 humans.⁴¹

An additional 64,579 persons were compelled to leave their houses in reaction to the flames and register with the Australian Red Cross. Nearly 8,100 individuals may have to relocate permanently as a result of the destruction of more than 3100 dwellings. Though government organizations, fire departments, and humanitarian organizations have been praised for their efforts in fighting the fires and meeting the needs of those displaced, displacement has continued to have an impact on living conditions, disrupting livelihoods, education, security, and health of people forced to leave their homes frequently with serious financial ramifications. ⁴²

4.3 East Africa Drought

There are two main rainy seasons in East Africa each year. However, due to failing of rainy seasons in considerable parts in 2021 and 2020 there was a significant precipitation shortfall from the end of 2020 to November 2021. Only a few isolated regions in 2021 experienced precipitations that were higher than normal, which lowered the gap just a little. However, to fully recover, even more precipitation over larger areas would have been

⁴¹ Md Kamrul Haque, Md Abdul Kalam Azad and Tareq Ahmed, "Wildfire in Australia during 2019-2020, Its Impacts on Health, Biodiversity and Environment with Some Proposal for Risk Management: A Review," *Journal on Environmental Protection* 12, no. 6 (2021): 391.

⁴² Ibid.

required. Significant and growing precipitation at the end of 2021 has exacerbated the already dire consequences.⁴³

Somalia, the coastal area of Kenya and Tanzania and Central Eastern Ethiopia are all experiencing a protracted drought. Moreover, ongoing drought conditions are causing a severe soil moisture deficit and are having an impact on the agricultural industry and rising wildfire risk. Between July 2020 and June 2022, Somalia experienced a severe deficit (20% according to the CHIRPS dataset, and 45% according to the ECMWF ERA5 reanalysis). Due to persistent wars, widespread poverty, and food insecurity, the region is particularly exposed to drought and other natural calamities in general and has a limited capacity to cope. A total of 70 million people in East Africa are in a certain level of danger from drought. According to UN-OCHA, 7 million individuals in Ethiopia, 4 million people in Kenya, and 5 million people in South Sudan need humanitarian aid. 6.1 million People in Somalia were affected by the drought as of May 2022.44

5. Climate Change in Pakistan

Due to its unique geographic and climatic characteristics, Pakistan is particularly susceptible to the impacts of climate change. Despite being close to the Arabian Sea, Pakistan's southern part is made up of very barren deserts, whereas its northern region is home to more than 5,000 glaciers. Due to Pakistan's economy's reliance on climate-sensitive sectors like agriculture and forestry, which causes the dread of floods in its low-lying, heavily populated coastal regions, climate change has had a major detrimental effect on Pakistan. Pakistan's annual mean surface temperature has been continuously increasing since the turn of the 20th century. A rise

⁴³ Gebremedhin Gebremeskel Haile, Qiuhong Tang, Siao Sun, Zhongwei Huang, Xuejun Zhang and Xingcai Liu, "Droughts in East Africa: Causes, Impacts and Res," *Earth Science Review* 193, no 2 (2019): 314.

⁴⁴ Ibid.

in temperature of 0.6 to 1.0°C has been observed in arid highlands, hyperarid plains, and desert coastal regions. Baluchistan's humidity is down 5%, but solar radiation in the state's southern half is up 0.5–0.7%. 45

Furthermore, it is ironic that Pakistan ranks 135th regarding global GHG per capita emissions while ranking 16th in terms of climate change sensitivity. Especially in the past 20 years, as global air temperatures have dramatically increased Pakistan's precipitation and heat regimes have changed. Because of this, Pakistan's hydrological cycle has undergone noticeable changes, including variations in seasonal rainfall, agricultural patterns, droughts, water accessibility times, the frequency and severity of heat waves, and precipitation-related natural disasters.⁴⁶

5.1 Challenges and Adverse Impacts Faced by Pakistan Due to Climate Change

Some of the challenges Pakistan is experiencing are the following:

- Heat exhaustion and other negative effects of climate change lead to lower agricultural and livestock yields.
- b. Due to more evaporation at higher temperatures, there will be a greater need for irrigation water but less water is available.
- c. Changes in river flows spurred on by melting glaciers and various precipitation patterns cause uncertainty regarding the timely supply of irrigation water.
- d. Unusual and irregular rainfall patterns, which are particularly detrimental to agriculture that depends on rain.
- e. The abundance of insects, maladies, and pests, particularly in warm, humid climates and after flooding and severe rain, degradation of

⁴⁵ Anjum Bari Farooqi, Azmat Hayat Khan and Hazrat Mir, "Climate Change Perspective in Pakistan," *Pakistan Journal of Meteorology* 2, no 3 (2005): 13 and 14.

