



General Assembly

Distr.: General
12 July 2024

Original: English

Human Rights Council

Fifty seventh session

9 September–9 October 2024

Agenda items 2 and 3

**Annual report of the United Nations High Commissioner
for Human Rights and reports of the Office of the
High Commissioner and the Secretary-General**

**Promotion and protection of all human rights, civil,
political, economic, social and cultural rights,
including the right to development**

Impact of climate change on the equal enjoyment of the right to education by every girl

Report of the United Nations High Commissioner for Human Rights

Summary

The present report, prepared pursuant to Human Rights Council resolution 54/19, examines how climate change can have an impact on the equal enjoyment of the right to education by every girl, identifies the main challenges girls face and the efforts to overcome those challenges and obstacles. The High Commissioner concludes with recommendations for the protection and promotion of girls' enjoyment of the right to education in the context of climate change.



I. Introduction

1. In resolution 54/19, the Human Rights Council recognized the essential role the right to education plays in achieving sustainable development and how it contributes to enhancing the resilience of individuals and communities facing the adverse impacts of climate change and environmental degradation. It also recognized the disproportionately negative effect of climate change on girls' enjoyment of the right to education. The Council requested the United Nations High Commissioner for Human Rights to prepare a report on how climate change can have an impact on the realization of the equal enjoyment of the right to education by every girl, highlighting how the realization of the equal enjoyment of that right can contribute to the climate change agenda, and making recommendations for submission to the Human Rights Council at its fifty-seventh session.¹

2. In preparation of the present report, the Office of the United Nations High Commissioner for Human Rights (OHCHR) received 43 submissions that informed the report.² The report also draws on desk research, including United Nations reports, policy briefs and academic articles.

3. Education is instrumental in protecting children's rights, in realizing other rights and in increasing children's awareness and preparedness for climate change.³ At the same time, the right to education is highly vulnerable to the impact of the environmental harm caused by climate change, as it can result in school closures and disruptions, school dropout and the destruction of schools and places to play.⁴ Research indicates that all children are affected by climate change but that girls are disproportionately affected due to the compounded impacts of climate change and the structural gender-based discrimination they already face.⁵ Advances made in girls' access to education, attendance at school and learning outcomes risk being undone by climate change and the resulting environmental degradation.⁶ If current trends continue, by 2025 the negative impacts of climate change could prevent more than 12 million girls worldwide from completing their education each year.⁷ To date only 55 countries have specific climate adaptation measures that refer to gender equality and only 23 countries recognize women as agents of change in accelerating progress on climate commitments.⁸

4. The present report examines the three dimensions of the right to education: the right of access to education; rights within education; and how the enjoyment of human rights can be achieved through education.⁹

¹ Pursuant to resolution 54/19, the present report focuses on girls, namely, those who are under 18 years of age. Reference to higher education is therefore limited.

² The submissions that the authors have agreed to make publicly available can be found at <https://www.ohchr.org/en/calls-for-input/2024/call-input-report-how-climate-change-can-have-impact-realization-equal>.

³ Committee on the Rights of the Child, general comment No. 26 (2023), para. 51.

⁴ Ibid.

⁵ Kate Sims, "Education, girls' education and climate change", K4D emerging issues report No. 29, Institute of Development Studies (2021).

⁶ Plan International, "Climate change: focus on girls and young women", position paper (September 2019), p. 4, and Kate Sims, "Education, girls' education and climate change", p. 3.

⁷ Uraidah Hassani, "Why we must engage adolescent girls in climate change solutions", World Bank Blogs (10 October 2022), available at <https://blogs.worldbank.org/climatechange/why-we-must-engage-adolescent-girls-climate-change-solutions>.

⁸ United Nations Educational, Scientific and Cultural Organization (UNESCO), "Women in science, not in silence: pioneering change in the global climate crisis" (February 2024), available at <https://www.unesco.org/en/articles/women-science-not-silence-pioneering-change-global-climate-crisis>.

