




Groups Affected by Climate Change and Those Bearing Responsibility for Its Consequences

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Climate change has clear and immediate consequences on the full enjoyment of human rights, such as the right to life, the right to participate in cultural life, the right to own property, the right to an adequate standard of living, the right to access food, and the right to the highest attainable standard of physical and mental health. These rights may be significantly impacted by climate effects on various human groups, including minorities, children, persons with disabilities, women, refugees, and migrants. States, as primary subjects of international law, must primarily cooperate and adopt shared procedures to mitigate the adverse effects of climate change on human groups. They should use all available safeguards to adapt these groups equitably and without discrimination to climate change, ensuring the protection of human rights from commercial harm. Additionally, business enterprises, as major contributors to climate change acceleration, must comply with maximum environmental standards to mitigate harmful effects. This article is structured using a descriptive-analytical method and a library-based approach.

Keywords: Climate change, human groups, right to the environment, sustainable development

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1. Introduction

Climate change is the most critical environmental issue of the 21st century (Hunter, 2022). This problem has arisen from the exploitation of the Earth's carbon resources, such as oil, coal, and natural gas, which account for over two-thirds of global greenhouse gas emissions and exacerbate climate change. These gases accumulate in the stratosphere and reflect the increased heat from the Earth back to the planet, resulting in an enhanced greenhouse effect. This phenomenon is known as global warming. Global warming causes more extreme and unpredictable climate events, such as storms, floods,

droughts, heatwaves, large wildfires, ice melting, and rising sea levels (IPCC WGIII Press Release Berlin, 2007). Climate change brings about new socio-economic harms to human life and livelihoods. These harms are more pronounced in areas like agricultural production, human health, access to drinking water, and the habitats of coastal communities. Therefore, by impacting various human groups, climate change puts fundamental human rights, such as the right to life, at serious risk ("Fifth Assessment Report (AR5)," 2013). Development-based economies are in clear conflict with environmental conservation and climate change prevention (Humphreys, 2009). The global community's response



(e.g., the United Nations Framework Convention on Climate Change (UNFCCC), the 1997 Kyoto Protocol, and the 2015 Paris Agreement) has often been driven by the global economic context (*Environmental Literacy Education Package for Educators and Facilitators; Climate Change, 2020*). However, micro and macro economies are primarily focused on profit generation rather than social justice. This article elucidates the impact of these changes on affected groups and outlines the responsibility of violators.

2. The Concept of Climate Change

Climate refers to the typical weather conditions of any region over a long period. It describes the weather characteristics of a geographic area, such as temperature, humidity, atmospheric pressure, wind, precipitation, and other meteorological features, over a relatively long period. Climate is one of the fundamental elements of the Earth's structure, significantly affecting nature, humans, and all forms of life on a large scale. Accordingly, the climate of each land is a crucial factor in the division of biological geography. The origin of this term, which is called "climate" in Arabic, is the Greek word "Clima," which has been adopted in nearly all languages from this root. Essentially, climate refers to the average state of weather-defining quantities, irrespective of the specific moment of occurrence. In other words, climate is location-dependent but not time-dependent. According to the International Meteorological Vocabulary, when the climate of a region is discussed, it refers to the overall weather conditions of the area, and any change in these weather conditions over time forms the climate variability of that region. Climate variability encompasses any alteration in weather that is longer-lasting than individual weather events, possibly persisting for several decades or more. Climate change is a phenomenon caused by factors such as the Earth's dynamic processes or external influences like variations in solar radiation intensity or human activities (*Environmental Literacy Education Package for Educators and Facilitators; Climate Change, 2020*). Consequently, climate change entails rising temperatures, increased evaporation, and alterations in rainfall patterns.

3. Evolution of the Climate Regime

The climate regime was introduced in 1979 when the World Meteorological Organization held the first World Climate Conference. Nearly a decade later, in 1988, the first session of the Intergovernmental Panel on Climate Change (IPCC) was convened (Sayyad et al., 2023). In 1990, the second World Climate Conference recommended that governments adopt a Framework Convention on Climate Change, which imposed broad obligations on its members. The goal of the conference was to establish specific targets in agreements, starting with the Kyoto Protocol and later including the Paris Agreement. In the same year, the first session of the Intergovernmental Negotiating Committee for the Framework Convention on Climate Change took place. Two years later, the United Nations Framework Convention on Climate Change (UNFCCC) was adopted in New York and became legally binding in 1994. The UNFCCC established a general governance system with core commitments to address climate change (Hunter, 2022).