⁴⁶ Ghulam Rasul et al., "Climate Change in Pakistan Focused on Sindh Province" (Islamabad: Pakistan Meteorlogical Department, December 1, 2012), 131, doi:10.13140/2.1.2170.6560.

- grasslands, and deterioration of previously cultivated land areas, including those impacted by erosion from water, erosion by winds, water logging, salt, etc.
- f. Pakistan would see the loss of its tropical forests, which are a source of fuel and food for the locals as well as the habitat for 90% of Pakistan's main exports. Rice and other climate-sensitive grains, cereals, vegetables, and wildlife are particularly noteworthy.
- g. The production of agriculture is expected to be harmed by high temperatures, extreme drought, flooding, and deteriorating soil. Pakistan's food security would be in danger as a result.
- h. Heat-related and infectious viruses like malaria and dengue would be more likely to occur in areas with high temperatures and rain.
- i. The expected climate change is likely to have a significant impact on the availability of fresh water.
- j. The dry and semi-arid regions may face severe water stress.
- k. Three consecutive, severe floods have plagued Pakistan's agriculture industry, disrupting both the State's general economy and the agriculture sector. The State's single largest industry, agriculture, accounts for 21% of all national income; its share has declined over time and it employs 45% of the labour force. Nearly 70% of people live in rural areas and the majority of them are reliant on the agriculture industry.⁴⁷
- The rise in CO₂ caused by the burning of fossil fuels, and the emission of aerosols emission from various resources will ultimately lead to the decline of the ozone layer.⁴⁸

⁴⁷Shah Fahad and Jiamgling Wang, "Climate change, Vulnerability and its Impacts in Rural Pakistan: A Review," *Environ Sci Pollut Res* 27, no. 2 (2020): 1334.

⁴⁸ Muhammad Naeem Javed and Abdul Majid Khan, "Climate Change in South Asia and It Impacts on Pakistan: Causes, Threats and Measures," *Pakistan Journal of Social Sciences* 39, no. 4 (2019): 1571.

5.2 Pakistan Flood 2022

Catastrophic floods occur in 2022 in Pakistan. The main factors were increased precipitation and glacier melting brought on by climate change. The flood covered one-third of the nation. 1700 people have perished in Pakistan as a result of protracted and heavy monsoon rains, while landslides and flash floods have wrecked roads, bridges, and buildings. People were cut off from aid in numerous villages. The floods have affected more than 33 million people, according to the Pakistani government, prompting the State to proclaim a state of emergency. Millions of people had to flee their houses and are now either homeless or staying in shelters. They hardly ever have access to clean water. Their crops were damaged, food was in short supply and starvation was imminent. The floods in August 2022 were preceded by a severe heat wave in May 2022 and have disproportionately affected the southern province of the country. Estimated economic losses exceed \$30 billion. Despite the several months after the disaster, things are still tense since much of southern Pakistan is still under water. Standing water is already a breeding ground for infectious diseases. Typhoid, cholera, malaria, and diarrhea are all spreading and putting more lives at peril. The floods show how urgent it is to solve climate change. Pakistan is one of those countries most severely impacted by climate-related extreme weather, despite producing less than 1% of the global GHG emissions.⁴⁹

6. Legal Framework for Environment in Pakistan

6.1 Constitution of the Islamic Republic of Pakistan

The Constitution does not expressly define any philosophy or policy concerning the privileges and obligations of the state and its inhabitants regarding the environment. It does not explicitly mention the right to the

⁴⁹ J. S. Nanditha et al., "The Pakistan Flood of August 2022: Causes and Implications," *Earth's Future* 11, no. 3 (2023): 1, doi:10.1029/2022EF003230.

environment, but thanks to the Supreme Court's (SC) decisions, the fundamental right to life guaranteed by Article 9(52) has been expanded to include the pursuit of environmental justice. Such as in Shehla Zia v. WAPDA, the Supreme Court upheld the right to life to include the right to a healthy environment, free from pollution. Although SC has made a lot of decisions regarding the fundamental right to life which expands its scope and covers all the elements of environmental justice, it is pertinent to mention here that the laws are more binding than judgments. Thus, we need to take proper steps to add the right to the environment as one of the Fundamental rights in the constitution of Pakistan.⁵⁰

6.2 Pakistan Environmental Protection Act, 1997(PEPA, 1997)

The Pakistan Environmental Protection Ordinance, of 1983 was the result of Federal government legislation on environmental and ecological issues; however, it was never put into effect and was later repealed by the PEPA, 1997 now called PEPA, 2012. Following the aforementioned Act, the Federal Government established the Environmental Protection Council to approve Pakistan's National policies regarding the environment and state quality criteria for the environment prepared by the Environmental Protection Agency.⁵¹

6.3 Pakistan Climate Change Act, 2017 (PCCA)

On April 3, 2017, the Assembly adopted PCCA bills addressing climate change. This legislation will support the provinces in their efforts to adopt and combat climate change the Pakistan Climate Change Council, authority, and fund were established by the Act.⁵²

 $^{^{50}}$ Shehla Zia v. WAPDA Pakistan Legal Decisions, PLD 693 (Supreme Court 1994).