⁹ See Committee on the Elimination of Discrimination against Women, general recommendation No. 36 (2017),

II. Legal framework

5. The right to education, including its equal enjoyment by every girl, is universally recognized and guaranteed in international and regional legal instruments, including in article 13 of the International Covenant on Economic, Social and Cultural Rights.¹⁰

6. Article 29 of the Convention on the Rights of the Child states that the education of the child shall be directed, among other things, to the development of respect for the natural environment. The Committee on the Rights of the Child, in its general comment No. 26 (2023) on children's rights and the environment, with a special focus on climate change, notes the urgent need to address the adverse impacts of climate change on children's rights and, in that context, clarifies the obligations of States parties on the crucial steps that they should take for ensuring children's rights and the interests of future generations under the Convention. In relation to the right to education, in the same general comment, the Committee states that school curricula should be tailored to children's specific environmental, social, economic and cultural contexts, and that teaching materials should provide scientifically accurate, up-to-date and developmental and age-appropriate environmental information.¹¹ In addition, environmental values should be reflected in the training of all professionals involved in education, including preparing children for green jobs.¹²

7. In general comment No. 26 (2023), the Committee on the Rights of the Child articulates States' obligations to build safe, healthy and resilient infrastructure for effective learning; ensure physical access to schools, especially for children in remote or rural communities, or consider alternative teaching methods, such as mobile educational facilities and distance learning; ensure alternative housing for displaced populations as soon as possible, to ensure that schools are not used as shelters; and recognize and address the disproportionate, indirect and knock-on effects of environmental degradation caused by climate change on children's education, paying special attention to gender-specific situations. Furthermore, the Committee stipulates that States need mechanisms for claims for the impacts of environmental harms and climate change, available to all children under their jurisdiction, including children outside their territory who are affected by transboundary harm.¹³

8. While recognizing the right to a clean, healthy and sustainable environment as a human right, Member States and others have pointed out that environmental damage has negative implications, both direct and indirect, for the effective enjoyment of all human rights, including the rights to life, health, food and water, and that the effective enjoyment of a clean, healthy and sustainable environment is interfered with by the decline in the services provided by ecosystems.¹⁴ Environmental degradation, climate change and childhood exposure to pollution, hazardous substances and wastes present an urgent challenge affecting all children's rights, as they are uniquely susceptible to health-related harm from an unhealthy environment.¹⁵ When children cannot enjoy their right to a clean, healthy and sustainable environment, their other rights may be seriously affected, including the right to education.¹⁶

9. Education is also referred to within the international climate framework. Article 6 of the United Nations Framework Convention on Climate Change stipulates that States will promote and facilitate the development and implementation of educational and public awareness programmes on climate change and its effects. The preamble of the Paris Agreement under the Convention states that when parties take action to address climate change, they need to respect, promote and consider their respective obligations regarding

¹⁰ Relevant legal and policy frameworks on the right to education of girls, including in crisis situations, were covered in previous reports: [A/HRC/44/39](#), paras. 9–18, and [A/HRC/35/11](#), paras. 5–8.

¹¹ Para. 53.

¹² Para. 54.

¹³ Paras. 11, 56, 84 and 103.

¹⁴ General Assembly resolution [76/300](#) and [A/HRC/34/49](#), para. 5.

¹⁵ [A/HRC/43/30](#), paras. 2 and 3. See also Convention on the Rights of the Child, art. 24 (2) (c), on the right to health.

¹⁶ [A/HRC/43/30](#), para. 5.

human rights, including gender equality and the empowerment of women. Furthermore, article 12 of the Paris Agreement stipulates that States shall cooperate in taking measures, as appropriate, to enhance climate change education, training, public awareness, public participation and public access to information. Action for Climate Empowerment, a term adopted by the parties to the Convention to denote work under article 6 of the Convention and article 12 of the Paris Agreement, sets the overarching goal as being to empower all members of society to engage in climate action, through climate change education and public awareness, training, public participation, public access to information and international cooperation on these issues.¹⁷

10. Under the International Covenant on Economic, Social and Cultural Rights, States need to take steps, including through international assistance and cooperation, especially economic and technical cooperation, to achieve the realization of the rights recognized in the Covenant to the maximum of their available resources.¹⁸ The phrase “the maximum of [its] available resources” refers to both the resources existing within a State and those available from the international community.¹⁹ Furthermore, a failure to prevent foreseeable harm to human rights caused by climate change or a failure to mobilize the maximum available resources in an effort to do so, could constitute a breach of the obligation to protect the human rights under the Covenant of those both within and outside their territories.²⁰ The Rio Declaration on Environment and Development likewise affirms the duty of States to cooperate in ensuring development, as well as protecting human rights and eliminating obstacles to them.²¹