In 1995, the IPCC released its second assessment report, emphasizing that human activities are driving climate change on Earth. In 1997, the Kyoto Protocol to the UNFCCC was adopted, setting legally binding targets for industrialized countries (Annex I of the Protocol) to achieve a 5% reduction in greenhouse gas emissions below 1990 levels over a five-year period. In 2000, the IPCC's third assessment highlighted identifiable human impacts on the environment, showing that emission reductions did not align with the Protocol's targets. In 2001, the United States unilaterally rejected the Protocol, while Europe, Japan, and other countries agreed to the Marrakech Accords, which established rules for land use, land-use change, and forestry under the Protocol. The Protocol became legally binding in 2005, and the European Union launched its carbon trading platform, the EU Emissions Trading System (EU ETS).

In 2007, the IPCC's fourth assessment revealed that emission levels were nearly double pre-industrial levels and rapidly rising. The first reporting period under the Protocol was scheduled from 2008 to 2012. In 2009, the Conference of the Parties (COP), the UNFCCC's main decision-making body, held its 15th conference in Copenhagen, with hopes for higher emission reduction targets (up to 30% for Annex I countries). However, no such agreement was reached; instead, countries were

allowed to decide individually how to reduce their emissions, forming the basis for nationally determined contributions (NDCs). Developed nations made a non-binding pledge in Copenhagen to aid developing countries through climate finance and enhance international monitoring of industrial emissions.

Before the Copenhagen Conference, 11 countries met near Malé in the Maldives to discuss the "Speed of Environmental Change Following Climate Change," marking the formation of the Climate Vulnerable Forum, which has since expanded to 43 countries. COP 16 took place in November 2010 in Cancún, Mexico. Key outcomes included a proposed technology mechanism to boost innovation, the approval of an adaptation framework, and the establishment of the Green Climate Fund to support developing countries. The first board meeting of the Green Climate Fund occurred in 2012. In Cancún, Mexico, countries were asked to consider human rights in climate change responses, a request incorporated into the preamble of the Paris Agreement. COP 17 was held in Durban, South Africa, in November and December 2011, where member states committed to negotiating a new climate treaty to succeed the Kyoto Protocol by 2015. Decisions were also made in Durban to operationalize the Green Climate Fund (GCF) to assist developing countries with adaptation and low-carbon technology development (Tedeschi, 2005). Human rights activists in Durban demanded that the GCF be separated from the International Monetary Fund and World Bank's debt sustainability frameworks, arguing that failing to do so would exacerbate the heavy debt burdens of developing nations. In 2012, COP 18 was held in Doha, Qatar, where participants discussed climate change-related losses in developing countries (*Doha Updates on Climate Change, 2012*). The goal was to enhance these countries' adaptive capacity ("FACT SHEET: THE KYOTO PROTOCOL," 2011).

COP 19 convened in Warsaw, Poland, in 2013, where an international mechanism was established to address climate-related losses, and a timeline for Green Climate Fund investment was set. Agreements were reached on monitoring and verification standards for a future 2015 treaty. COP 20 took place in 2014 in Lima, Peru, followed by COP 21 in Paris in 2015, where a post-Kyoto agreement was adopted. COP 21 was a historic milestone, as 195 UNFCCC member states signed the Paris Agreement, marking the first "global climate

agreement." Although non-binding national commitments were necessary for achieving the Agreement's goals, this was also considered a weakness, as it allowed parties to set independent, often insufficient targets ("FACT SHEET: THE KYOTO PROTOCOL," 2011; Hunter, 2022).

This weakness could change over time if countries consistently follow the Paris Agreement's five-year reporting cycles and progressively tighten their emission targets to meet the 1.5°C warming goal. Legal obligation under customary international law could be achieved if countries adhere to these commitments. COP 22 in 2016 in Morocco was held under favorable circumstances, as the Paris Agreement became legally binding on November 4, 2016. By the end of the Marrakech conference, the Paris Agreement had been ratified by 111 countries, accounting for over three-quarters of global emissions. As of November 2017, all nations, including Nicaragua, which had initially abstained due to concerns over the Agreement's effectiveness, had signed it (*Quantified Economy-Wide Emission Targets for 2020, 2009*).

The reference to human rights in the Paris Agreement was a victory for activists who had long advocated for climate projects, but much work remains to turn this commitment into practical support. The Agreement emphasizes that climate change is a common concern of humankind and urges member states to respect, promote, and consider human rights when addressing climate change, acknowledging human rights obligations (Brown & Ballesteros, 2012; Tedeschi, 2005). However, this common concern in international law shows that human rights remain a weak standard in the climate regime, meaning compliance is not yet legally enforceable.

