



Human Rights Law Clinic Papers 2023

CLIMATE CHANGE AND BUILDING RESILIENT HEALTH AND SOCIAL SYSTEMS

To: Amnesty International

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I. List of Legal Instruments

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Portillo Cáceres and Others v Paraguay, CCPR/C/126/D/2751/2016, Communication 2751/2016.

UN Committee for the Elimination of All Forms of Discrimination Against Women, *General recommendation No.37* (13 March 2018) UN Doc CEDAW/C/GC/37.

UN Committee on the Elimination of Discrimination Against Women, “General recommendation No. 39” (26 October 2022) UN Doc CEDAW/C/GC/39.

UN Committee on the Rights of the Child (CRC Committee), *General Comment No. 15: On the Rights of the Child to the Enjoyment of the Highest Attainable Standard of Health (Art. 24 of the Convention)*, 17 April 2013, CRC/C/GC/15.

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UN Human Rights Committee (HRC), *General Comment No. 36: The Right to Life (Art. of the 6 Covenant)*, 3 September 2019, CCPR/C/GC/35.

UN Human Rights Council, *Resolution adopted by the Human Rights Council on 8 October 2021 - The Human Right to a Clean, healthy, and sustainable environment*, 18 October 2021, A/HRC/RES/48/13.

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UNGA Res 34/180 (18 December 1979) *Convention on the Elimination of All Forms of Discrimination against Women*.

UNGA Res 44/30 (22 April 2020) *Report of the Office of the United Nations High Commissioner for Human Rights* UN Doc A/HRC/44/30.

UNGA, Human Rights Council: Resolution 41/21 adopted by the General Assembly, 12 July 2019, A/HRC/RES/41/21.

UNGA, Human Rights Council: Resolution 48/13 adopted by the General Assembly, 18 October 2021, A/HRC/RES/48/13.

II. List of Abbreviations

CAF	Cancun Adaptation Framework
CEDAW Committee	Committee on the Elimination of All Forms of Discrimination Against Women
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CESCR	Committee on Economic, Social and Cultural Rights
COB	Concluding Observations
CRC Committee	Committee on the Rights of the Child
CRC	Convention on the Rights of the Child
CRPD Committee	Committee on the Rights of Persons with Disabilities
CRPD	Convention on the Rights of Persons with Disabilities
CSW	The Commission on the Status of Women
ECHR	European Convention on Human Rights
GEF	Global Environment Facility
OHCHR	Human Rights Committee
HRC	Human Rights Council
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
LDCs	Least Developed Countries
NAP	National Adaptation Plan
NDMA	National Disaster Management Authority
RMI	Republic of the Marshall Islands
SIDS	Small Island Developing States
UNFCCC	United Nations Framework Convention on Climate Change

WHO

World Health Organization

Introduction

Climate change worldwide is causing an imminent risk to people's health. The melting of the poles, increased rainfall in tropical areas, forest fires, and changes in seasonal temperatures have become a risk for the realisation of human rights. Following the international community's recognition of the right to a clean, healthy, and sustainable environment,¹ it has become more than necessary for states, non-states actors, and international mechanisms to take an active role in preventing, managing, and responding to the risks that climate change poses to human rights and public health. This will be analysed throughout this memorandum, together with states' responsibility and obligation to protect people from its effects, particularly regarding its impact on the right to health. It will look into what practices and systems states should implement to combat the problem this problem.

The memorandum is divided into two main sections. The first one analyses the correlation between the climate crisis and the fulfilment of human rights obligations. This section will briefly describe the concept of economic and social rights and their proper implementation by states through progressive realisation, and how the responsibility of states to fulfil these rights is linked to the health risks currently posed by climate change. This is done by analysing what international law, treaties, and treaty bodies say, emphasising groups with unique vulnerabilities. It also examines the development of the relationship between the right to health and human rights more broadly. Secondly, the memorandum focuses on applying the applicable law from the different instruments, by exploring how states can create a health system that addresses the challenges posed by climate change and by looking at real examples of good practices already being developed worldwide through governmental or non-governmental actors.

To conclude, we will demonstrate that states must assume the responsibility to foresee and be prepared to address possible human rights violations, e.g., of the right to health through pre-established measures in national health and social systems. It will set out specific actions' states could take to ensure they are fulfilling their socioeconomic rights obligations, especially under the International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of the Child, the Convention on the Elimination of All Forms of Discrimination Against Women, and the Convention on the Rights of Persons with Disabilities.

¹ UNGA, Human Rights Council: Resolution 48/13 adopted by the General Assembly, 18 October 2021, A/HRC/RES/48/13.

The methodology that is used is doctrinal research, analysing the human rights instruments at the international level. After in-depth analysis of this instruments, the memorandum will switch its focus on analysing examples and good practice from different countries and regions. In this section, by using a socio-legal approach, it will be underlined how these good practices in contrast with the legal instruments can implement a more effective applicability of the legal instruments, by creating health resilient systems to face climate change.

2. Correlation between the climate crisis and the fulfilment of human rights obligations

a. Concept of economic and social rights and their proper implementation by states through progressive realisation

International human rights treaties recognise economic and social rights as fundamental rights.² These are the rights of individuals to necessities and services essential for an adequate standard of living, including food, shelter, healthcare, education, and employment.³

ICESCR establishes the fundamental basis for all socioeconomic rights. Article 2(1) of ICESCR outlines the implementation these rights by states through the principle of progressive realisation.⁴ The steps indicated in the Convention ought to be taken individually by each country, or in cooperation with international assistance.⁵ States recognise that certain rights may be limited by financial or other constraints and may not be fully realised immediately. Still, states are required to take concrete steps to move towards a full realisation of those rights. The realisation of the right varies across countries considering environmental, cultural, and geographical factors.⁶ States are responsible for fulfilling these rights, which are also linked to the health risks of climate change because it has significantly impacted individuals' socioeconomic rights. Individuals and groups have been affected by extreme weather events with the loss of homes and livelihoods, and to an extreme with the loss of lives.⁷ Consequently, it is incumbent upon states to undertake measures aimed at preventing and adapting to these effects in order to protect and promote socioeconomic rights of their citizens. Several

² Theo Van Boven, 'Categories of rights' in Daniel Moeckli and others (eds), *International Human Rights Law* (4th edn, OUP 2022) 135.

³ International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 (ICESCR) art 11.

⁴ *ibid* art 2.

⁵ *ibid* art 2.

⁶ Rhona K.M. Smith, *International Human Rights Law* (10th edn OUP 2021) ch 16.

⁷ Lavanya Rajamani, 'Climate Change' in Daniel Moeckli and others (eds), *International Human Rights Law* (4th edn, OUP 2022) 644.

measures can be taken to mitigate greenhouse gas emissions, improve access to clean water and energy, reinforce disaster responses and preparedness, and promote sustainable agriculture and forestry.⁸

b. How should states prepare their systems for the likely risks of climate change?

Numerous states have implemented policies and regulations aimed at promoting energy efficiency and reducing greenhouse gas emissions in response to the Paris Agreement, as a means of mitigating the impact of climate change.⁹ However, it is recommended that states adopt measures that are more closely associated with socioeconomic rights and the right to a dignified life. This is because the impact of climate change has a direct effect on various rights, including the right to health and the right to housing. Failure to uphold these rights would jeopardise the right to a dignified life. Therefore, it is imperative for states to develop and implement strategies to mitigate the potential hazards associated with climate change. Various methodologies can be employed, encompassing:

1. The objective is to formulate and execute strategies aimed at mitigating the impact of climate change on marginalised communities, including but not limited to children, women, persons with disabilities, and indigenous groups. It is recommended that states prioritise investment in infrastructure and services that exhibit resilience to the impacts of climate change. This includes but is not limited to measures such as food protection, early warning systems, and healthcare facilities that have been adapted to the changing climate.¹⁰
2. It is essential that states prioritise the involvement of children and young individuals in climate change planning and decision-making across all levels, including international, national, regional, and local domains.¹¹
3. It is essential that states allocate sufficient resources and extend support to all communities impacted by the consequences of climate change. This entails attending to the requirements of individuals who have been displaced or compelled to migrate

⁸ *ibid.*

⁹ Paris Agreement to the United Nations Framework Convention on Climate Change (adopted 12 December 2015, entered into force 4 November 2016) UNTS 3156.