⁵¹ Inayat Ullah Khan and Asif Yaseen, "Implementation of Climate Change Convention in Pakistan," *The Dialogue* XII, no. 4 (2017): 347.

 $^{^{52}}$ Javed and Majid Khan, "Climate Change in South Asia and It Impacts on Pakistan," 1576.

6.4 The 2005 National Environmental Policy

It provides a framework for Pakistan's Climatic issues, such as water pollution, seawater contamination, air smog, deforestation, and natural disasters. To better the quality of life for citizens through SDG, it objects to maintaining and rebuilding Pakistan's surroundings.⁵³

6.5 Climate Change Task Force (TFCC)

To control the State's GHG emissions, improve forestry, economic development, food security, and water safety, and construct new climate-related institutes, the Pakistan Planning Commission established a TFCC in October 2008. It also focuses on enhancing the capabilities of the current institute for reducing climate change.⁵⁴

6.6 Implementation of National Climate Change Policy (NCCP)

The primary goal of NCCP, 2012 is to assist the socially vulnerable sector and guide Pakistan towards climate-spirited progress, with a particular emphasis on Integrated Water Resource Management (IWRM) from Climate Change Viewpoint.⁵⁵

6.7 Ministry of Climate Change

To deal with issues relating to environmental pollution, ecology, and international environmental accords, the Ministry of Environment was originally founded in 1975. The said Ministry was abolished after the passage of the 18th amendment and the Ministry of Planning then oversees matters on environmental issues. In October 2011, the minister of Disaster management was established by the Federal Government and was empowered to handle environmental matters. Finally, the Ministry of Disaster Management was abolished and the Ministry of Climate Change

54 Ibid.

⁵³ Ibid.

⁵⁵ Ibid.

was given the portfolio of the Ministry of Disaster Management in April 2012.⁵⁶ The following are the issues that are delegated to the Ministry of Climate Change:

- a. Compliance with requirements imposed by several multilateral environmental conventions, protocols, and accords.
- b. National Environmental Quality Standards Determination.
- c. Encouraging nationwide acceptance of environmental norms, regulations, and strategies.
- d. Conducting surveys and providing environmental databases in response to multilateral environmental agreements.
- e. Implementation of the climate change convention in Pakistan, as well as monitoring, coordinating, and implementing environment and climate change agreements and conventions in Pakistan.
- f. Addressing issues covered by PEPA, 1997
- g. Creation of national action plans and strategies to fulfil environmental duties on a global scale.⁵⁷

6.8 Pakistan Climate Change Council

The council was established under section 3⁵⁸ of the Act. Section 4⁵⁹ of the Act highlights the Function of the council which includes overseeing the CCA's enforcement. Additionally, it has the power to decide how to achieve the Sustainable Development Goals (SDG) of the UN, setting policies for environmental protection, and taking into account the National Climate Change Report. Pakistan is a party to several international agreements. ⁶⁰

⁵⁸ Pakistan Climate Change Act," Pub.L. No. X (2017), sec. 3.

 $^{^{56}}$ Khan and Yaseen, "Implementation of Climate Change Convention in Pakistan," 353.

⁵⁷Ibid

⁵⁹ Pakistan Climate Change Act," Pub.L. No. X (2017), sec. 4.

⁶⁰ Sarim Jamal, "Examining the Pakistan Climate Change Act 2017 in Contest of the Contemporary International Legal Regime" *LUMS Law Journal* 5 (2020): 108.

6.9 Pakistan Climate Change Authority

The authority is created according to section $5(2)^{61}$ with the aim of corporate organization, with the ability to be sued, pursue a *suo moto* action, acquire assets, borrow money, and engage in contacts as necessary. The creation of authority makes it clear that it is in charge of preventing and mitigating climate-related calamities.⁶²

6.10 Pakistan Climate Change Fund

To give PCCA a financial foundation upon which to operate, section 12⁶³ authorizes the creation of a fund specifically related to climate change. According to section 12(2)⁶⁴ "donation, endowment, grant and gifts" may be used as a pool from which the fund might draw funding. The link between sections 12(b)⁶⁵ and 10(2)(b)⁶⁶ which demands approval from senior government official before accepting any kind of foreign-based aid from organization and states, is a crucial issue to be taken into account.⁶⁷

6.11 National Climate Change Policy, 2021

The updated Pakistan's NCCP, 2021 recognized the government flagship "Ten Billion Tree Tsunami Plan", along with the Prime Minister's "Urban Forest Project", "Clean Green Pakistan Campaign" and "Protected Areas and National Park Initiatives". The last two projects aim to increase protected areas to at least 15% of Pakistan's area by 2030. Also, the significant focus of the policy is the Ecosystem Restoration Initiative (ESRI).⁶⁸

⁶¹ "Pakistan Climate Change Act," Pub.L. No. X (2017), sec 5(2).