4. Groups Affected by Climate Change

The adverse effects of climate change are disproportionately felt by individuals and communities who are in vulnerable situations due to various factors. According to the Intergovernmental Panel on Climate Change (IPCC), individuals who are socially, economically, politically, institutionally, or otherwise marginalized are at greater risk from climate change and certain adaptive responses (Hunter, 2022). For example, people, communities, and countries that rely on low-lying coastal areas, tundra and Arctic ice, arid lands, and

other delicate ecosystems for their habitation and livelihoods face the most significant threats posed by climate change (Humphreys, 2009). Therefore, preventing and responding to climate change impacts must be a participatory process that empowers all. This section explains how climate change differently affects Indigenous peoples, women, children, migrants, and persons with disabilities. It provides a non-exhaustive analysis of some groups and individuals disproportionately impacted by climate change.

4.1. Indigenous Peoples

The United Nations Declaration on the Rights of Indigenous Peoples and the International Labour Organization's Convention on Indigenous and Tribal Peoples highlight specific rights of Indigenous peoples. The Declaration emphasizes in its preamble that respecting Indigenous knowledge, cultures, and traditional practices contributes to sustainable and equitable development and sound environmental management. Article 32 of the Declaration mandates that states implement effective mechanisms to neutralize equitably any activities affecting Indigenous lands and resources and take appropriate measures to minimize adverse environmental, economic, social, cultural, or spiritual impacts. Article 29 addresses Indigenous peoples' rights to conserve their environment, lands, and resources. The Declaration seeks the free, prior, and informed consent of Indigenous peoples on actions affecting their rights, including climate change mitigation and adaptation measures.

Climate change disproportionately impacts Indigenous peoples. For instance, the displacement of Indigenous communities and the potential destruction of their lands, territories, and traditional resources threaten their cultural survival, traditional livelihoods, and right to self-determination. Indigenous peoples have long lived in fragile ecosystems that are more susceptible to climate change impacts. Extreme weather events, droughts, ice melting, rising sea levels, and species extinction severely affect Indigenous territories and increase their vulnerability. Indigenous peoples are directly affected by environmental degradation, such as deforestation, land degradation, land grabbing, and overexploitation of mineral resources, which negatively impact local economies, lifestyles, food security, water access, and

Indigenous culture. They often rely heavily on land and natural resources for subsistence.

The 2030 Agenda and the Paris Agreement recognize the special and crucial role of Indigenous peoples as partners in achieving their goals. The Major Group on Indigenous Peoples for Sustainable Development has become a platform for Indigenous participation in the 2030 Agenda. The Paris Agreement calls on parties to respect their human rights commitments concerning Indigenous peoples. Specifically, it acknowledges the use of traditional Indigenous knowledge in adaptation strategies. Indigenous peoples are increasingly recognized as valuable actors in responding to and adapting to environmental pressures. The IPCC indicates that stakeholder participation, especially those more vulnerable to climate change like Indigenous peoples, enhances the effectiveness of decision-making and governance in selecting, evaluating, implementing, and monitoring land-based climate adaptation and mitigation policy instruments. The Agreement also recognizes the significant contribution of Indigenous knowledge and practices in enhancing adaptation effectiveness, such as Indigenous peoples' holistic view of community and environment, a critical resource for climate change adaptation (*Key Messages on Human Rights, Climate Change and Migration*, 2019).

To ensure the effective participation of Indigenous peoples in climate change discussions, the Local Communities and Indigenous Peoples Platform was established under the UNFCCC. This platform aims to strengthen Indigenous knowledge and practices in addressing climate change, facilitate experience exchange, share best practices in mitigation and adaptation, and enhance community and Indigenous participation under the Convention.

4.2. Women

The Convention on the Elimination of All Forms of Discrimination Against Women supports women's rights and prohibits discrimination against them. The Convention aims to ensure women's equal participation with men in political, social, economic, and cultural development. In its General Recommendation No. 37 (2018), the Convention emphasized the urgency of climate change mitigation and highlighted necessary actions to achieve gender equality to enhance the resilience of individuals and communities to climate

change and disasters. The Office of the High Commissioner for Human Rights found that women's unique knowledge and experience, especially at the local level in areas such as agriculture, conservation, and natural resource management, make their diverse backgrounds crucial in meaningful, effective, and informed climate action and decision-making processes (*Guidelines for Public Participation in Climate Affairs, 2018*; *"Slow-Onset Effects of Climate Change and Human Rights Protection for Cross-Border Migrants," 2018*).