¹⁰ UNFCCC, 'The Paris Agreement' (2015) available at: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement> accessed 10 April 2023.

¹¹ Children's Environmental Rights Initiative, 'Children and Youth in Climate Action: A Guide to Involving Children and Young People in Climate Change Planning and Decision-making', available at: <https://www.ceri-alliance.org/children-and-youth-in-climate-action> accessed 10 April 2023.

as a result of the climate-induced effects on their communities, and establishing an innovative support framework for the impacted communities that necessitate recuperation and restoration.¹²

2.1 Human Rights Committee (OHCHR) and Human Rights Council (HRC)

OHCHR has issued General Comment No. 36 regarding the right to life, in which it has discussed the relationship between article 6 of ICCPR and the influence of climate change on this right. The Committee's comment pertained to the responsibility of all states parties to the Convention to implement measures aimed at reducing the impact of climate change on the realisation of the right to life.¹³

The Committee deliberated on the responsibility incumbent upon states parties to safeguard the right to life. It is recommended that governments implement suitable actions to tackle the prevailing societal circumstances that may potentially pose a risk to human life or impede individuals from experiencing a life with dignity.¹⁴ These situations may encompass the deterioration of the natural surroundings, the widespread presence of diseases, and the prevalence of hunger, malnutrition, and poverty.¹⁵ The Committee has recommended the implementation of measures aimed at ensuring the protection of the right to life, including but not limited to the provision of prompt access to essential goods and services such as food, water, shelter, healthcare, and sanitation. Additionally, the Committee has suggested the adoption of measures aimed at promoting and facilitating adequate general conditions, such as the strengthening of emergency health services.¹⁶

Furthermore, the Committee observed that climate change has a disproportionate effect on marginalised groups, including but not limited to women, children, indigenous communities, and individuals with disabilities. The statement emphasises the importance of safeguarding the rights of marginalised communities, particularly by ensuring their involvement in climate change-related decision-making procedures.¹⁷ In addition, it is essential for the states that are parties to the Convention to guarantee the sustainable utilisation of natural resources,

¹² Internal Displacement Monitoring Centre and GRID-Arendal, 'Global Report on Internal Displacement 2021' (IDMC and GRID-Arendal, 2021), available at: <https://www.internal-displacement.org/sites/default/files/publications/documents/2021-IDMC-GRID-Global-Report.pdf> accessed 10 April 2023.

¹³ UN Human Rights Committee (HRC), *General Comment No. 36: The Right to Life (Art. of the 6 Covenant)*, 3 September 2019, CCPR/C/GC/35, para 26.

¹⁴ *ibid* para 26.

¹⁵ *ibid*.

¹⁶ *ibid*.

¹⁷ *ibid*.

establish and execute substantial environmental standards, carry out assessments of environmental impact, and engage in consultations with pertinent states regarding activities that are anticipated to have a noteworthy impact on the environment. Moreover, these states should provide notification to other concerned states about natural disasters and emergencies and collaborate with them accordingly.¹⁸

HRC has issued communications that establish a connection between climate and/or environment and the well-being of the general public. An instance that can be cited is the legal case of *Portillo Cáceres and Others v Paraguay*.¹⁹ The Council has determined that Paraguay has violated the right to life. The decision at hand is grounded on the Committee's General Comment No. 36, which suggests that the right to life encompasses an individual entitlement to lead a life with dignity and to be protected from any acts or omissions that may lead to their unnatural or premature death.²⁰ The previously mentioned text explained that it is imperative for states to implement positive measures to tackle societal situations that may potentially endanger human life, such as environmental contamination, even if such circumstances have not yet caused any fatalities.²¹ The current situation suggests that the execution of large-scale fumigations carries related hazards to human health that could have been foreseen. The utilisation of fumigants presented a plausible risk to the water sources, crops, and livestock that functioned as fundamental sources of sustenance for the farming population. Furthermore, despite the acknowledgement by multiple governmental bodies and the adverse effects and the government's incapacity to enforce regulations, Paraguay persisted in disregarding the discontinuation of fumigation.²² The case bears considerable significance as the Committee has recognised a clear association between safeguarding the environment and safeguarding human rights in a specific instance.

Moreover, HRC adopted resolution 48/13 in 2021, which pertains to individuals' entitlement to a clean, healthy, and sustainable environment. The resolution recognises that this provision is crucial for the complete realisation of human rights, which includes the right to life, health, food, water, and culture.²³

The resolution mandates that states must take measures to ensure that all individuals have equal access to an environment that is safe, clean, and sustainable, and requires states to

¹⁸ *ibid.*

¹⁹ *Portillo Cáceres and Others v Paraguay*, CCPR/C/126/D/2751/2016, Communication 2751/2016.

²⁰ *ibid.*

²¹ *ibid.*

²² *ibid.*

²³ UNGA res 48/13 (n1).

undertake actions aimed at guaranteeing universal access to it in a non-discriminatory manner. The previous statement underscores the importance of promoting environmental education and awareness while ensuring public participation in environmental decision-making processes.²⁴

The resolution recognises the urgent need to confront worldwide environmental issues, including but not limited to climate change, pollution, and biodiversity depletion. It promotes cooperative attempts and collaborations on a global scale to address these matters. This statement highlights the utmost importance of the entitlement to an unpolluted, clean, and healthy environment in protecting and promoting human rights. The achievement of this objective is encouraged through collaborative efforts among all states.²⁵

2.2 International Covenant on Economic, Social and Cultural Rights (ICESCR)

As per the provisions of article 2 of ICESCR, it is mandatory for the states parties to undertake measures, both independently and with the aid of international assistance and cooperation, to the best of their available resources, with the aim of gradually accomplishing the complete realisation of the rights.²⁶ In order to safeguard the various substantive rights delineated by ICESCR that may face increased risk in the context of climate change, it is imperative to undertake certain measures.

CESCR has acknowledged the influence of climate change on the attainment of economic, social, and cultural rights. The Committee released its inaugural declaration on the subject of climate change and its potential impacts on the entitlements to health, food, water and sanitation in 2018.²⁷ They acknowledge that vulnerable groups, such as children, women, persons with disabilities, and indigenous peoples, are particularly impacted by the effects of climate change.²⁸ As per the declaration made by the Committee, the entitlement to sufficient sustenance is intricately linked to the fundamental dignity of individuals and is imperative for the fulfilment of other human rights that are enshrined in the Covenant.²⁹ The Committee recommended that states implement a climate change strategy that is grounded in human

²⁴ *ibid.*

²⁵ UN Human Rights Council, *Resolution adopted by the Human Rights Council on 8 October 2021 - The Human Right to a clean, healthy and sustainable environment*, 18 October 2021, A/HRC/RES/48/13, available at: <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G21/289/50/PDF/G2128950.pdf?OpenElement>, accessed 10 April 2023.

²⁶ ICESCR (n3) art 2.

²⁷ Committee on Economic, Social and Cultural Rights (CESCR), *Statement on Climate Change and the International Covenant on Economic, Social and Cultural Rights (ICESCR)*, 31 October 2018, E/C.12/2018/1.

²⁸ *ibid.*

²⁹ *ibid.*

rights principles, prioritising the welfare and entitlements of individuals in the development and execution of climate change policies and initiatives.³⁰ This entails ensuring the participation of individuals and communities in decision-making processes related to climate change and mitigating the disproportionate impact of climate policies on vulnerable and underrepresented groups.³¹

CESCR has made references to climate change in multiple Concluding Observations (COB) (see Annex 1) as well as in various General Comments. The Committee initially acknowledged the issue of climate change and its General Comment No. 15 concerning the right to water.³² The Committee's General Comment underscores the pressing necessity of mitigating the effects of climate change on water resources, which are essential for the realisation of socioeconomic rights for current and future generations.³³

In addition, the Committee has taken measures to safeguard rights against the consequences of climate change, specifically in terms of adaptation, and has also emphasised the importance of procedural fairness across various COBs. As evidenced by the Concluding Observations for Bangladesh in 2018, CESCR has suggested that the state should guarantee that their approaches are executed in accordance with human rights principles, and that affected communities are meaningfully involved in the process.³⁴

The work of CESCR underscores the significance of engaging in discourse regarding the impact of climate change on the rights enshrined in the Convention. Furthermore, it emphasises that in the absence of additional measures, the enjoyment of said rights will continue to be impacted. Even though the Committee has acknowledged the potential threats that climate change poses to the realisation of human rights, it has refrained from providing any directives to states on how to mitigate the negative effects of climate change on human rights.