11. The United Nations Framework Convention on Climate Change and the Paris Agreement further contextualize the global response to climate change-related issues, which must be underpinned by international solidarity. Among other things, that entails the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances. Those principles acknowledge the different capabilities and differing responsibilities of countries in addressing climate change, while requiring the provision of capacity-building, technology transfer and financial assistance by developed to developing countries.²²

12. In its general comment No. 26 (2023), the Committee on the Rights of the Child, stipulates that in realizing the right to education under the Convention on the Rights of the Child, and in line with the framework of international cooperation, as stipulated under article 4 of the Convention, developed countries should provide technical and financial assistance to developing countries to address the impacts of climate change, including on girls’ right to education. In the same general comment, the Committee notes that developed States have committed to facilitating capacity-building, to the transfer of green technology and to contributing to financing environmental measures. It also notes that States should ensure that environmental measures supported by international environmental finance mechanisms protect children’s rights and, when establishing and funding global responses to address environmental harm, they should pay particular attention to safeguarding the rights of children in the light of their specific vulnerabilities.²³

¹⁷ See <https://unfccc.int/topics/education-and-youth/big-picture/ACE>.

¹⁸ Art. 2. See also Committee on Economic, Social and Cultural Rights, general comment No. 25 (2020), for example, para. 81.

¹⁹ Committee on Economic, Social and Cultural Rights, general comment No. 3 (1990), para. 13. See also general comment No. 13 (1999), para. 56.

²⁰ Statement by the Committee on Economic, Social and Cultural Rights (E/C.12/2018/1), paras. 5 and 6. Also E/C.12/FIN/CO/6, para. 9; E/C.12/CAN/CO/6, para. 53; and E/C.12/RUS/CO/6, para. 42. Principle 7.

²² United Nations Framework Convention on Climate Change, art. 4.

²³ Paras. 92–94. See also Human Rights Council resolution 54/19.

III. Impact of climate change on girls' right to education

A. Right of access to education

13. The right of access to education is reflected in the extent to which girls are equally represented and there is adequate infrastructure at the various levels.²⁴ For girls to enjoy access to education, it must be physically, technologically and economically accessible to them, in particular for girls belonging to disadvantaged groups and those in precarious situations, and by keeping in mind cultural barriers.²⁵ This means that the infrastructure, including transport to get to school, must respond to their needs; that girls have access to technologies, devices and infrastructure, such as the Internet, radio and television networks, and are equipped to use such technologies; and that girls and their families can afford the costs of education without compromising other basic needs.²⁶ When girls are denied access to education, they may lose opportunities to develop their capacities to fully exercise personal autonomy and choices over their lives and bodies, and to exercise power-sharing and participation in decision-making in social and political institutions.²⁷ Efforts to ensure these rights require that the broader inequalities that girls face outside school are addressed, including in relation to their health, food security and housing. In the submissions received for the present report, those broader inequalities have been referred to as important in the context of climate change.

14. The submissions received and the desk research undertaken indicated a scarcity of disaggregated data at the global and national level, making it difficult to have a nuanced understanding of the intersection between gender, age and inequality in the context of climate change, and how girls' equal enjoyment of the right to education is specifically affected by climate change and the environmental degradation it causes. That lack of disaggregated data and analysis leads to a poor understanding of the nuanced vulnerabilities faced by girls and women in the context of climate change. In one submission, it was noted that in the absence of such data, policymakers and educators might struggle to tailor interventions to the specific needs of girls, hindering their ability to develop resilience and adaptability in the face of environmental challenges.²⁸ In particular, an absence of disaggregated data on the impacts of climate change on girls' enjoyment of the right to education in developed countries was highlighted. For example, while the World Meteorological Organization found that the impacts of climate change continue to be seen across Europe, with millions of people impacted by extreme weather events, there is less data available on the effects on girls' enjoyment of the right to education in that region.²⁹ In addition, the absence of data does not allow for the creation of a baseline against which trends can be analysed.

15. Despite the lack of comprehensive disaggregated data, there are some negative impacts of climate change directly affecting children's access to education that can be highlighted. Extreme weather may damage or destroy school buildings, facilities and transport, thus disrupting children's access to education.³⁰ Schools may also be closed when school buildings are used as emergency shelters.³¹ Negative impacts on the right to education can affect boys and girls differently. For example, it has been reported that prolonged closures create a higher risk of student dropout, especially among girls.³² Some research indicates that

²⁴ Committee on the Elimination of Discrimination against Women, general recommendation No. 36 (2017), para. 15.

²⁵ Ibid., para. 28.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Submission by UNESCO, p. 5.