⁶² Jamal, "Examining the Pakistan Climate Change Act 2017," 108.

⁶³ Pakistan Climate Change Act," Pub.L. No. X (2017), sec 12.

⁶⁴ Ibid, sec 12(2).

⁶⁵ Ibid, sec 12(b).

⁶⁶ Ibid, sec 10(2)(b).

⁶⁷ Jamal, "Examining the Pakistan Climate Change Act 2017," 108.

⁶⁸"Pakistan National Climate Change Policy" (Islamabad: Ministry of Climate Change, GOP, 2021). https://mocc.gov.pk/SiteImage/Policy/NCCP%20Report.pdf.

The policy outlines the necessary adaptation steps and highlights the various sectors' vulnerabilities to climate change. The policy also deals with problems in many sectors, including water, agriculture, forestry, coastal regions, biodiversity, and fragile ecosystems. Being a responsible member of the International Community Pakistan is also prioritizing climate change mitigation in the energy and transportation sectors. Furthermore, the policy has included suitable measures for disaster pre-readiness, capacity building, institutional strengthening, technology transfer, and international cooperation as significant elements.⁶⁹

6.12 National Security Policy of Pakistan 2022-2026

The issues Pakistan is presently experiencing or will experience in the future as a result of climate change are addressed under the NCCP. Pakistan's initiatives to combat climate change have received international recognition. Pakistan has established a separate ministry of climate change, launched a campaign to plant 10 billion trees, and committed to reducing predicted emissions by 50% by 2030, subject to international grants. Additional efforts are being made to avoid, minimize, adapt, and mitigate the adverse impacts of climate change on the economy, environment, health, and well-being of people through transforming water management, increasing water storage capacity, institutional capacity building, research, and development.⁷⁰

6.13 Measures to Mitigate Climate Change Effects

The Pakistani government is acting in response to the issue to lessen the adverse effects of global warming. The government recently took the following actions:

⁶⁹Ibid.

⁷⁰ "National Security Policy of Pakistan 2022-2026," (Islamabad: National Security Division, 2022), https://onsa.gov.pk/assets/documents/polisy.pdf.

- a. By integrating adaptation and mitigation through ecologically focused projects, the government has started the ESRI to help Pakistan make the transition to an environmentally resilient nation. They include conserving biodiversity, improving the policy environment in consistency with Pakistan's Nationally Determined Contribution (NDC), and achieving Land Degradation Neutrality (LDN). The main aim behind the initiative is to create an independent and transparent financial mechanism in Pakistan called the Eco-system Restoration Fund (ESRF).
- b. The Clean Green Pakistan Movement (CGMP) and resource mobilization for the Strategy Unit on Water, Sanitation, and Hygiene (WASH) are among the SDGs that the MoCC is promoting in partnership with important stakeholders and pertinent provincial agencies to inspire a nationwide movement for a clean, green environment.
- c. Ten Billion Tree Tsunami Program (TBTTP) aims to alleviate the negative consequences of climate change.
- d. Pakistan's National Drought Plan is being created to assist the country in creating its national action plans to increase its drought resilience. The Global Mechanism Team of the UN Convention to Prevent Desertification has chosen a national consultant for Pakistan to create a thorough national action plan for this aim.⁷¹

The Ministry of Climate Change's significant Initiatives are listed below:

e. The Pakistani delegation at COP-25 was successful in securing six positions on various committees under the UNFCCC, demonstrating confidence in Pakistan's commitment to climate negotiations.

⁷¹ "Pakistan Economic Survey 2019-2020," Islamabad: Finance Division, 2020), https://www.finance.gov.pk/survey/chapter_20/16_Climate_Change.

- f. The NDC cooperation is assisting Pakistan in formulating its development strategy for climate resilience.
- g. The NCEC, or National Commission on the Establishment of the Carbon Market, has been formed.
- h. To lessen the negative environmental consequences of vehicle carbon emissions and the associated expenses, the Pakistani government has established the National Electricity Vehicle Policy, which calls for a shift to electric vehicles of 30% by 2030. In addition, construction on Karachi's first "zero emissions" metro line has started.
- i. The "A Clean-Green Cities Index" has been launched in 20 cities to encourage greater hygiene and handling of waste. The decision to ban the use of single-use plastic has also been made in Pakistan.⁷²

7. Islam and Climate Change

The Islamic way of life encourages total ecological balance and defends the rights of all living things. Humans lost sight of these rights and the duties they bear as the Earth's guardians along the road, upsetting the delicate balance of this equilibrium. A severe and unavoidable result of this neglect is climate change.⁷³ Islam teaches its believers to protect the environment. Muslims believe that God will hold mankind accountable for their actions and that they should act like the globe's *Khalifah* or guardians. Muslims are taught that God created the earth and the sky before he created everything else. Protecting God's most prized creation, the planet is considered more Islamic than anything else.⁷⁴

 73 Ibrahim Ozdemir, "What Does Islam Say about Climate Change and Climate Action?," Aljazeera, August 12, 2020, https://www.aljazeera.com/opinions/2020/8/12/what-does-islam-say-about-climate-change-and-climate-action.