³⁰ *ibid.*

³¹ *ibid.*

³² CESCR, *General Comment No. 15: The Right to Water (Art. 11 and 12 of the Covenant)*, 20 January 2003, E/C.12/2002/11.

³³ *ibid.*

³⁴ CESCR, Concluding Observation, Bangladesh, 18 April 2018, E/C.12/BGD/CO/1, para 14.

2.3 Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and The Commission on the Status of Women (CSW)

Women experience more significant risks concerning violation of their human rights due to the climate crisis. CEDAW classifies “any distinction, exclusion or restriction made based on sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women”³⁵ as *discrimination against women*. Therefore, CEDAW Committee recognises the direct link between being a woman and the risks to their health and well-being that are directly related to climate change: “Women and men are affected differently by climate change and disasters, with many women experiencing greater risks, burdens, and impacts. Crises exacerbate pre-existing gender inequalities and compound the intersecting forms of discrimination against, among women”.³⁶

The Committee's General Recommendation No. 37 on the gender dimensions of disaster risk reduction in climate change highlights the importance of safeguarding women's entitlement to health. Gender disparities in access to food, nutrition, and healthcare, as well as societal norms that place the responsibility of caregiving on women, exacerbate the vulnerability of females to illnesses.³⁷ For this reason, in paragraph 68, the Committee recommends eight actions (see Annex 2) that states should take to protect the right to health of girls and women. Incorporate women in leadership roles and involve them in the development of comprehensive healthcare services for women. Secondly, removing obstacles that hinder the access of women and girls to healthcare services. Thirdly, it is recommended to prioritise the delivery of family planning and sexual and reproductive health information and services in disaster preparedness and response programmes.³⁸ Furthermore, it is recommended that all health services functioning during times of disaster adhere to the promotion of women's human rights, encompassing the rights to autonomy, privacy, confidentiality, informed consent, non-discrimination, and choice.³⁹ Additionally, it is suggested that data pertaining to gender disparities in vulnerability to infectious and non-infectious diseases that arise during disaster situations and as a consequence of climate change be collected and shared.⁴⁰

³⁵ UNGA Res 34/180 (18 December 1979) *Convention on the Elimination of All Forms of Discrimination against Women* art 1.

³⁶ UN Committee for the Elimination of All Forms of Discrimination Against Women, *General recommendation No.37* (13 March 2018) UN Doc CEDAW/C/GC/37, 2.

³⁷ *ibid* 20.

³⁸ CEDAW (n35) art 20,21.

³⁹ *ibid* para 68(f).

⁴⁰ *ibid* para 68(h).

Through this document, CEDAW Committee directly calls for the need “to develop integrated rights-based disaster and climate change action plans and strategies”⁴¹ and emphasise how intersectionality is vital through a gender lens approach. CEDAW Committee states that it is necessary that the construction of policies and the structure of health systems have a gender approach and that within women and girls there are individuals belonging to marginalised groups with greater vulnerability.⁴²

CEDAW Committee, in its General Recommendation No. 39 on the rights of indigenous women and girls, states how climate change affects the right to water and food by threaten food security and contaminate and disrupt water supplies⁴³ and how it is necessary for "states to take urgent measures to ensure that indigenous women and girls have adequate access to sufficient food, nutrition and water".⁴⁴ Likewise, with reference to articles 12 and 14 of the Convention, the Committee acknowledges the inherent connection between indigenous women and girls and *Mother Earth*. Consequently, the Committee asserts that the lack of sufficient actions taken by states to prevent, mitigate, and redress instances of environmental degradation represents a manifestation of discrimination and violence against indigenous women and girls, which necessitates immediate attention.⁴⁵

Furthermore, CSW recognises the risks to women’s health in natural disasters with a higher rate of maternal mortality, sexual abuse, gender-based violence or abortions,⁴⁶ and it emphasises the need for a gender perspective in natural disaster management strategies.⁴⁷ In addition, the Commission has reaffirmed that women and girls are disproportionately affected by the impacts of natural disasters, extreme weather events, sea-level rise and other climate change related issues. At the same time states that are deeply concerned about the adverse impacts of climate change on women and girls, especially those living in poverty.⁴⁸ One of its significant recommendations is to emphasise the need for the high participation of women in the construction of climate change policies to “ensure a comprehensive approach to address the hardships faced by women and girls by integrating their specific needs into humanitarian responses to natural disasters”.⁴⁹

⁴¹ *ibid.*

⁴² *ibid* para 68(f).

⁴³ UN Committee on the Elimination of Discrimination Against Women, *General recommendation No. 39* (26 October 2022) UN Doc CEDAW/C/GC/39 para 58.

⁴⁴ *ibid* para 58.

⁴⁵ *ibid* para 60.

⁴⁶ UN Economic and Social Council (ECOSOC) Report 27 (15 March 2012) *Commission on the Status of Women* UN Doc E/2012/27 p 21.

⁴⁷ *ibid* 10.

⁴⁸ ECOSOC Res 58/2 (21 March 2014) *Commission on the Status of Women* UN Doc CSW58 para 34.

⁴⁹ *ibid* para B(tt) 15.

2.4 Convention on the Rights of the Child (CRC)

CRC Committee has acknowledged that the issue of climate change presents a substantial risk to the rights and overall welfare of children. Specifically, it has been noted that the enjoyment of fundamental rights, including but not limited to life, health, access to food, water and sanitation, and adequate housing, may be negatively impacted by climate change.

As per CRC Convention, it is prohibited to discriminate against children, and it is the responsibility of states to safeguard various rights that are implicitly linked to environmental and climate protection. These rights include but are not limited to the right to life,⁵⁰ the right to an adequate standard of living,⁵¹ to food, water and sanitation,⁵² housing⁵³ and to education.⁵⁴ Additionally, the Convention comprises two provisions that mandate states to consider environmental issues while safeguarding the rights of children.⁵⁵ According to the Convention, it is imperative for states to fully implement the right of children to the highest possible standard of health, while also taking into account the potential hazards and risks associated with environmental pollution.⁵⁶ Additionally, state parties must ensure that the right to education encompasses the promotion of respect for the natural environment, as outlined in article 29(1)(e) of the Convention.⁵⁷

The Committee has elaborated upon the extent of these responsibilities pertaining to climate change in two of its General Comments. In 2013, the Committee released General Comment No. 15, on the right of the child to the enjoyment of the highest attainable standard of health.⁵⁸ CRC has underscored that environmental intervention must include measures to combat climate change, as it poses a significant risk to children's health and contributes to health inequalities.⁵⁹ Furthermore the Committee has argued that it is imperative for nations to prioritise the well-being of children in their strategies pertaining to climate change adaptation and mitigation.⁶⁰

⁵⁰ Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 (CRC) art 6.

⁵¹ *ibid* art 27.

⁵² *ibid* art 24.

⁵³ *ibid* art 27.

⁵⁴ *ibid* art 26.

⁵⁵ *ibid* art 24 and 29.

⁵⁶ *ibid* art 24(2)(c).

⁵⁷ *ibid* art 29(1)(e).

⁵⁸ UN Committee on the Rights of the Child (CRC Committee), *General Comment No. 15: On the Rights of the Child to the Enjoyment of the Highest Attainable Standard of Health (Art. 24 of the Convention)*, 17 April 2013, CRC/C/GC/15.

⁵⁹ *ibid* para d.

⁶⁰ *ibid*.