²⁹ See <https://wmo.int/news/media-centre/europe-experiences-widespread-flooding-and-severe-heatwaves-2023>.

³⁰ Plan International, "Climate change: focus on girls and young women", p. 10, and submission by She Leads consortium, p. 3.

³¹ A/HRC/35/13, para. 10, and submission by UNESCO, p. 2.

³² Geneva Global Hub for Education in Emergencies, *Leveraging Education in Emergencies for Climate Action* (2023), p. 29; Malala Fund, "A greener, fairer future: why leaders need to invest in climate and

this may be partly explained by the fact that girls are less likely than boys to attend school in temporary facilities.

16. The decline in access to a safe and continuous supply of water due to water scarcity as a result of climate change and environmental degradation impacts adolescent girls' physical access to education.³³ Although the lack of a reliable water supply at school affects all children's access to safe drinking water, adolescent girls are affected disproportionately due to the challenges associated with managing their menstrual hygiene.³⁴ While many schools are not equipped with water, sanitation and hygiene facilities in the first place, difficulties in managing menstrual hygiene increase if those facilities are not restored quickly when damaged by climate change. Globally, 447 million children lack basic water services at school and 427 million children do not have basic sanitation services at school.³⁵ Girls may be unwilling to attend school, or their parents and guardians may discourage them from doing so if schools do not provide water or take into account girls' particular health needs. Girls' concentration and participation in class may also be negatively affected in those circumstances.³⁶

17. The impact of climate change exposes children to many risks when travelling to and from school. Extreme weather events, such as heavy rainfall and flooding, may destroy roads and bridges, and routes may become impassable. It can also increase the risk of children drowning on their way to school. Other extreme weather events, such as extreme heat and excessive sunlight, may make travel to school and studying in classrooms dangerous.³⁷ That is especially true for children who face an intersection of issues, for example when exposure to excessive sunlight for children with albinism exacerbates health problems.³⁸

18. Climate change may also exacerbate gender-specific risks for girls. Data shows that gender-based violence increases when there is an extreme weather event.³⁹ In addition, extreme weather events related to climate change increase the frequency and number of school closures. That can increase the distance that girls need to travel to another school, which may in turn increase their risk of being exposed to sexual violence.⁴⁰ Some research indicates that when schools are closed and alternative schools are further away, girls are less likely than boys to attend any temporary school facilities provided, often because families fear for girls' safety as they travel to and from school.⁴¹ Children who are out of school – and girls in particular – are even more at risk because they are likely to be unsupervised, especially when they travel alone or are working. They are at increased risk of violence, exploitation, sexual and physical abuse, and trafficking during and after extreme weather events, and these risks are heightened when collecting food, water and firewood, or when staying in temporary shelters or refugee camps.⁴²

19. Access to education can also be disrupted by displacement when children and communities must move or flee from their homes because of natural disasters and environmental degradation induced by climate change, or because of conflicts and violence,

girls' education" (2021), p. 10; and submission by Geneva Global Hub for Education in Emergencies, p. 2.

³³ United Nations Children's Fund (UNICEF), "Climate change: impact on adolescent girls" (2023).

³⁴ Ellen Chigwanda, "A framework for building resilience to climate change through girls' education programming" (Brookings, 2016), p. 4, and see submission by International Human Rights Center of Loyola Law School.

³⁵ World Health Organization (WHO) and UNICEF, *Progress on Drinking Water, Sanitation and Hygiene in Schools 2015–2023: Special Focus on Menstrual Health* (2024), p. 20.

³⁶ A/HRC/35/11, para. 28.

³⁷ Submission by Plan International, p. 3.

³⁸ See submissions by Women and Girls with Albinism Network and Africa Albinism Network.

³⁹ Bharat H. Desai and Moumita Mandal, "Role of climate change in exacerbating sexual and gender-based violence against women: a new challenge for international law", *Environmental Policy and Law*, vol. 51, No. 3 (2021).

⁴⁰ Submission by Geneva Global Hub for Education in Emergencies, p. 3.

⁴¹ Malala Fund, "A greener, fairer future", p. 10; submissions by Geneva Global Hub for Education in Emergencies, p. 3, and Center for Reproductive Rights, p. 2.