The Office of the High Commissioner for Human Rights also noted that climate change affects women, men, boys, and girls differently. Rooted and systemic discrimination can lead to gender-differentiated impacts on health, food security, and human livelihoods. Intersectional discrimination can increase the vulnerability of some women to climate change. Women are also at higher risk of sexual violence, which can become more acute following national disasters. Therefore, policies and programs must address existing and emerging risks of gender-based violence against women in the context of disaster risk reduction and climate change.

Intensified threats to land, water, wildlife, and livelihoods significantly impact women living in rural areas. These women work the land or rely on marine and terrestrial ecosystems for their families' livelihoods. Economic pressures from climate-related disasters may lead to instances of child, early, and forced marriages as a coping strategy. Another coping mechanism is migration, such as rural women migrating from farming communities in drought-prone areas and those threatened by sea-level rise and extreme weather events. Rural women also play a significant role in climate adaptation and mitigation. Their local traditional knowledge is valuable; they observe environmental changes and know how to respond through various adaptive methods, including crop selection, planting, harvesting, soil conservation techniques, and efficient water resource management.

Decision 18/CP.20 by the UNFCCC Conference of the Parties introduced the Lima Work Programme on Gender, emphasizing the need for gender integration through relevant objectives in activities under the Convention to enhance their effectiveness. The Paris Agreement, in Article 7, Section 5, underscores the importance of gender inclusivity and equality in climate policies and actions. Parties acknowledged that

adaptation actions must be gender-responsive, participatory, and fully transparent, adopting a country-driven approach. Gendered impacts of climate change must be considered in planning mitigation and adaptation efforts, such as ensuring gender-sensitive investments in adaptation, mitigation, technology transfer, and capacity building.

The 2030 Agenda highlights the effects climate change can have on women. Just as with human rights, the Sustainable Development Goals (SDGs) are interconnected, and Goal 5 (gender equality) must be considered when achieving other goals, such as Goal 13. The lack of explicit reference to women and gender equality in some goals, particularly those closely linked to climate action (e.g., Goals 13, 7, 12, 14, and 15), does not diminish the need for gender-sensitive approaches to achieve these goals.

4.3. Children

According to the Convention on the Rights of the Child, the inherent dignity and equal and inalienable rights of all members of the human family are the foundation of freedom, justice, and peace in the world. This Convention establishes children's rights as fundamental and universal human rights and is the most widely ratified human rights instrument globally. The Committee on the Rights of the Child, in its General Comment No. 15 (2013) on the right of the child to the highest attainable standard of health, describes climate change as one of the greatest threats to children's health. Children, due to their unique metabolism, physiology, and developmental needs, are disproportionately affected by climate change. The Special Rapporteur on human rights obligations related to a safe, clean, healthy, and sustainable environment concluded that no group is as vulnerable to environmental harm as children. The Special Rapporteur emphasized that climate change and biodiversity loss present a grave threat that can endanger children's lives for years to come (*"Greta Thunberg's UN Petition on Human Rights," 2019*; *Humphreys, 2009*).

Climate change can significantly impact children's right to the highest standard of physical and mental health, access to education, adequate food, suitable housing, safe drinking water, and sanitation. Children in developing countries often face the worst climate impacts. The Office of the High Commissioner for Human Rights, in its study on the connection between climate change and the full

and effective enjoyment of children's rights, found that all children are vulnerable to the adverse effects of climate change, and the younger the child, the greater the risk. The study outlined key requirements for a child-rights-based approach, such as mitigation actions to minimize future negative impacts on children and adaptation measures focused on supporting the most vulnerable children. The Office highlighted the need for mitigation and adaptation efforts stemming from participatory and evidence-based decision-making processes that consider children's best interests and ideas. The Office also concluded that climate change litigation initiated by today's children can protect the interests of future generations, and a legal basis for these claims exists in many countries. Children and their representatives have been involved in environmental lawsuits in countries like the Philippines, Nigeria, and the United States.

During the 2019 Climate Action Summit convened by the Secretary-General, 16 children from 12 countries submitted an important petition to the Committee on the Rights of the Child, protesting governments' inaction on the climate crisis. Additionally, children and youth play a significant role in the climate justice movement, including Fridays for Future, Extinction Rebellion, and the Sunrise Movement.

4.4. *Migrants and Internally Displaced Persons*

International human rights instruments, such as the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the Universal Declaration of Human Rights, and the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, require states to respect all human rights provisions for everyone without discrimination, including the rights of all migrants under their jurisdiction or effective control, regardless of their migration status. The Paris Agreement explicitly recognizes the rights of all individuals in vulnerable situations, such as migrants, and calls on states to respect human rights in their climate actions.