In addition, the Committee emphasised the significance of education pertaining to climate change in its General Comment No. 20, which was issued in 2016 and focused on the execution of the rights of the child during the adolescent phase.⁶¹ As per the Committee's assertion, it is imperative to provide appropriate education and assistance to adolescents in order to effectively address both local and global challenges, such as climate change and environmental degradation.⁶²

Of significant note is the fact that the Committee has drafted General Comment No. 26 concerning the rights of children in relation to the environment, with a particular emphasis on the issue of climate change. The proposed approach by the Committee involves the integration of child rights within the environmental framework. This approach entails the recognition of the full range of rights of children as outlined in the Convention.⁶³ The child-centric approach considers the impediments that hinder specific categories of children, who are in vulnerable or in marginalised situations, from completely exercising their environmental entitlements.⁶⁴ The Committee posits that the attainment of a diverse range of children's rights, including but not limited to the right to life, survival and development, health, education, adequate standard of living, housing, food, water, and sanitation, is contingent upon the availability of a clean, healthy, and sustainable environment.⁶⁵ The Committee recommends the inclusion of all children in the development of strategies aimed at both mitigating and adapting to the impacts of climate change.⁶⁶

CRC has issued additional deliberations and suggestions aimed at tackling the issue of children's rights in the context of climate change. The Committee has advised that it would be safe for states to prioritise the best interests of children when formulating, executing, and overseeing environmental laws and policies that pertain to climate change.⁶⁷ Furthermore, the Committee proposes that states devise new methods to enable children to be acknowledged as stakeholders possessing the entitlement to express their views in the formulation and implementation of initiatives pertaining to climate change adaptation and mitigation, as well as

⁶¹ CRC Committee, *General Comment No. 20: On the Implementation of the Rights of the Child During Adolescence*, 6 December 2016, CRC/C/GC/20.

⁶² *ibid.*

⁶³ CRC Committee, draft General Comment No.26 on Children's Rights and the Environment with a Special Focus on Climate Change, 9 December 2021, available at: <https://www.ohchr.org/en/calls-for-input/2023/call-comments-draft-general-comment-childrens-rights-and-environment-special>, accessed 1 April 2023.

⁶⁴ *ibid.*

⁶⁵ *ibid.*

⁶⁶ *ibid.*

⁶⁷ CRC Committee, *General Discussion Day: Children's Rights and the Environment*, 23 September 2016, CRC/C/155.

disaster risk reduction. This links to article 29(1)(e) of the Convention, article 6 of UNFCCC, and article 12 of the Paris Agreement.⁶⁸

2.5 Human Rights and Persons with Disabilities

Climate change exacerbates environmental and institutional barriers to the right to health of persons with disabilities and can directly increase public health concerns. Therefore, people with disabilities are part of the portion of humanity most affected by climate change and climate hazards, threatening their health, dignity and life.⁶⁹ Thus, CRPD makes a clear call in article 11 to protect and ensure the safety of persons with disabilities in natural disasters.⁷⁰ This is aggravated in situations of double vulnerability, as in the case of women and girls with disabilities who are at “risk of violence, including sexual violence, exploitation or abuse, during emergencies, especially in emergency shelters”.⁷¹ The lack of sanitation facilities in shelters or during humanitarian responses to climate crises also increases discrimination against them, who face several barriers to accessing humanitarian aid.⁷²

CRPD Committee has emphasised in different COBs of certain countries that there is a deficiency in the adequate inclusion of individuals with disabilities in disaster risk reduction and climate change adaptation plans.⁷³ "Involving individuals with disabilities and their representative organisations in the formulation and implementation of disaster risk reduction and climate change adaptation plans at the national and district levels is recommended."⁷⁴ A comprehensive strategy should be implemented throughout all stages of the process.⁷⁵ In other words, it is imperative for states to guarantee the effective engagement of disability organisations, with an equitable representation of both genders, in the formulation and execution of laws pertaining to climate change and the mitigation of risks associated with natural disasters.⁷⁶

⁶⁸ *ibid.*

⁶⁹ UNGA Res 44/30 (22 April 2020) *Report of the Office of the United Nations High Commissioner for Human Rights* UN Doc A/HRC/44/30 para 9.

⁷⁰ Convention on the Rights of Persons with Disabilities (CRPD) (adopted 13 December 2006, entered into force 8 May 2008) 2515 UNTS 3 art 11.

⁷¹ UNGA Res 44/30 (n69) para 12.

⁷² Committee the Rights of Persons with Disabilities (CRPD) (25 November 2016) *General Comment No. 3: On Women and Girls with Disabilities* UN Doc CRPD/C/GC/3, para 50.

⁷³ CRPD (5 October 2022) *Concluding Observations: Singapore* UN Doc CRPD/C/SGP/CO/1, para 21(b).

⁷⁴ *Ibid.*

⁷⁵ *ibid* para 22(b).

⁷⁶ CRPD (30 September 2022) *Concluding Observations: Lao People's Democratic Republic* UN Doc CRPD/C/LAO/CO/1, para 19.

The phenomenon of climate change has the potential to trigger ecological calamities, such as soil erosion-induced landslides, escalated precipitation, and elevated temperatures leading to forest fires. It is essential to enhance the degree of humanitarian safeguarding for individuals with disabilities, particularly women and girls, as well as those who identify with ethnic and religious minorities and refugees. This includes their incorporation into all post-disaster evacuation, rescue, shelter, relief, and rehabilitation strategies.⁷⁷ One approach to promoting inclusion involves implementing accessible early warning systems that incorporate sign language and Braille, with a specific emphasis on individuals residing in rural and remote regions.⁷⁸

3. Public health and social systems' responses to impacts of climate change

The phenomenon of climate change and its associated impacts have the potential to disproportionately affect certain communities, including those who are particularly vulnerable due to their socioeconomic status, such as developing countries and Small Island Developing States (SIDS), as well as specific demographic groups, such as children, women, people with disabilities, and indigenous groups. Considering the climate crisis, it is essential that health and social systems are adequately prepared to safeguard the fundamental rights for all individuals. It is recommended that states implement a *human rights-based approach* in order to address and manage the various challenges presented by climate change.⁷⁹ The integration of a human rights-based approach within a state necessitates that all devised strategies, protocols, and initiative must prioritise the protection of the fundamental rights of both individuals and collectives from the detrimental impacts of climate change.⁸⁰ It is anticipated that this measure will enhance the advancement of sustainability by providing individuals with the ability to engage in policy formulation and to hold accountable those who are entrusted with implementation.⁸¹ In order to achieve this goal, it is advisable that all states avoid focusing exclusively on mitigation measures, instead they should undertake attempts towards the implementation of adaptation measures. The achievement of this goal is not exclusively

⁷⁷ CRPD (11 October 2022) *Concluding Observations: Bangladesh* UN Doc CRPD/C/BGD/CO/1, para 24(b).

⁷⁸ CRPD (4 May 2017) *Concluding Observations: Honduras* UN Doc CRPD/C/HND/CO/1 para 26.

⁷⁹ Officer of the High Commissioner of Human Rights (OHCHR), *Applying a Human Rights-Based Approach to Climate Change Negotiations, Policies and Measures* (2010), available at: <https://www.ohchr.org/sites/default/files/Documents/Issues/ClimateChange/InfoNoteHRBA.pdf> accessed 29 March 2023.

⁸⁰ *ibid.*

⁸¹ *ibid.*

dependent on the state, as both health authorities and communities should adopt a more proactive approach in shaping these measures.⁸²

The concept of *adaptation* refers to modifying diverse processes, protocols, and frameworks to mitigate the potential adverse effects of capitalise on the potential benefits that may develop due to climate change.⁸³ Consequently, it is essential for states to implement adaptive strategies⁸⁴ (see Annex 3). In contemporary times, a multitude of states and non-states actors have undertaken concrete measures to ensure the protection of specific communities or improve the effectiveness of crisis management and intervention. Therefore, the importance of sharing these effective methodologies on a global scale lies in the possibility of enhancing positive efforts and cooperating through demonstration towards more dignified and comprehensive societal responses.⁸⁵ The observance of good practices is of utmost importance in lessening the unfavourable consequences on individuals' attainment of their human rights.

3.1 Human Rights-Based Approach to Climate Change

UNFCCC and its Paris Agreement have recognised the imperative of devising an adaptation plan.⁸⁶ This process is widely regarded as a pivotal component of the ongoing worldwide attempts aimed at alleviating the impacts of climate change, with the overarching objective of protecting human welfare, financial pursuits, and ecological frameworks. UNFCCC and its Paris Agreement have recognised the significance of tailoring strategies to cater to the distinctive requirements of specific nations. It is essential that the plans are designed in a manner that is gender-responsive, participatory, and transparent, while also considering the needs of vulnerable groups, communities, and ecosystems.⁸⁷

UNFCCC has instituted several entities to supervise the process of adaptation in order to achieve the previously mentioned objectives. The National Adaptation Plans (NAPs)⁸⁸ are a

⁸² *ibid.*

⁸³ United Nations Framework Convention on Climate Change (UNFCCC), Adaptation and Resilience, available at: <https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction> accessed 23 March.