⁴² Submissions by Center for Reproductive Rights, p. 3, and by Commonwealth Human Rights Initiative and Commonwealth 8.7 Network members, pp. 1–4.

including those connected to climate change. Displacement creates more hurdles in accessing education, in particular for those left behind by parents who have been displaced or have migrated because, for example, there is a subsequent lack of financial support. While displacement in general has such effects, climate change and the extreme weather caused by it may exacerbate the situation in the frequency and scale of displacement. Displaced and migrant girls have been reported to be at even greater risk of losing their access to education and of dropping out, as they might face discrimination or have additional responsibilities in the household that undermine their access to education.⁴³ Even if learning opportunities exist for displaced and migrant children and youth, their willingness to attend school may be impeded by overcrowded classrooms, for example because of the displacement of teachers due to climate change, and other factors, such as discrimination, including xenophobia and racism, language barriers, or curriculum-related challenges.⁴⁴

20. Barriers to accessing technology, combined with the lack of physical access, may undermine children's access to education. The shift to remote education, often seen as a solution, presents its own difficulties. Access to distance learning requires digital devices and an Internet connection, resources which are not available in all households or schools, or in all areas and regions, and access to which may be compromised by the effects of climate change. Such challenges are particularly acute in rural areas, which already suffer from a lack of digital equipment and connectivity, and which see the disparities exacerbated by climate change. Such difficulties are further exacerbated by the fact that women and girls in general have less access to the Internet, with only 57 per cent of women using it. That number drops to 19 per cent of women in the least developed countries.⁴⁵ Even when an Internet connection and digital tools are available, the gender gap in digital access and digital skills may mean it is more difficult for girls to use these tools, including for education.⁴⁶

21. Environmental degradation, including climate change, impacts livelihoods, food security and household incomes, and may impede economic access to education.⁴⁷ Research reveals that recurring climate-induced disasters can create significant shocks for low-income households and trap them in a vicious downward spiral of poverty.⁴⁸ Children may be pulled from school to supplement reduced incomes or protect unstable incomes. That is especially true for girls who are taken out of school to support families with paid and unpaid care and domestic work, such as caring for younger siblings or performing a range of domestic activities in other households.⁴⁹ Studies focusing on rural households typically find that after a disaster, attendance at school is often replaced by having to engage with other responsibilities.⁵⁰

22. Faced with economic shocks, including those related to climate change and environmental degradation, families may be forced to prioritize meeting immediate basic needs instead of investing in education, especially that of girls. Child, early and forced marriage is an example of a harmful coping strategy among those who suffer from economic stress due to both sudden and slow-onset events.⁵¹ Such marriages may be used to reduce the size of the household and the number of mouths to feed, or to use the dowry provided by the groom's family as a source of capital.⁵² Girls are more susceptible to child marriage because of deep-rooted gender stereotypes and discrimination. Child marriage frequently leads to

⁴³ Submission by Geneva Global Hub for Education in Emergencies, p. 4.

⁴⁴ Geneva Global Hub for Education in Emergencies, *Leveraging Education in Emergencies*, p. 37, and Committee on the Elimination of Discrimination against Women, general recommendation No. 37 (2018), para. 59. See also submission by UNESCO.

⁴⁵ See <https://www.itu.int/en/mediacentre/backgrounders/Pages/bridging-the-gender-divide.aspx>.

⁴⁶ Submission by UNESCO, p. 2.

⁴⁷ Zahrah Nesbitt-Ahmed, "How gender-responsive age-sensitive social protection is related to the climate crisis" (UNICEF, 2023), p. 13.

⁴⁸ Submission by Geneva Global Hub for Education in Emergencies, p. 1.

⁴⁹ Zahrah Nesbitt-Ahmed, "How gender-responsive age-sensitive social protection is related to the climate crisis", p. 13.

⁵⁰ Carolyn Kousky, "Impacts of natural disasters on children", *The Future of Children*, vol. 26, No. 1 (Spring 2016), p. 86.

⁵¹ See A/HRC/41/26.