The General Assembly, in Resolution 64/162, emphasized that natural disasters are a factor in internal displacement and expressed concern over factors exacerbating the impact of natural hazards and climate events. The Human Rights Council, in Resolution 35/20,

highlighted the urgency of protecting and promoting human rights for migrants and displaced persons across international borders in the context of the adverse impacts of climate change (Section 7). The Global Compact for Safe Migration invites countries to establish mechanisms for disaster risk reduction, climate change mitigation, and adaptation to address the needs of those whose lives and rights are most at risk from these threats. Human displacement can result from sudden events, slow-onset processes, or a combination of both. Measures to respond to the adverse effects of climate change, such as climate mitigation and adaptation, can also directly or indirectly influence population displacement (*Climate Finance Should Not Add to the External Debt Burdens of Poor Recipient Countries, 2011; Key Messages on Human Rights, Climate Change and Migration, 2019*).

When living conditions and human rights, such as the right to life, food, water, and health, are affected by climate-related hazards like desertification, environmental degradation, or rising sea levels, individuals may be forced to migrate either internationally or domestically, complicating the link between climate change and human displacement. Most environmental migration falls somewhere between voluntary and forced, but it is clear that climate change significantly exacerbates harm to human rights. Predictions suggest that most people displaced by climate change will remain in their home countries. Extreme climate events were a major cause of internal displacement for 28 million people in 2018. Internal displacement can be linked to cross-border migration, especially when people lack job security and access to essential services. Migrant workers and their families may be forced to migrate when basic needs like water, food security, jobs, and livelihoods become inaccessible, increasing the risk of severe human rights violations, such as human trafficking, forced labor, and sexual violence. Migrant women face vulnerabilities such as trafficking for sexual exploitation and other forms of discrimination in camps, at borders, and in destination countries ("*Greta Thunberg's UN Petition on Human Rights*," 2019). Thus, integrating human displacement and gender considerations into disaster risk reduction and climate change policies is crucial.

The negative impacts of climate change can reduce adaptive capacity and affect individuals' ability to

migrate, their freedom of choice, and their vulnerability before and after migration. Vulnerability can arise throughout migration, whether the movement is voluntary or not. Although climate change poses specific threats, the dangers faced by climate-displaced individuals are similar to those encountered by all migrants in vulnerable situations. In reality, most migrants lack access to safe and affordable migration pathways. Climate-induced migrants may become more vulnerable due to increased barriers to international migration. Human rights protection gaps for those crossing national borders in response to climate change stem from various legal and policy gaps. Governments and other stakeholders can take steps to address these gaps, such as implementing more robust climate action and creating safe, accessible pathways for human mobility. Acquiring more and accurate data on cross-border climate-related displacement enhances understanding of the phenomena. The Special Rapporteur on the Human Rights of Migrants emphasized that, although no place is entirely shielded from climate impacts, fragile environments have become increasingly vulnerable, including major deltas, small island developing states, low-lying coastal areas, arid regions, polar areas, and locations prone to sudden, severe natural disasters. The Special Rapporteur urged countries to consider migration as part of the solution to global environmental challenges and stressed the need for international cooperation in this regard.

4.5. *Persons with Disabilities*

The Convention on the Rights of Persons with Disabilities reaffirms that all persons with disabilities are entitled to the full range of human rights and fundamental freedoms on an equal basis with others. This Convention provides a framework for disability-inclusive climate responses and resilience. There are approximately 1 billion persons with disabilities worldwide, comprising a diverse population with varying individual conditions and support needs. They face significant attitudinal barriers, such as stereotypes, stigma, and prejudice, as well as environmental obstacles, which prevent their full and effective participation in society on an equal basis with others.

The Office of the High Commissioner for Human Rights, in its study on promoting and supporting the rights of persons with disabilities in the context of climate change,

concluded that persons with disabilities are at heightened risk from the adverse impacts of climate change due to various social and economic factors. Poverty, discrimination, and stigma are major elements that increase the exposure of persons with disabilities to climate change effects. Intersectional factors related to gender, age, ethnicity, geography, migration, religion, and gender identity may further heighten the risks faced by some persons with disabilities, affecting areas such as health, food security, housing, water and sanitation access, livelihoods, and more. In emergencies, persons with disabilities are disproportionately affected in terms of harm and mortality rates and often have the least access to emergency support.