⁷² Ibid.

⁷⁴ Ibid.

7.1 Importance of Taking Action on Climate Change

The extent of the harm that people are doing to the environment has become critical. According to Islamic law, minimizing harm should come first. Safeguarding the environment and taking action to lessen or even halt the effects of climate change should be a key concern for Muslims, organizations, and governments. Islamic law distinguishes between two types of duties: *fard-al'ayn* (personal responsibility) and *fard-al'kifaya* (shared duty). The latter states that if a certain Muslim group fulfils the requirement, the rest of the Muslims are exempt from it. Both *fard-al'ayn* and *fard-al'kifaya* may be seen in environmental activism.⁷⁵

The Islamic idea of *jihad* also covers the prospect of environmental protection from an activist standpoint, particularly for single Muslim and Muslim groups. *Jihad* is a key overarching concept in the Islamic theological context. It relates to every personal challenge one faces to succeed. If fighting destructive forces for a good result and purpose is one aspect of *jihad*, then environmental activism is a form of *jihad*. According to Islamic beliefs, peaceful activism undertaken with true intentions against entities and powers that could cause environmental harm is a sort of righteous *jihad* that will reap rewards from God in the hereafter. Every Muslim has a personal responsibility to protect the environment because the harm to the planet is getting worse and current levels of action are doing little to improve the situation. Governments of Muslim-majority nations also have a responsibility because their cultural and economic practices significantly affect their carbon footprint.⁷⁶

It should be emphasized that Hazrat Abu Bakr gave considerable importance to the preservation of the environment, especially under the

⁷⁵ The Conservation, "Why Taking Action on Climate Change is an Islamic Obligation," accessed September 17, 2022, https://theconversation.com/why-taking-action-on-climate-change-is-an-islamic-obligation-171111.

⁷⁶ Ibid.

trying circumstances of battle. This concern was sparked by the awareness that God Himself imposed a high value upon such flora and animals, making it evident that conservation measures should be taken. IHL emphasizes protecting nature during armed conflicts, which is not surprising given that traditionally its devastation has been viewed as an undervalued sign of war.⁷⁷

7.2 Some Relevant Qur'ānic Verses and Aḥādīth on Climate Change

The Qur'ān is the greatest environmental manual for Muslims. Muslims diligently read this divine text for spirituality since it is thought to be a magnificent revelation with exceptional concepts. Given that Muslims believe God created everything, they hold that faith and belief in the environment are equally important as having faith in mankind and God. Thus, the Qur'ān does not merely equate kindness to animals and plants with believing in One God. The natural world is praised in the Qur'ān as an earthly paradise, a reflection of the verdant forest of Paradise overhead. Some of the most effective climate-conscious teachings derived through the verses of Qur'ān as well as from the *aḥādīth* are discussed below:⁷⁸

There is one *ḥadīth* according to which one day, Saad ibn Abi Waqas (RA) was making *wudu* when the Prophet (PBUH) passed by. The Prophet (PBUH) questioned him as to what is this wastage to which he responded with a question as to whether there is wastage in *wudu* too. Prophet (PBUH) replied that yes, it is waste even if you're beside a flowing river.⁷⁹ This

^{77 &}quot;The Surprising Influence of Hazrat Abu Bakr's Will on Modern IHL Protections" *Dlpforum*, accessed February 3, 2023, https://www.dlpforum.org/2023/02/03/the-surprising-influence-of-hazrat-abu-bakrs-will-on-modern-ihl-protections/.

⁷⁸ "The Eco Muslim: 10 Qur'ān Verses on The Environment and Do-Able Action Plans," *Greenfitree* accessed September 17, 2022, https://greenfitree.org/2013/06/17/10-Qur'ān-verses-on-the-environment-and-do-able-action-plans/.

⁷⁹ Imam Muhammad bin Yazid Ibn Majah al-Qazvini, "The Book of Purification and Its Sunnah - Chapter: Concerning Moderation in Ablution and Avoiding Extravagance, Ḥadīth 425," in *Sunan Ibn Majah*, accessed May 17, 2023, https://sunnah.com/ibnmajah:425.