⁵² Kate Sims, "Education, girls' education and climate change", p. 15.

girls not continuing their education.⁵³ At the same time, education is widely understood to be protective against child marriage, as girls with a primary education are twice as likely to experience child marriage as those with secondary or higher education.⁵⁴

23. Across the world, women and girls tend to be largely responsible for unpaid care, support and domestic work in the household and community.⁵⁵ Climate shocks are likely to further increase women's and girls' domestic and caring roles and responsibilities, for example due to impacts on water availability and food production.⁵⁶ Climate change is exacerbating both water scarcity and water-related hazards (such as floods and droughts), as rising temperatures disrupt precipitation patterns and the entire water cycle.⁵⁷ As women and girls are generally tasked with collecting water, they are also typically burdened by the effects of water scarcity, which typically forces them to walk longer distances to access water. Thus, because girls are often given the responsibility for household tasks, they have less time to spend on other activities, including school. An increase in care and support responsibilities can lead to their being absent from school. Adolescent girls, in particular, are at additional risk of being pulled out of school to help alleviate the extra domestic workload that is shouldered by women in households affected by climate-related stress.⁵⁸

24. Going without food makes it extremely hard to concentrate in class and thus impacts students' performance in school.⁵⁹ Research shows that girls achieve lower academic performance and are more likely to be absent from school in the context of climate crises.⁶⁰ One explanation is that climate change is likely to increase the risk of food insecurity and evidence suggests that women and girls tend to be disproportionately affected by that.⁶¹ Similarly, extreme temperatures, heat and drought also present barriers to children's education, as intense heat affects concentration, which, in turn, can have an impact on their education, even when they are able to physically attend classes.⁶²

25. A disaster can cause stress and trauma to those affected, triggered by the damage to their homes and possessions, displacement or relocation, the loss of loved ones, witnessing parents or caregivers undergo stress, or neglect and abuse. Children are particularly susceptible to such mental health problems, which can in turn affect their physical health and schooling.⁶³ For example, adolescent girls in temporary shelters stated that the lack of privacy around sleep, washing and dressing might affect their ability to concentrate at school.⁶⁴ As children and young people – girls as well as boys – may have little power to limit the harms

⁵³ A/HRC/35/11, para. 44, and joint general recommendation No. 31 of the Committee on the Elimination of Discrimination against Women/general comment No. 18 of the Committee on the Rights of the Child (2019), para. 22.

⁵⁴ United Nations Population Fund, "Child marriage and environmental crises: an evidence brief" (2022), p. 2.

⁵⁵ United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women), "The climate-care nexus: addressing the linkages between climate change and women's and girls' unpaid care, domestic and communal work", working paper (November 2023).

⁵⁶ A/HRC/41/26; Zahrah Nesbitt-Ahmed, "How gender-responsive age-sensitive social protection is related to the climate crisis" and submissions by She Leads consortium, p. 3, and joint civil society Cambodia, p. 1.

⁵⁷ See <https://www.unicef.org/stories/water-and-climate-change-10-things-you-should-know>.

⁵⁸ UN-Women, "The climate-care nexus", p. 20.

⁵⁹ See Kerri Whelan, "This is what hunger does to girls' education", Plan International USA, (September 2018) and Plan International, "Real choices, real lives: world hunger and its impact on girls" (2022), pp. 7 and 8.

⁶⁰ UNICEF, "Climate change: impact on adolescent girls", p. 6.

⁶¹ Food and Agriculture Organization of the United Nations (FAO), International Fund for Agricultural Development, UNICEF, WHO and World Food Programme, *The State of Food Security and Nutrition in the World: Urbanization, Agrifood Systems Transformation and Healthy Diets across the Rural–Urban Continuum* (Rome, FAO, 2023).

⁶² Submissions by Plan International, p. 3, and Felm, p. 1.

⁶³ A/HRC/35/13, paras. 18 and 19; Carolyn Kousky, "Impacts of natural disasters on children", pp. 81 and 83; and joint submission by Children Education Society and Tanzania Alliance for Climate and Sustainable Society, p. 3.

⁶⁴ Plan International, "Climate Change: focus on girls and young women", p. 6.

of climate change, they may experience worry, fear, anger and despair regarding current and anticipated losses caused by climate change.⁶⁵

B. Rights within education

26. Rights within education are aimed at promoting substantive gender equality in education. That includes gender equality in the school setting, such as in educational content and the method of education. It further includes an environment where girls have opportunities to pursue goals towards self-determination and the realization of their talents and potential, free of violence.⁶⁶ It has been noted that improving girls' and young women's access to science, technology, engineering and maths, to so-called green skills⁶⁷ and to leadership skills and confidence to drive this agenda and ensure they are not left behind, can promote decent work for women, gender equality and their empowerment. Strengthening girls' skill sets in diverse activities offers them more choice when seeking employment, enabling them to achieve sustainable livelihoods, manage natural resources and reduce exposure to risks.⁶⁸

27. Climate change can alter economic structures and employment opportunities. If the education system does not adapt to the changes climate change brings, children and youth may struggle to acquire the skills needed for emerging job markets. Currently, girls are often underrepresented in science, technology, engineering and maths in academic schools.⁶⁹ Education systems must build the skills girls need to address the impacts and consequences of climate change, including by facilitating their opportunities to be educated in science, technology, engineering and maths, so-called green skills and leadership skills, and achieve the confidence to drive change with regard to the climate agenda.