Natural disasters can severely impact persons with disabilities' access to food and nutrition, safe drinking water, sanitation, healthcare services and medications, education, adequate housing, and dignified employment. Most persons with disabilities live in poverty, experiencing lower levels of income and employment and higher disability-related costs. Social support and poverty reduction programs often overlook the needs of persons with disabilities and may include incentives to enter the labor market. Thus, compared to non-disabled individuals, persons with disabilities face greater risks and have lower resilience to climate change and natural disasters. The IPCC predicts that the poorest individuals will experience the worst impacts of climate change through reduced income and livelihood opportunities, displacement, hunger, and adverse health effects.

Article 4, Section 3 of the Convention on the Rights of Persons with Disabilities mandates the active participation of persons with disabilities and their representative organizations in all matters affecting them. Article 33, Section 3 also requires the participation of civil society, particularly persons with disabilities and their representative organizations, in monitoring processes (*Quantified Economy-Wide Emission Targets for 2020, 2009*). As one of the groups most vulnerable to climate change, persons with disabilities must actively participate in advancing climate actions through their representative organizations. Their involvement should be guaranteed at all stages of decision-making, planning, implementation, and monitoring of strategies, awareness-raising, resource allocation, research, and data collection.

5. Responsibilities in the Context of Climate Change

The UN Charter, the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, and the Declaration on the Right to Development all explicitly state that governments have human rights obligations, which necessitate individual and collective state actions. Governments hold primary responsibility for human rights and must respect, support, and implement these rights for all individuals. The Declaration on the Right to Development emphasizes that all people bear individual and collective responsibility for development. The Guiding Principles on Business and Human Rights also affirm that businesses have human rights obligations. Human rights instruments make it clear that all responsible actors must be held accountable for the negative impacts of their activities and must collaborate to mitigate these effects, including addressing climate change impacts (*UN Conference on New Emissions Treaty, 2011*).

Governments, as the primary duty bearers, have a positive obligation to mitigate climate change and must ensure that all individuals have the capacity to adapt to its consequences. States' responsibilities to respect, protect, and fulfill all human rights for all people extend to populations beyond their territories, as stipulated in Articles 55 and 56 of the UN Charter.

5.1. Governments

The preamble of the Paris Agreement highlights that countries must respect commitments related to human rights, the right to health, the rights of Indigenous peoples, local communities, migrants, children, persons with disabilities and vulnerable people, the right to development, gender equality, women's empowerment, and intergenerational equity. Governments are obliged to respect, support, promote, and implement all human rights provisions, including the duty to prevent foreseeable harm, such as climate change-related damage. The Office of the High Commissioner for Human Rights, in its key messages on human rights and climate change, outlines the core obligations of governments regarding climate change (*Key Messages on Human Rights, Climate Change and Migration, 2019*).

5.1.1. *Mitigating Climate Change and Preventing Its Negative Impact on Human Rights*

States must respect all human rights provisions for all individuals without discrimination. Failing to take positive actions to prevent human rights harms resulting from climate change, such as long-term foreseeable damages, constitutes a breach of this obligation. The Intergovernmental Panel on Climate Change (IPCC), in its Fifth Assessment Report, confirmed that climate change is driven by greenhouse gas emissions. The adverse impacts of climate change exponentially increase with the degree of climate change and disproportionately affect vulnerable groups, including women, children, the elderly, Indigenous peoples, minorities, migrants, rural workers, persons with disabilities, and the poor. Therefore, countries must take necessary measures to limit anthropogenic greenhouse gas emissions (mitigating climate change) and implement oversight to prevent current and future negative impacts on human rights as much as possible.

5.1.2. *Ensuring Everyone Has the Capacity to Adapt to Climate Change*

Countries must ensure that appropriate adaptation measures are taken to protect the rights of all individuals, particularly those most at risk of adverse climate impacts, such as people living in vulnerable areas. Governments should also build adaptive capacities in vulnerable communities and allocate sufficient resources to enable people, especially those at the greatest risk, to realize their economic, social, and cultural rights.

5.1.3. *Ensuring Effective Accountability for Human Rights Harms Caused by Climate Change*

According to the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, and other human rights instruments, states are obligated to ensure effective measures to address human rights violations. Climate change and its effects, such as sea level rise, extreme weather events, and drought, have already caused human rights harm to millions. For governments and communities most at risk, this situation is linked to their survival. People already affected or who will be affected in the future must have access to meaningful remedies, such as judicial

mechanisms and other redress mechanisms. States' obligations regarding climate change and other environmental harms extend to all rights holders and cover damage that occurs both within and beyond their borders. States must be held accountable to rights holders for contributing to climate change, regardless of where the harm occurs ("[Greta Thunberg's UN Petition on Human Rights](#)," 2019; [Key Messages on Human Rights, Climate Change and Migration](#), 2019; "[Slow-Onset Effects of Climate Change and Human Rights Protection for Cross-Border Migrants](#)," 2018).