⁸⁴ *ibid.*

⁸⁵ *ibid.*

⁸⁶ *ibid.*

⁸⁷ *ibid.*

⁸⁸ United Nations Framework Convention on Climate Change (UNFCCC), Overview - National Adaptation Plans (NAPs), available at: <https://unfccc.int/topics/resilience/workstreams/national-adaptation-plans/overview> accessed 16 March.

significant establishment that was introduced under the Cancun Adaptation Framework (CAF).⁸⁹ This enables the parties concerned to formulate and implement NAPs.

NAPs will enable countries to identify and address their medium-long-term priorities for adapting to climate change. NAPs are a good example of good practices of states to adapt to climate change, because NAPs are underpinned by a comprehensive process that involves the systematic undertaking of adaptation work through various stages, including “observation and research, analysis, assessment, priority-setting, planning, implementation, reporting, monitoring, review, and evaluation”.⁹⁰ Furthermore, NAPs outline the current understanding of vulnerability and identify the prioritised adaptation measures to be implemented within a specific time frame for a given nation. It is a policy tool that facilitates the coordination and motivation of all involved parties and interested parties towards achieving national adaptation objectives. At the national level, NAPs are formally approved as official documents and strategies.⁹¹

The situation of SIDS can demonstrate the drafting and implementation of NAPs. This is because many SIDS are experiencing adverse impacts of climate change, such as heat waves, sea level rise, unpredictable weather patterns, and water pollution. Consequently, the adoption of diverse strategies and adaptation measures in these nations, which includes the adjustment of their healthcare systems to mitigate the impacts of climate change, as well as the construction of coastal barriers to mitigate land erosion,⁹² will serve to safeguard the well-being of the population from the detrimental impacts of climate change.

The adaptation plans developed by The Republic of the Marshall Islands (RMI) are an important example of human rights-based approaches. The reason behind this is that their implementation plan incorporates a gender-responsive analysis.⁹³ This approach considers the potential differential impacts of gender norms and roles on individuals of different genders and has been utilised to address the inequalities arising from climate change.⁹⁴ Gender-based disparities, particularly among impoverished women, are made worse by their limited involvement in decision-making and labour markets. These disparities further impede

⁸⁹ Cancun Agreement Framework (2011).

⁹⁰ UNFCCC, National Adaptation Plans 2021. Progress in the formulation and implementation of NAPs (20 July 2022) available at: <https://unfccc.int/documents/548662> accessed 26 March.

⁹¹ *ibid.*

⁹² Government of the Republic of the Marshall Islands (GoRMI), *Adaptation Communication* - Republic of the Marshall Islands (RMI), 2020 available at: https://unfccc.int/sites/default/files/resource/RMI-AdaptationCommunication_Dec2020.pdf accessed 24 March. .

⁹³ Daniel Morchain, Gender and Human Rights Analysis: Ensuring a gender-responsive Adaptation Plan in the Republic of the Marshall Islands, 2021, available at: <https://napglobalnetwork.org/resource/gender-and-human-rights-analysis/> accessed 19 March. .

⁹⁴ GoRMI (n92).

women's ability to effectively contribute to climate-related planning, policymaking, and implementation.⁹⁵ The Government of the Marshall Islands (GoRMI) acknowledges in their NAPs that climate change has varying impacts on individuals, dependent upon factors such as gender, age, health status, financial situation, and other relevant factors.

The development of a gender-responsive approach in the RMI NAPs is a process that involves three distinct stages:

1. Acknowledging the gender discrepancies in the standards for adaptation.⁹⁶
2. Enhancing women's participation and impact in making adaptation decisions.⁹⁷
3. Ensuring equal access to financial resources and other benefits derived from adaptation investments, regardless of gender.⁹⁸

The Indian National Disaster Management Authority (NDMA)⁹⁹ and the "Gaibandha Model" from Bangladesh¹⁰⁰ are excellent examples of incorporating a human-rights-based approach into their adaptation plan. They have included guidelines on the effect of climate change on people with disabilities.¹⁰¹ The effects of climate change on people with disabilities have not yet been thoroughly studied compared to those of other vulnerable groups. This was a step forward for India and Bangladesh and an excellent example of a human rights-based approach. Those with poor vision or blindness, hearing loss, or movement problems may not be able to completely access emergency warnings and other essential communications, making it more difficult for them to prepare for severe weather events.¹⁰² The health systems' lack of readiness primarily affects people with disabilities because they may require continuing medical treatment during and after a natural catastrophe or extreme weather. It must be remembered that individuals with disabilities are more likely to experience social and fiscal risk factors like unemployment and poverty.¹⁰³ Establishing a national disaster agency was

⁹⁵ UNFCCC, Introduction to Gender and Climate Change. Available at: <https://unfccc.int/gender> accessed 17 March.

⁹⁶ Morchain (n93).

⁹⁷ *ibid.*

⁹⁸ *ibid.*

⁹⁹ National Human Rights Institution of India (22 April 2020) *Contribution to the Analytical study on the rights of persons with disabilities in the context of climate change*. Report of the Office of the United Nations High Commissioner for Human Rights, General Assembly A/HRC/44/30.

¹⁰⁰ International Labour Organization (ILO), (2020) *Questionnaire in relation to Human Rights Council Resolution A/HRC/RES/41/21 on human rights and climate change* <https://www.ohchr.org/en/climate-change/impact-climate-change-rights-persons-disabilities> accessed 21 March 2023.

¹⁰¹ UNGA Res 44/30 (n69) para 49.

¹⁰² National Human Rights Institution of India (n99).

¹⁰³ *ibid.*

deemed imperative by the Indian National Disaster Management Authority (NDMA) to address the abovementioned issues. The agency would manage and supervise the integration into and coordination with the disaster risk management and climate change action plan. In the context of the Bangladesh model, a mechanism was established to notify individuals with disabilities who may not have access to early warning systems of an impending flood. This was achieved through personalised home visits to ensure that all members of the community were accounted for and not left behind.¹⁰⁴

3.2 Adaptation of infrastructures and International Organisations Collaboration

The increased occurrence and intensity of strange weather phenomena resulting from climate change, such as cyclones, inundations, and heat waves, can substantially affect the general populace's well-being. The occurrence of such incidents has the potential to result in physical harm, forced relocation, and the onset of illnesses, thereby placing a significant burden on healthcare infrastructure.¹⁰⁵ There is an urgent necessity to adapt healthcare systems and infrastructure to address the health consequences of climate change.¹⁰⁶

Furthermore, climate change is causing modifications in the spread and transmission of illnesses. The widening of the disease vector spectrum, such as mosquitoes, as a result of elevated temperatures, can increase one's vulnerability to diseases such as dengue fever, malaria, and Zika.¹⁰⁷ The occurrence of severe weather can facilitate the transmission of waterborne illnesses, such as cholera and typhoid fever. Implementing adaptation strategies, such as establishing timely notification systems, enhanced disease monitoring, and advancing vaccinations and medical treatments, can effectively alleviate the health consequences associated with evolving disease trends. The susceptibility of certain populations, including children, the elderly, and individuals with pre-existing medical conditions, is heightened by substandard air quality. The implementation of adaptation strategies, such as the provision of sufficient respiratory protection, has the potential to mitigate the adverse health effects associated with air pollution.

Adaptation of healthcare infrastructure is imperative to manage the amplified demand for healthcare services resulting from the effects of climate change. The measures mentioned above encompass formulating contingency strategies for emergencies, enhancing the

¹⁰⁴ ILO (n100).

¹⁰⁵ World Health Organization (WHO), 'Climate Change and Health' (Fact Sheet, 7 February 2018) available at: <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health> accessed 19 March.

¹⁰⁶ *ibid.*

¹⁰⁷ *ibid.*

capacity of healthcare infrastructures to withstand adverse weather conditions, and guaranteeing sufficient stocks of pharmaceuticals and medical apparatus. The mitigation of health impacts of climate change and the development of resilient health systems to tackle future challenges necessitate a comprehensive and coordinated effort from policymakers, healthcare providers, and communities.¹⁰⁸

The World Health Organization (WHO) assumes an important role in financing and formulating strategies that facilitate the establishment of health systems that are resilient to the impacts of climate change. The Asian LDCs (Least Developed Countries) project is among the primary initiatives in which they have participated.¹⁰⁹ WHO engaged in collaborative efforts with six nations, namely Bangladesh, Cambodia, Lao People's Democratic Republic, Myanmar, Nepal, and Timor-Leste.¹¹⁰ The primary objective of the project is to enhance the ability of national health systems and institutions to effectively address and mitigate climate-sensitive risks through improved adaptive capacity.¹¹¹ The project's is designed to enhance the health system's resilience by effectively integrating climate risks.