28. Through education, so-called green skills can be developed. Green skills include technical knowledge, expertise and abilities that enable the effective use of green technologies and processes in professional settings. They draw on a range of knowledge, values and attitudes to facilitate environmentally sustainable decision-making at work and in life.⁷⁰ Education may also help girls in developing the skills needed for the green economy: that means the transferable or transversal skills that are essential for linking life skills to social change in an economy that is low carbon, resource-efficient and socially inclusive. Skills such as future thinking and critical thinking are crucial for girls to link skills into empowered action, equipping them with the capacity to read contexts, identify solutions and respond and adapt more effectively. Such skills are also important for paving a pathway into green-sector careers.⁷¹

29. Within education systems, children may further develop skills in negotiation, communication, confronting power structures, problem identification and problem solving.⁷² Such skills are needed so that they may have a say in political processes and continue the role they have played in calling for climate justice, both within their communities and globally.⁷³ That is specifically important for girls, as women are still underrepresented in political

⁶⁵ Caroline Hickman and others, "Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey", *The Lancet Planetary Health*, vol. 5, No. 12 (2021).

⁶⁶ Committee on the Elimination of Discrimination against Women, general recommendation No. 36 (2017), paras. 56, 64 and 65.

⁶⁷ Skills needed for a workforce in a low-carbon economy.

⁶⁸ Plan International, "Climate change: focus on girls and young women", p. 14.

⁶⁹ Committee on the Elimination of Discrimination against Women, general recommendation No. 36 (2017), para. 60.

⁷⁰ See <https://unfccc.int/news/why-are-green-skills-important-for-youth>.

⁷¹ Christina Kwauk and Amanda Braga, "Three platforms for girls' education in climate strategies" (Brookings, 2017).

⁷² Plan International, "Climate change: focus on girls and young women", p. 11.

⁷³ Submission by Geneva Center for Human Rights Advancement and Global Dialogue, p. 3.

processes and decision-making. Because of this, they have less opportunity to influence policies that affect them, including those related to climate change.⁷⁴

C. Rights through education

30. Rights through education define the ways in which schooling shapes rights and gender equality in aspects of life outside the sphere of education. Schooling must offer education programmes to equip women and girls with the skills to claim rights in all spheres, beyond the school, and to participate in social, economic and political processes, as well as in decision-making in all sectors.⁷⁵ In the context of climate change, education must empower children, including girls, with the knowledge that protecting the environment contributes to the fulfilment of human rights and with the skills to engage in environmental decision-making processes, and to undertake effective action to address and promote accountability for environmental harms.⁷⁶ Education should also build the capacity of all actors in the education system to prevent, prepare for, respond to and recover from climate change risks, and education systems must be strengthened to achieve continuity of education, especially for the most marginalized children, when climate-related disruptions occur.⁷⁷ It is therefore important that education is transformative and child- and learner-centred: curricula need to be gender-sensitive and tailored to include the children's environmental context and teaching materials need to be scientifically accurate and up to date. All children should be equipped with the necessary skills in the context of expected environmental challenges. That is especially true in the light of disinformation on climate change, making learning important in increasing science literacy and critical thinking skills. Furthermore, environmental values need to be reflected in the training of education professionals.⁷⁸

31. Education, particularly for girls, can strengthen climate action strategies in multiple ways. It can empower girls, foster their climate leadership and pro-environmental decision-making, and it may help in developing their green skills for green jobs.⁷⁹ This subsequently means that education can help girls in identifying climate change risks and hazards, and in enhancing their abilities and understanding of the measures required to reduce, mitigate and face those risks. Education can also help girls address the causes of climate change and environmental degradation, which can include building skills, knowledge, competencies and behaviours to reduce greenhouse gas concentrations and emissions, conserve nature and protect the planet.⁸⁰

32. Education further provides children and young people with opportunities to become agents of climate action.⁸¹ It empowers girls to take up leadership roles in climate justice movements and take action, individually and collectively, to promote climate justice and environmental sustainability.⁸² Furthermore, by learning life skills which can be nurtured at school, such as self-esteem, confidence and the ability to challenge power structures that often limit their potential, girls may gain the critically important skills needed to improve their participation and engagement in decision-making from the household to the national level.⁸³ That has been demonstrated by student climate protesters around the world, the majority of whom are adolescent girls and young women, and by climate activists, such as

⁷⁴ Committee on the Elimination of Discrimination against Women, general recommendation No. 36 (2017), para. 80.