5.1.4. *Mobilizing Maximum Available Resources for Human Rights-Based Sustainable Development*

According to core human rights treaties, states acting individually or collectively must use the maximum available resources to progressively realize economic, social, and cultural rights and to advance civil and political rights, as well as the right to development. Failing to take reasonable measures to mobilize resources to prevent foreseeable human rights harms caused by climate change breaches this obligation. Innovative measures, such as carbon taxes with appropriate protections to minimize the negative impacts of greenhouse gas emissions on the poor, can be designed to internalize environmental externalities and mobilize additional resources to fund mitigation and adaptation efforts aimed at empowering the most vulnerable groups.

5.1.5. *Cooperating with Other Countries*

Climate change is a human rights threat with cross-border causes and consequences, requiring a global response grounded in international solidarity. Countries must share resources, knowledge, and technology to combat climate change. International assistance for climate mitigation and adaptation should be additional to existing official development aid commitments. Climate aid must be adequate, effective, and transparent, managed through participatory, non-discriminatory processes, and primarily directed toward vulnerable individuals and groups. States should collaborate on joint efforts to address climate-related displacement and migration and manage climate-related conflicts and security risks.

5.1.6. *Ensuring Justice in Climate Actions*

The Rio Declaration on Environment and Development, the Vienna Declaration and Programme of Action, all emphasize the realization of the right to development to equitably address the developmental and environmental needs of present and future generations. The United Nations Framework Convention on Climate Change (UNFCCC) urges countries to act on climate change based on equity and common but differentiated responsibilities and respective capabilities, protecting future generations. Equity in climate action requires that mitigation and adaptation efforts benefit people in developing countries, Indigenous peoples, vulnerable individuals, and future generations.

5.1.7. *Ensuring Everyone Benefits from Scientific Advancement and Its Applications*

According to the International Covenant on Economic, Social and Cultural Rights, everyone has the right to benefit from scientific advancements and their applications (Article 15). States must actively support the development, dissemination, and transfer of new technologies to mitigate climate change and achieve adaptation. Environmentally sound and clean technologies should be affordably priced, with development costs shared equitably, and benefits distributed fairly among and within countries. Technology transfer between nations should ensure a fair, comprehensive, and effective international response to climate change. Additionally, governments must ensure that global intellectual property regimes do not hinder the dissemination and transfer of mitigation and adaptation technologies, while promoting incentives to support sustainable development goals. The right of Indigenous peoples to participate in decisions and benefit from their knowledge, innovations, and practices must also be upheld.

5.1.8. *Protecting Human Rights from Business Harms*

The Guiding Principles on Business and Human Rights affirm that states must protect individuals from human rights abuses by third parties within their territory or jurisdiction. Governments must take adequate measures through policies, laws, and effective enforcement to protect individuals from business-related human rights harms, such as business contributions to climate change.

States must also ensure that their activities, including those involving private sector collaboration, respect human rights (*Key Messages on Human Rights, Climate Change and Migration, 2019*).

5.1.9. Ensuring Equality and Non-Discrimination

Countries are committed to ensuring equality and non-discrimination. Efforts to address climate change must not exacerbate inequalities within or between nations. For example, the rights of Indigenous peoples must be fully respected in accordance with the United Nations Declaration on the Rights of Indigenous Peoples, and actions impacting their rights should not occur without their free, prior, and informed consent. Gender perspectives, such as ensuring gender equality in all climate change mitigation and adaptation planning, must also be integrated (*UN Conference on New Emissions Treaty, 2011*). The rights of children, the elderly, minorities, migrants, and others in vulnerable situations must be effectively protected. For more information on equality and non-discrimination, refer to Question 6.

5.1.10. Ensuring Meaningful and Informed Participation

The International Covenant on Civil and Political Rights and other human rights instruments, particularly the Declaration on the Right to Development, guarantee the right of everyone to free, active, meaningful, and informed participation in public affairs and development. Government guidelines on effective participation in public affairs emphasize that participation can facilitate the realization of all human rights. The right to free, active, meaningful, and informed participation is essential for effective rights-based climate action and requires open and participatory institutions and processes, accurate and transparent monitoring of greenhouse gas emissions, climate change, and its impacts. States must make relevant information on early warnings of climate impacts and natural disasters accessible to all community members (*Climate Vulnerable Forum: History, 2011; Climate Vulnerable Forum: Participating Countries, 2011*). Adaptation and mitigation plans must be publicly available, transparently financed, and developed in consultation with affected groups. Special attention must be paid to fulfilling human rights obligations regarding the participation of individuals, groups, and vulnerable

populations in decision-making processes and ensuring that adaptation and mitigation efforts do not adversely affect those they are meant to protect.