WHO has undertaken a similar project to assist Mozambique in enhancing the climate resilience of its National Health System. This effort aims to improve the country's capacity to anticipate, withstand, and address the health hazards associated with climate change.¹¹² The disease burden in Mozambique is predominantly characterised by climate-sensitive diseases that disproportionately impact rural people, women, and children. These diseases include Malaria, Cholera, and Measles. These current circumstances have led to an unprecedented strain on healthcare systems. The project has a specific focus on ensuring that climate risks are managed and addressed both vertically and transversally within pertinent health policies, strategies, plans, and programmes.¹¹³ The project endeavours to mitigate the vulnerability of essential health system functions to climate change and to achieve sustainable improvements in population health outcomes despite the instability of the climate.¹¹⁴

3.3 Obligations Relating to Those in Vulnerable Situations

¹⁰⁸ *ibid.*

¹⁰⁹ WHO, *Building resilience of health systems in Asian LDCs to climate change* (2019) available at: <https://www.who.int/news/item/02-12-2019-building-resilience-of-health-systems-in-asian-lDCs-to-climate-change> accessed 19 March.

¹¹⁰ *ibid.*

¹¹¹ *ibid.*

¹¹² WHO, *Strengthening the resilience of the Mozambique health system to climate change impacts* (2018) available at: <https://www.who.int/news/item/01-01-2018-strengthening-the-resilience-of-the-mozambique-health-system-to-climate-change-impacts> accessed 22 March.

¹¹³ *ibid.*

¹¹⁴ *ibid.*

The obligation of states to recognise that there are populations with a greater vulnerability to climate change and that they need special protection measures has been framed during this document and argued under the precepts of the aforementioned bodies of international human rights law. The obligations to respect and protect the human rights of the most vulnerable people, especially their life and human dignity, must include a non-discriminatory, inclusive, and intersectional approach that guarantees the prevention and protection of these populations.

When talking about minorities and low-income populations, the United States Environmental Protection Agency, in its role in the Mariana Islands, Puerto Rico and the US, has constituted a good example through its Executive Order 12898 because of its comprehensive measure that can be replicated as a way to unite national agencies towards the identification and address of potential adverse human health effects of their actions in minorities communities.¹¹⁵ It permits coordination and cooperation of different governmental agencies towards one same goal.¹¹⁶ At the same time, this has evolved into more recent actions as their Building Resilience Against Climate Effects (BRACE).¹¹⁷ The framework comprises a five-step process enabling health officials to devise strategies and programmes for community preparedness towards the health impacts of climate change (see Annex 2).

Food security is one of the major consequences of climate variations and constitutes an imminent risk to the health of rural populations. Colombia and Ecuador give a good example of bilateral governmental coordination, where the Ministry of Environment and Water of Ecuador and the Ministry of Environment and Sustainable Development of Colombia execute material actions to protect the border community, afro-descendants, and indigenous people, who are also victims of the armed conflict, and have a multidimensional vulnerability.¹¹⁸ Given the extreme events in their territory that does not allow them to produce, access, use and stabilise the food, these countries seek to implement innovative measures to adapt to climate change with an emphasis on food security through the Binational Project.¹¹⁹ This innovative

¹¹⁵ National Centre for Environmental Publications and Information, *Environmental Justice Strategy: Executive Order 12898* (1995) available at: <https://nepis.epa.gov/Exe/ZyPDF.cgi/40000AEB.PDF?Dockkey=40000AEB.PDF> accessed 29 March 2023.

¹¹⁶ *ibid.*

¹¹⁷ National Center for Environmental Health, *Public Health Adaptation Strategies for Climate Change* (2022) available at: <https://www.epa.gov/arc-x/public-health-adaptation-strategies-climate-change> accessed 24 April 2023.

¹¹⁸ Ministry of Environment, Water and Ecological Transition of Ecuador, *Good practices and lessons learned from building capacities to adapt to climate change through food and nutritional security actions in vulnerable Afro-descendant and indigenous communities in the Colombian-Ecuadorian border area* (2023) available at: <https://adaptacioncc.com/genero-adaptacion/seguridad-alimentaria> 24 April 2023.

¹¹⁹ *ibid.*

example highlights the joint work of two national states to protect the life and integrity of a highly vulnerable population.

3.4 Piloting Climate Change Adaptation to Protect Human Health

Impacts of climate change on health and wellbeing is one of three categories of *adverse effects* that must be successfully handled through climate change adaptation, according to UNFCCC. So, to "increase the adaptive capacity of national health system institutions, including field practitioners, to respond to climate change-sensitive health risks,"¹²⁰ the Global Environment Facility (GEF) and WHO launched a worldwide pilot project in 2010. The project, which was carried out in seven nations – Barbados, Fiji, Uzbekistan, Jordan, Bhutan, Kenya, and China (see annexe 4) – was conceived as a programmatic method for addressing health hazards brought on by climate change by pursuing the following four outcomes:

1. "A climate-sensitive health risk early warning, response, and management system with information on likely incidence;
2. Improved early warning information-based capacity of health sector organisations to manage climate-sensitive health hazards;
3. Piloting prevention strategies in epidemic and emergent risk areas; and
4. Cooperation among participating nations encourages innovation and adaptation to shifts in the climate."¹²¹

The results of this pilot project varied from country to country depending on what each needed from it. In all instances, it was helpful to establish a climate-resilient healthcare system through the implementation of electronic health records, construction of hospitals that can withstand climate-related events, and prioritisation of disadvantaged populations and remote areas for equitable healthcare access.¹²² The project has resulted in the pilot communities having adaptation plans to raise the drinking water standard. Additionally, the project increased the number of water tanks built. As more droughts and floods are brought on by climate change,

¹²⁰ Global Environment Facility (GEF), *Piloting Climate Change Adaptation to Protect Human Health* (2009).

¹²¹ *ibid.*

¹²² *ibid.*

these water tanks can aid in preventing water-borne diseases, which will become more common.

4. Conclusion and Recommendations

This memorandum has emphasised the necessity for states to adapt their health and social systems in response to the effects of climate change. The effect of climate change has resulted in and will continue to result in, dangers to human health. It is essential for various entities such as states, non-state actors, and regional and international mechanisms to actively participate in addressing the impacts of climate change. This includes mitigating its effects and adapting to the risks posed by it, particularly concerning human rights and public health.

The memorandum has emphasised the crucial role of international mechanisms in shaping the adaptation process. Additionally, it examined example and best practices employed by nations that have undergone a process of adapting their healthcare and social infrastructure to safeguard the fundamental rights of both individuals and collectives. The previously mentioned findings have highlighted the efficacy of sustainable practices in ongoing or accomplished projects. Nonetheless, they have also demonstrated the necessity of intensifying efforts to safeguard the rights of individuals and groups from the probable harm created by climate change.

Consequently, the subsequent recommendations have been identified:

- Amnesty International may urge governments to create a policy framework to give the necessary direction and support for climate adaptation in the health sector. This demand would come from both state and non-state players.
- Encourage international cooperation and bilateral action plans, especially in vulnerable communities sharing border areas. This to protect populations with multidimensional discrimination and to enhance the level of impact and state commitment.
- Create prevention and action plans with an intersectional approach, and special access and participation for the most vulnerable communities.

- All states must have NAPs to address the health risks that climate change may generate in their different regions.