Hadīth serves as a prime example of the necessity of avoiding resource waste, even in the absence of an apparent shortage. In simple words, not wasting things ought to be something that Muslims naturally do. This is particularly significant when we take into account the number of people who lack access to safe, clean water worldwide and the effects that the changing climate is having on these areas.80

O children of Adam! Dress cleanly and beautifully for every act of worship, and without making unlawful the things God has made lawful to you eat and drink, but do not be wasteful by over-eating or consuming in unnecessary ways: indeed, He does not love the wasteful.⁸²

The Qur'an serves as a reminder of our obligations to one another and the planet's rich resources. In the above-mentioned verse, the Qur'ān indicates for us to drink and eat but to not waste anything since God cannot possibly love the lavish or wasteful. We behave extravagantly and unjustly toward the riches Allah (SWT) has given us when we squander food and water, buy plastics and clothes items, and then toss them out of hand. According to another source, the Prophet (SAW) said that until there is a benefit for doing so, no man will cultivate a crop or plant a grain that birds, animals, or people

⁸⁰ Maria Zafar, "6 Climate Lessons from the Qur'ān and Ḥadīth," accessed 17, 2022, https://www.islamic-relief.org.uk/6-climate-lessons-from-the- September Qur'ān-and-Hadīth.

⁸¹ Qur'ān, 7:31.

⁸²⁴ The Holy Qur'ān (Translation by Ali Unal)," accessed April 12, 2023, https://mQur'an.org/content/view/985/4/.

will eat. Being environmentally conscious and living sustainably affects more than simply the environment. Additionally, it is moral and ethical.⁸³

Prophet Muhammad (SAW) historically laid the foundation for what it is to live purposefully and effectively. For the sake of wildlife protection, hunting was not permitted. Even in times of conflict and devastation, it was prohibited to cut down trees and destroy crops. He urged people to treat their animals, who served as the primary form of transportation at the time, with kindness by giving them rest and refraining from overloading them with provisions. Islamic law imposes several moral requirements on the slaughter of animals for food to reduce waste, foster environmental awareness, and foster compassion for all of Allah's creatures (SWT).⁸⁴

There is no animal that crawls on the earth, no bird that flies with its two wings but are communities like you. We have neglected nothing in the Book (of decree). Then to their Lord will they all be mustered. ⁸⁶

Furthermore, as evident from the above verse, it is mentioned in the Qur'ān that neither an animal nor a being that flies on its wings inhabits the ground, but they live in communities just like humans and that in the end, everyone will be brought to their Lord. This Qur'ānic verse illustrates the privileges of animals. It recognizes the value of their position in the world. Additionally, it serves as a harsh warning that just as mankind has

⁸³ The Zahra Foundation, "Climate Change: An Islamic Responsibility to Care for the Planet," accessed September 17, 2022, https://zahrafoundation.ca/blog/climate-change-an-islamic-responsibility-to-care-for-the-planet/.

⁸⁴Ibid.

⁸⁵ Qur'ān, 6:38.

⁸⁶Islamicstudies, "Towards Understanding the Qur'ān," accessed April 12, 2022, <a href="https://www.islamicstudies.info/tafheem.php?sura=6&verse=31&to=40#:~:text=(6%3A38)%20There%20is,will%20they%20all%20be%20mustered.&text=(6%3A39)%20Those%20who,and%20blunder%20about%20in%20darkness.

communities, networks, and roots on earth, so do animals. As Muslims, we must keep this in mind and exercise compassion when treating other living things.⁸⁷

7.3 Islamic Declaration on Climate Change

The Islamic Declaration on Climate Change, which exhorts countries to reduce GHG emissions and switch to 100% renewable energy, was approved by Islamic academics from throughout the world. This declaration lays forth some requests for global leaders and the corporate community and reasons why Muslims need to be responsible environmental advocates. First, the proclamation urges decision-makers to reach a fair and legally binding accord while drafting the entire climate agreement that will be adopted in Paris. The agreement should specify specific goals and mechanisms to track them. Furthermore, developed nations and oil-producing governments should engage in a green economy, stop making immoral environmental profits, and wipe out their carbon dioxide emissions by the middle of the decade.⁸⁸

Second, the declaration calls on citizens and political leaders from all nations to acknowledge that an unrestricted economy is not an option and to commit to a zero-emissions plan and 100% renewable energy as soon as possible. A strong priority should also be given to adaptation, specifically for highly endangered groups. Prominently, the corporate world is urged to play a more active role in reducing its carbon footprint, confess to using only renewable energy sources and no emissions, switch investments to renewable energy sources, incorporate more sustainability initiatives, and help with the divestiture from fossil fuels.

⁸⁷Maria Zafar, "6 Climate Lessons from The Qur'ān and Ḥadīth," accessed September 17, 2022, https://www.islamic-relief.org.uk/6-climate-lessons-from-the-Qur'ān-and-Hadīth/.