5.2. Business Enterprises

The Guiding Principles on Business and Human Rights, unanimously endorsed by the Human Rights Council in 2011, state that governments must protect human rights from abuses by businesses, and business enterprises must respect human rights. They should be accountable for their climate impacts and responsibly engage in climate change mitigation and adaptation efforts, fully respecting human rights (*Climate Vulnerable Forum: Participating Countries, 2011; Guidelines for Public Participation in Climate Affairs, 2018*). In cases where governments utilize private financing or market-based approaches for climate action within the international climate change framework, it is crucial to ensure businesses comply with these responsibilities.

The second pillar of the Guiding Principles outlines the corporate responsibility to respect human rights, which requires avoiding infringing on the rights of others and addressing adverse human rights impacts that a business is involved in. This responsibility applies to all companies regardless of size, sector, operational context, ownership, or structure. The corporate responsibility to respect human rights encompasses all internationally recognized human rights standards (at a minimum, as set out in the International Bill of Human Rights) and core labor standards outlined in the International Labour Organization's Fundamental Principles. Depending on the context, businesses may also need to consider additional standards.

The corporate responsibility to respect human rights requires businesses to:

- Avoid causing or contributing to adverse human rights impacts through their activities and mitigate such impacts if they occur, including greenhouse gas emissions, toxic waste, air, water, and soil pollution, and deforestation. These issues negatively affect human life, health, ecosystems, and biodiversity.
- Make efforts to prevent or mitigate adverse human rights impacts linked directly to their operations, products, or services through business relationships, even if the company has

not contributed to these impacts, such as impacts from greenhouse gas emissions and toxic waste.

Furthermore, to fulfill their responsibility to respect human rights, businesses must:

- Develop and implement a clear policy that outlines their commitment to respect human rights, including policies specifically addressing climate change mitigation and associated actions.
- Conduct human rights due diligence to identify, prevent, mitigate, and address climate change impacts on human rights and to demonstrate respect for human rights. Conducting social and environmental impact assessments should be integral to this process.
- Establish mechanisms to address any adverse human rights impacts they cause.

Business enterprises have an independent responsibility to respect human rights, which remains valid regardless of whether governments fulfill their own obligations. This responsibility is distinct from issues related to legal liability and enforcement, as defined by national laws in relevant jurisdictions. If a business enterprise contributes to or can potentially contribute to adverse human rights impacts, it must cease or prevent its involvement and mitigate any residual impact to the greatest extent possible, including supporting climate adaptation measures. If a business enterprise determines that it has caused or facilitated harm, it must cooperate to remediate it. The Guiding Principles recognize the role of grievance mechanisms, both governmental and non-governmental, as potential remedies for human rights harms. Additionally, if a business enterprise can influence a harmful practice of another business entity (e.g., due to a business relationship or control), it is expected to take action to mitigate or halt the adverse human rights impact. Governments are also expected to intensify their efforts to address climate change. Collaboration between governments, businesses, and other stakeholders (e.g., through multi-stakeholder initiatives) can provide constructive pathways for shaping collective climate responses.

6. Conclusion

Human rights are universal and rooted in the inherent dignity of all human beings. People have rights. Those most affected by climate change have a greater right to protective measures against its negative impacts. Climate action must align with human rights obligations, standards, and principles, protecting everyone, especially the most vulnerable, such as children, minorities, persons with disabilities, migrants, and displaced persons. These groups, who have contributed the least to climate change, unfairly bear the brunt of its consequences. These rights holders must be central participants and beneficiaries of climate actions and have access to effective solutions.

On the human rights front, climate change and related projects have already caused rights violations for less resilient and powerful individuals. Governments must adopt a collective approach rooted in comprehensive justice and the elimination of discrimination to protect vulnerable groups from climate change. Collective action requires sustainable development steps that maintain environmental balance, backed by the human right to a healthy environment. A climate justice program grounded solely in human rights can pivot away from carbon-based financial exploitation toward sustainable development based on equity and social justice. Advocates of climate justice must utilize complementary norms and standards, such as accountability and social responsibility from both public and private actors, to establish a fair global climate regime.

Authors' Contributions

Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

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Declaration of Interest

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In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.

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