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Annex 1 - Key CESCR Concluding Observations on Climate Change

State Party	Source	Year	Concluding Observations
Philippines	CESCR, Concluding Observations, Philippines, 26 October 2016, E/C.12/PHL/CO/5-6.	2016	45. “[The Committee] is particularly concerned that the livelihood of small-scale fishers has been under threat owing to declining fish stocks in coastal areas as a result of climate change”.
Finland	CESCR, Concluding Observations, Finland, 17 December 2014, E/C.12/FIN/CO/6.	2014	9. “The Committee urges the party to: (...) adopt the appropriate measures to address the adverse effect of climate change on the Saami people’s land and resources”.
Russian Federation	CESCR, Concluding Observations, Russia, 16 October 2017, E/C.12/RUS/CO/6.	2017	43. “[The Committee] also recommends that the state party increase its efforts to reduce greenhouse gas emissions and set national targets with time-bound benchmarks”.
Canada	CESCR, Concluding Observations,	2016	54. “The Committee recommends that the state party address the impact of climate change on indigenous

	Canada, 23 March 2016, E/C.12/CAN/CO/6.		peoples more effectively while fully engaging indigenous peoples in related policy and programme design and implementation. The Committee also recommends that the state party ensure that the use of non-conventional fossil energies is preceded by consultation with affected communities and impact assessment process. It also recommends that the State party pursue alternative and renewable energy production”.
Australia	CESCR, Concluding Observations, Australia, 11 July 2017, E/C.12/AUS/CO/5.	2017	11. “The Committee is concerned about the continued increase of carbon dioxide emissions in the state party, which run the risk of worsening in the coming years, despite the state party’s commitments as a develop country under the UNFCCC and the Kyoto Protocol, as well as nationally determined contribution under the Paris Agreement”. 12. “The Committee recommends that the state party revise its climate change and energy policies, as indicated during the dialogue. It recommends that the state party take immediate measures aimed at reversing the current trend of increasing absolute emissions of greenhouse gases and pursue alternative renewable energy production. The Committee also encourages the state party to review its position in support of coal mines and coal exports”.
Ukraine	CESCR, Concluding Observations, Ukraine, 4 January 2008, E/C.12/UKR/CO/5.	2008	4.“The Committee recommends the state party to adopt legislation on climate protection giving effect to the 1997 Kyoto Protocol to the UNFCCC”.
Bangladesh	CESCR, Concluding	2018	14. “The Committee recommends to ensure that

	Observation, Bangladesh, 18 April 2018, E/C.12/BGD/CO/1.		strategies and actions plan on climate change and disaster risk reduction are formulated and implemented on the basis of human rights”. 14. “The Committee recommends to ensure that national and regional strategies action plans on climate change and disaster response and risk reduction are formulated with the meaningful participation of affected communities and civil society”.
Cabo Verde	CESCR, Concluding Observations, Cabo Verde, 28 November 2018, E/C.12/CPV/CO/1.	2018	9. “The Committee recommends to strengthen public policies and strategies aimed at mitigating the impact of natural disasters and climate change on the population”.
Mauritius	CESCR, Concluding Observations, Mauritius, 5 April 2019, E/C.12/MUS/CO/5	2019	10. “The Committee recommends to reduce the vulnerability of communities by increasing their preparedness and fostering prevention measures”. 10. “The Committee recommends strengthening international cooperation and seek the support to which developing states are entitled in mitigating and responding to the effects of climate change”.
Denmark	CESCR, Concluding Observations, Denmark, 12 November 2019, E/C.12/DNK/CO/6	2019	15. “The Committee recommends ensuring that the contribution to the Green Climate Fund is over and above the current level of official development assistance and is not to the detriment of development assistance in other areas”.

Annex 2 - Recommendations and Principles for a Human Rights-based Approach to Climate Change

Source	Title	Content
United Nations Environment Programme, 'Youth Climate Action Guide' (UNEP, 2019), available at: https://www.unep.org/resources/report/youth-climate-action-guide accessed 10 April 2023.	Youth Climate Action Guide	It is recommended that governments incorporate children and youth into their climate change education initiatives, as well as raise awareness regarding the potential consequences of the crisis and engage in advocacy efforts.
UN Committee for the Elimination of All Forms of Discrimination Against Women, <i>General recommendation No.37</i> (13 March 2018) UN Doc CEDAW/C/GC/37, 2.	D. Right to health	In particular, States parties should: (a) Ensure participation, including in decision-making positions, by diverse groups of women and girls in the planning, implementation and monitoring of health policies and programmes and in the design and management of integrated health services for women in the context of disaster risk management and climate change; (b) Invest in climate- and disaster-resilient health systems and services and allocate the maximum of their available resources to the underlying determinants of health, such as clean water, adequate nutrition and sanitation facilities and menstrual hygiene management. Those investments should be geared towards transforming health systems so that they are responsive to the changing health-care needs arising from climate change and disasters and sufficiently resilient to cope with those new demands; (c) Ensure the removal of all barriers to access for women and girls to health services, education and information, including in the areas of mental and psychological health, oncological

		treatment and sexual and reproductive health, and, in particular, allocate resources for cancer screening, mental health and counselling programmes and programmes for the prevention and treatment of sexually transmitted infections, including HIV, and treatment for AIDS, before, during and after disasters; (d) Accord priority to the provision of family-planning and sexual and reproductive health information and services, within disaster preparedness and response programmes, including access to emergency contraception, post-exposure prophylaxis for HIV, treatment for AIDS and safe abortion, and reduce maternal mortality rates through safe motherhood services, the provision of qualified midwives and prenatal assistance; (e) Monitor the provision of health services to women by public, non-governmental and private organizations, to ensure equal access to and quality of care that responds to the specific health needs of diverse groups of women, in the context of disasters and climate change; (f) Require that all health services operating in situations of disaster function to promote the human rights of women, including the rights to autonomy, privacy, confidentiality, informed consent, non-discrimination and choice. Specific measures to ensure the promotion and protection of the rights of women and girls with disabilities, women and girls belonging to indigenous and minority groups, lesbian, bisexual and transgender women and girls, intersex persons, older women and women and girls belonging to other marginalized groups should be explicitly included in health-care policies and standards relating to situations of disaster; (g) Ensure that training curricula for health workers, including in emergency services, incorporate comprehensive, mandatory, gender-responsive courses on women's health and human
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		rights, in particular gender-based violence. Health-care providers should be made aware of the linkages between increased disaster risk, climate change and the growing potential for public health emergencies as a result of shifting disease patterns. The training should also include information on the rights of women with disabilities and women belonging to indigenous, minority and other marginalized groups; (h) Collect and share data on gender-based differences in vulnerability to infectious and non-infectious diseases occurring in situations of disaster and as a result of climate change. That information should be used to develop integrated rights-based disaster and climate change action plans and strategies.
UNGA Res 44/30 (22 April 2020) <i>Report of the Office of the United Nations High Commissioner for Human Rights</i> UN Doc A/HRC/44/30 para 40.	B. Operational framework for a disability-inclusive human rights-based approach to climate change	40. Key principles of a disability-inclusive human rights-based approach to climate change include: (a) The integration of principles and standards derived from international human rights law, especially the Universal Declaration of Human Rights, the Convention on the Rights of Persons with Disabilities and another core human rights treaties, and the Declaration on the Right to Development, in all policies and programmes; (b) Active, free and meaningful participation and inclusion of persons with disabilities and their diverse representative organisations at all levels of decision-making and action; (c) Increased capacity and empowerment of persons with disabilities and their representative organizations; (d) Equality and non-discrimination of persons with disabilities in climate action; (e) Accessible and inclusive environments in addition to accessibility of

		information and communication; (f) Enhanced awareness of policymakers and the climate movement of the requirements and capacities of persons with disabilities; (g) Evidence-based decision-making that takes into account the requirements of persons with disabilities; (h) International cooperation, including through mobilization of resources to support the advancement of a human rights-based, disability-inclusive approach to climate action.
National Center for Environmental Health (2022) <i>Public Health Adaptation Strategies for Climate Change</i> available at: https://www.epa.gov/arc-x/public-health-adaptation-strategies-climate-change.	CDC's Building Resilience Against Climate Effects (BRACE) Framework	Five Steps 1. Anticipate Climate Impacts and Assessing Vulnerabilities Identify the scope of climate impacts, associated potential health outcomes, and populations and locations vulnerable to these health impacts. 2. Project the Disease Burden Estimate or quantify the additional burden of health outcomes associated with climate change. 3. Assess Public Health Interventions Identify the most suitable health interventions for the identified health impacts of greatest concern. 4. Develop and Implement a Climate and Health Adaptation Plan Develop a written adaptation plan that is regularly updated. Disseminate and oversee implementation of the plan. 5. Evaluate Impact and Improve Quality of Activities Evaluate the process. Determine the value of information attained and activities undertaken.