⁸⁸Environment Ecology, "Islam, Faith and Climate Change", accessed September 17, 2022, http://environment-ecology.com/religion-and-ecology/740-islam-faith-and-climate-change.html.

Last but not least, the declaration makes a call to action for all Muslims, no matter where they may be, supported by verses from the Holy Qur'ān. According to the proclamation, mankind is currently accountable for wasting treasures given by Allah, and that care toward creation is a key component of the Islamic religion.⁸⁹

7.4 Significance of the Islamic Declaration on Climate Change

The significance of this declaration is that it is a significant illustration of how religion can inform and reshape sustainability discussion. Islam has always been the driving force behind civilization. The declaration may aid in directing Islam's moral and spiritual might toward the goal of creating a low-emission, climate-resilient future.⁹⁰

7.5 Muslim's Perception of Climate Change

In terms of their resources, geography, ecology, and economic development, States with a majority of Muslims differ greatly. However, a large number of Muslim-populated areas are extremely affected by climate change. For instance, the Middle East and North Africa's arid or semiarid environment makes the area susceptible to increasing heat stress and decreasing fresh water supplies. Most Muslims consider climate change to be a significant societal concern. Some academics, however, contend that persistent economic difficulties in nations with a majority of Muslims influence local populations to place a higher priority on economic growth and poverty reduction than on reducing climate change. Muslims put climate change above other environmental issues. The manners in which

⁸⁹Ibid.

 $^{^{90}\}mbox{Odeh}$ Al-Jayyousi, "The Islamic Discourse on Climate Change," $\it Ecomena$, accessed September 17, 2022, https://www.ecomena.org/islamic-discourse-climate-change/.

Muslims understand climate change also range from place to region, in addition to geographical variations in concern about it.⁹¹

Various interpretations are there for climate change. The first interpretation, which considers human activity as the primary driver of ongoing climate change, is in line with the majority of scientific viewpoints. As a result, some Muslim environmentalists point to the current economic structure as the primary cause of the issue. This viewpoint contends that the spread of this damaging economic structure into Muslim-majority nations has resulted in the loss of Islamic principles and values in those nations correct path such diverging from the as consuming things moderation results in actions that are destructive to the environment. Those who believe that climate change is God's retribution, on the other hand, blame human immorality for environmental destruction. According to this viewpoint, God responds to the immoral actions of local communities or political leaders with various types of environmental destruction or calamities. Examples of such evil activities include stealing, lying, greed, and injustice.⁹²

8. Comparative Analysis of International, National, and Islamic Law on Climate Change

| Issues | International | Pakistani Laws | Islamic Laws | |
|------------|---------------|-------------------|--------------|--|
| | Laws | | | |
| Greengages | 1. The | 1. PEPA, 2017 | 1. Qur'ānic | |
| Emission | UNFCCC | 2. Climate Change | Verses | |
| | 2. The | Task Force | regarding | |
| | KYOTO | 3. Ministry of | pollution, | |
| | Protocol | Climate Change | environment, | |
| | 3. Paris | 4. Pakistan | and water. | |
| | Agreement | Environmental | 2. Ḥadīth | |

^{91&}quot;Muslims and climate change: How Islam, Muslim organizations, and religious leaders influence climate change perceptions and mitigation activities," *Wires Online Library*, accessed September 17, 2022,

https://wires.onlinelibrary.wiley.com/doi/full/10.1002/wcc.702.

92 Ibid.

| | 4. | Sixth Assessment Report of UN IPCC | 5. | Protection Act, 2012. The 2005 National Environmental | 3. | Islamic Declaration on Climate Change |
|-----------------------|----------|------------------------------------|----|--|----|---------------------------------------|
| | | ON II CC | 6. | Policy. National Climate | | Change |
| | | | | Change Policy, 2021. | | |
| | | | 7. | National Security Policy of Pakistan, 2022-2026 | | |
| Ozone | 1. | The Vienna | 1. | The Ministry of | 1. | The Qur'ān |
| Layer | | Convention | | Climate Change is | | directs us to |
| Depletion | | for the Protection | | working on making Policies to | | preserve the |
| | | of Ozone | | protect the | 2. | ozone layer. Under the |
| | | Layer | | Stratospheric | ۷. | Islamic |
| | 2. | The | | Ozone depletion. | | Declaration on |
| | | Montreal | 2. | National Ozone | | Climate |
| | | Protocol | | Unit in the | | Change, all |
| | | | | Ministry of | | Muslims are |
| | | | | Environment. | | obligated |
| | | | | | | under Islamic |
| | | | | | | law to cut |
| | | | | | | GHG |
| | _ | TG GDD | 4 | | | emissions |
| Climate | 1. | ICCPR | 1. | Art 9 of the | 1. | The Islamic |
| Change as a Threat to | 2. 3. | ICESCR UDHR | | Constitution of Pakistan, 1973. | | Declaration on Climate |
| | Э. | UDHK | 2 | * | | |
| Humanity | | | 2. | Implementation of National Climate | | Change directs to reach a just |
| | | | | Change Policy, | | and legally |
| | | | | 2021 | | binding |
| | | | | 2021 | | decision while |
| | | | 3. | National Security | | drafting the |
| | | | | Policy, 2022-2026 | | entire climate |
| | | | | • 1 | | agreement |