Annex 3 - Acts, Constitutions, Laws, and Policies Related to Climate Change¹²³

State	Acts/Constitution/Law/Policy	Year	Description
Mexico	<i>Law for sustainable agricultural development</i>	2012	4. "Provides sustainability specific investment provisions. The Law directs the state government (supplemented by funding from the federal government) to allocate resources to support producers seeking to modernise infrastructure and equipment, for sustainable energy-saving technology, and for the improvement of land for environmental services". Article 63. "Financial support prioritises producers whose activities protect soil, capture, and use water efficiently, recycle inputs and protect the environment".
Argentina	<i>The National Food Security Plan (Law 25/724)</i>	2003	6. "Created a National Nutrition and Food Program, which recognises the non-delegable duty of the state to guarantee the right to food for all citizens."
Ecuador	<i>Framework Law for Food Sovereignty</i>	2009	7. "Promotes agroecology by requiring the state to carry out training, open special lines of credit, and develop marketing strategies, all in support of agroecological producers. This Law state that measures to boost consumption of nutritious foods of agroecological origin are to be implemented alongside education campaigns and informative labelling programmes."
Ecuador	<i>Framework Law of Agrobiodiversity, Seeds and Promotion of</i>	2017	7. "Recognises the importance of traditional seed systems (developed by local or indigenous communities) producing, reproducing, exchanging, marketing, and

¹²³ UNCHR 'Report of the Special Rapporteur on Human Rights and the Environment (2021) UN Doc Annex to A/GA/76/179.

	<i>Sustainable Agriculture</i>		maintaining their own seed. The principle of the Law guarantees the production of seeds by ensuring efficient use and conservation of agrobiodiversity to guarantee food sovereignty and security.”
Brazil	<i>Law creating the State Policy on Organic Production and Agroecology</i>	2014	8. “Declares that the Law is guided by the principles of sustainable development. These include among others: participation; ecological conservation; social inclusion; food security and sovereignty; socioeconomic, gender and ethnic equity; and agricultural, biological, territorial, landscape and cultural diversity.”
Nicaragua	<i>Law to promote agroecological or organic production</i>	2011 amended in 2014	9. “Defines ‘agroecosystems’ to mean ecological systems that have one or more types of agriculture whose main components are the subsystems of crops or animal production, identified with the parcels or areas of the farm, and the broader environment with which those components intersect.”
Nepal	<i>Right to Food and Sovereignty Act</i>	2018	11. “Intends to improve the food security of impoverished households through initiatives to: provide ration cards; maintain food supply during emergencies; protect the rights of the farmers; sustainably use agricultural land; promote local food systems; and adapt to climate change.”
El Salvador	<i>Law on Control of Pesticides, Fertilisers and Products for Agricultural Use; and the Plant and Animal Health Law</i>	2013	10. “The Law reform established the gradual prohibition over two years of the use of 53 pesticides and fertilisers containing heavy metals or metalloids in their formulation.”
Philippines	<i>Indigenous Peoples Rights Act</i>	1997	12. “Landmark law recognising and promoting the rights of Indigenous peoples. A key provision authorises the granting of Certificates of Ancestral Land/Domain Titles for the ancestral lands of Indigenous individuals or groups. The law also requires the free, prior and informed consent

			of Indigenous peoples for projects and other activities that are proposed for ancestral lands or domains.”
Kenya; Mali; Zambia	<i>Community Land Act; Agricultural Land Law; Forest Act</i>	2016; 2017; 2015	14. “These states have implemented laws that recognise the land rights of Indigenous peoples and local communities. Those communities are more likely to invest in the good management of forest, soil, and water if they have clear user rights and security against eviction.”
Liberia	<i>Community Rights Law</i>	2008	15. “Empowers communities to access, manage, use, and benefit from forests for their sustenance, livelihoods and community development. While implementation of the law has had some challenges, it has led to new programs and measures that support conservation and sustainable livelihood activities in forest communities.”
Burkina Faso	<i>Access to plant genetic resources for food and agriculture and the sharing of benefits arising out of their use</i>	2019	16. “The Law contains a chapter on farmers’ rights, which explicitly recognises farming communities’ rights over seeds as enshrined in the International Treaty on Plant Genetic Resources for Food and Agriculture as well as the UN Declaration on the Rights of Peasants and Other People Working in Rural Communities.”
European Union	<i>Regulation of the European Parliament and the Council on organic production and labelling of organic products and repealing Council Regulation (EC)</i>	2018	17. “Requires operators to comply with general production rules, and this involves, for example, the use of products or substances that have been authorised for organic production. Restrictive lists guide the use of plant protection products, soil conditioners and fertilisers, non-organic feed, or feed activities.”
Ireland	<i>Rural Environmental Protection Scheme</i>	1994	18. “Farmers must follow a 5-year environmental plan in order to receive an annual payment. Among the mandatory tasks are soil testing, fencing off watercourses, and planting hedgerows. The program ensures that farming practices and production methods are updated to

			improve environmental outcomes.”
Poland	<i>Land transaction</i>	2015	19. “Intended to protect agricultural land from large foreign or domestic investors who would establish agribusinesses to the detriment of family farming. It also set out procedures that allowed individuals to appeal against administrative proceedings in the event that they were wrongly denied their right to purchase farmland.”

Annex 4 - Piloting Climate Change Adaptation to Protect Human Health

Country	Sources	Adaptation Plan
Barbados	Global Environment Facility (GEF), Piloting Climate Change Adaptation to Protect Human Health (2009).	3. “The project will lead to improved practices for the storage of rainwater, preventing the breeding of <i>Aedes aegypti</i> and ultimately reduce the incidence of dengue fever. Increased awareness of <i>A. aegypti</i> breeding sites in rainwater tanks will also increase awareness of other potential breeding sites and increase people’s efforts to reduce overall breeding opportunities. Local perceptions will be changed with regards to the utilization of wastewater. With a system in place for the safe use of treated wastewater, local health risks will be reduced. The level of public knowledge will be enhanced as it relates to wastewater reuse. In Bhutan, the project will increase the effectiveness of monitoring health issues and the effectiveness of control interventions (by directly measuring the actual incidence of climate sensitive diseases). Local communities will benefit from improved rural water quality and community sanitation, including enhanced community participation in prevention of climate sensitive diseases”.

China	Global Environment Facility (GEF), Piloting Climate Change Adaptation to Protect Human Health (2009).	3.“The project will strengthen health education and training on the impacts of climatic change on the environment and human health, increase school and university course content on global climatic change, and increase awareness of the potential impacts of climatic change across various media”.
Fiji	Global Environment Facility (GEF), Piloting Climate Change Adaptation to Protect Human Health (2009).	3.“The principal expected benefit for the health sector is having a functional Health Information System that is capable of generating Early Warnings for Climate Sensitive Diseases and communicating these effectively to relevant stakeholders. The project will strengthen both inter disciplinary collaboration and communication within all levels the Ministry of Health as well as promote inter sectoral collaboration at all levels with other key government agencies such as the Fiji Meteorological Service, the National Disaster Management Office and NSAs such as The Fiji Red Cross, the International Federation of Red Cross, and Red Crescent (IFRC)”.
Jordan	Global Environment Facility (GEF), Piloting Climate Change Adaptation to Protect Human Health (2009).	3.“Regulatory and monitoring systems associated with human health protection will be reviewed and strengthened. The level of coordination and cooperation among different governmental and non-governmental organisations concerned with climate change adaptation to protect human health will be enhanced. The project will also strengthen institutional capacity to address climate change induced health risks”.
Kenya	Global Environment Facility (GEF), Piloting Climate Change Adaptation to Protect Human Health (2009).	3.“This project will integrate climate change health risks into national planning and sectoral processes for the implementation of malaria epidemic prevention measures. The project will strengthen partnerships, including meteorological department provision of forecasting data to KEMRI; improved interactions between health officers and stakeholders; and sharing of resources and reduction in duplication of tasks within a district. Local communities will

		receive central support in their efforts to reduce malaria burdens due to climate change through linking this project with other relevant programs”.
Uzbekistan	Global Environment Facility (GEF), Piloting Climate Change Adaptation to Protect Human Health (2009).	3.“National benefits will be realized through implementing the first concrete health adaptations to climate change, expressed as an urgent need within the draft Second National Communication to the UNFCCC. Long-term adaptive capacity will be improved through enhancement of the knowledge and skills of health personnel to monitor variations in climate and take preventive actions, and the national population will have enhanced capacity for self-protection. At the local level, two provinces will have a well-designed, tested and readily available system to improve population health. The project will also contribute to enhanced awareness of the potential for well-planned adaptation to reduce impacts in health as in other sectors”.