The security, ecology, and economics of the Nations need to be given more thought because climate change is one of the biggest concerns to civilization. All States have a right to equitable treatment, equal involvement, and equal protection against climate change, according to environmental justice. However, not all States are treated equally and some States are vulnerable to climate despite making less of a contribution to it. The unbalanced weather on Earth puts the viability of the planet's ecosystems, the long-term survival of mankind, and the equilibrium of the world's economy in danger. Although the earth's temperature has been gradually changing for millennia, the GHG problem has gotten worse over the past two centuries and now poses a threat to bring about global warming on a scale that has never been seen before. However, if this risk keeps increasing, the world may soon experience catastrophic repercussions of climate change.

Keeping in view the worrisome increasing rate of climate change and the rising level of carbon dioxide in the atmosphere, States have taken numerous actions on national and international levels aimed at stabilizing the atmospheric concentration of GHG, halting further temperature increases, decreasing ozone-depleting substance production, use, and emission. Additionally, climate change as a threat to humanity is linked to human rights. Moreover, an ethical problem with climate change exists. Responses to climate change that are not carefully considered, with ethical considerations in mind, can destroy whole communities, create new patterns of injustice and misdistribution, and make individuals who have already been driven away by other artificial political and ideological challenges even more vulnerable. If inaction could have catastrophic consequences, inadequate reactions to climate change could have the same consequences.

Last but not least it is pertinent to note here that Islam which is a complete code of life promotes complete ecological harmony and upholds the rights of all living things. Islam insists on environmental preservation in its believers. Muslims believe that Allah will hold them accountable for

their actions and that it is the primary responsibility of Muslims, organizations, and the government to halt climate change. The analysis concludes that although the effects of climate change are irreversible, further effects can be averted with human assistance.

9. Recommendations

- 1. The developing countries of Asia, such as Pakistan, where the effects of global warming are projected to be encountered most severely because of resource and infrastructure barriers, must create and carry out gradual adaptations and policies to emphasize the importance of taking climate change into account while planning, designing, and executing development activities. The government needs to take a proactive role by eliminating inconsistent and ineffective methods of planning, enacting, and carrying out policies.
- 2. A nationwide climate change policy should be developed using legislation outlining the duties assigned to the federation, provinces, and the public and commercial sectors.
- 3. Local citizens should come forward with their knowledge of the climate to better assist in the creation of policies for mitigation and adaptation.
- 4. Reservoirs should be built in the higher Indus catchments to control the distribution of water across the Indus Delta and lessen flood losses.
- 5. Reducing our dependence on petroleum and coal and switching from burning fossil fuels to CO₂-free alternative power providers like solar and hydropower will help avert climate change.
- 6. By halting deforestation, carbon dioxide emissions would be reduced and wildlife would be preserved. To reduce the global level of carbon dioxide, extensive tree planting ought to be done. Population management should be taken into consideration as a long-term solution to the climate change issue since all greenhouse gases are produced by human activity.

- 7. Encouraging the growth of science and technology in important areas related to climate change.
- 8. Good governance is at the heart of the problem; all conceivable solutions are only feasible if the government frames and designs implementable and competent decision-making. Policy tackling adjustment and prevention should be prioritized and executed in text and spirit.
- 9. Following COVID-19, people must adapt their lifestyles since excessive car usage and high-speed economic activity might lead to another calamity in the shape of a climatic explosion.

10. Conclusion

States are keeping up their efforts to slow down climate change since it endangers individuals' mental and physical well-being and has a terrible effect on the state's economy. States have implemented many conventions, protocols, and agreements to halt climate change worldwide in light of the alarming rapid rate of climate change. However, Pakistan's constitution empowered it with the authority to ratify and implement the UNFCCC, Kyoto Protocol, and the Paris Agreement to minimize climate change. Additionally, as an Islamic state, Pakistan is also obligated to protect the Earth while acting as its guardian and custodian as their primary goal. Through climate justice, the rights of people and development are interrelated to create a human-centered policy that shares the costs and benefits of combating climate change evenly and fairly. The goal of the climate justice movement, a subset of the environmental justice movement, is to promote an equitable distribution of resources to address the disproportionate consequences of climate change on vulnerable people.