⁷⁵ *Ibid.*, para. 13.

⁷⁶ See [A/HRC/57/34](#).

⁷⁷ UNICEF, "Harnessing the transformative potential of education for climate change mitigation, adaptation and resilience building in Europe and Central Asia" (2023), p. 4.

⁷⁸ Committee on the Rights of the Child, general comment No. 26 (2023), paras. 53 and 54.

⁷⁹ Zahrah Nesbitt-Ahmed, "How gender-responsive age-sensitive social protection is related to the climate crisis", p. 17.

⁸⁰ Kate Sims, "Education, girls' education and climate change", p. 8.

⁸¹ Submission by Geneva Center for Human Rights Advancement and Global Dialogue, p. 4.

⁸² See [A/HRC/57/34](#).

⁸³ Plan International, "Climate change: focus on girls and young women", p. 11.

Elizabeth Wathuti from Kenya, Brianna Fruean from Samoa, Greta Thunberg from Sweden and Vanessa Nakate from Uganda.⁸⁴

33. The completion of education, in particular the completion of higher level education, further protects girls from poverty. Globally, the level of completed education is directly linked to an average increase in wages: for girls with a primary level of education this is 10.9 per cent, at the secondary level it is 8.7 per cent and at the tertiary level it is 16.8 per cent.⁸⁵ Considering that climate change exacerbates existing vulnerabilities to poverty, investment in education will require not only ensuring girls' access to education but also their completion of it, so that they enjoy better economic security even while facing the impact of climate change.⁸⁶

34. Education plays a key role in enhancing girls' disaster preparedness: educational attainment has an impact on their understanding of, and actions against, climate change. Research shows that formal education directly supports the development of cognitive and problem-solving skills and risk perception. Furthermore, educated individuals are associated with better implementation of disaster preparedness measures, evacuation at times of emergency, diversified and better access to useful information (including weather forecasts and warnings) and greater social capital, including social support and networks. Prevention and mitigation of disasters and climate change require well-trained women in disciplines that include economics, agriculture, water resources management, climatology, engineering, law and emergency services.⁸⁷

35. Educated individuals are more likely to respond better in the event of weather-related disasters, including through addressing and coping with the risks associated with disaster. That is especially important, as girls' education, particularly secondary education, has been identified as the most important socioeconomic determinant in reducing vulnerability to weather-related disasters and extreme weather.⁸⁸ It has been noted that policies that support gender equality in access to and use and control of science and technology, and to formal and informal education and training, would enhance a nation's capability in the areas of disaster reduction, mitigation and adaptation to climate change.⁸⁹

36. Developing the leadership skills that empower girls to engage in politics and participate in decision-making relating to their environment has been shown to have environmental benefits. Studies demonstrate that gender equality and women's empowerment are central to economic development and environmental sustainability.⁹⁰ It is further shown that countries with a higher representation of women in parliament are more likely to set aside protected land areas and ratify multilateral environmental agreements.⁹¹ Female leaders tend to be more effective in conservation and protection efforts, and are more likely to pursue sustainable futures for their communities.⁹² Similarly, in the private sector, organizations and businesses with gender-diverse leadership teams are more likely to adopt policies and procedures that are beneficial to environmental outcomes.⁹³ Climate solutions have benefited from the contribution of women climate scientists in areas such as climate financing and water-related hazards.⁹⁴

⁸⁴ Zahrah Nesbitt-Ahmed, "How gender-responsive age-sensitive social protection is related to the climate crisis", p. 17.

⁸⁵ Christina Kwauk and Amanda Braga, "Three platforms for girls' education in climate strategies", p. 17.

⁸⁶ See Kate Sims, "Education, girls' education and climate change".

⁸⁷ Committee on the Elimination of Discrimination against Women, general recommendation No. 37 (2018), para. 58.

⁸⁸ Kate Sims, "Education, girls' education and climate change", p. 9.

⁸⁹ Committee on the Elimination of Discrimination against Women, general recommendation No. 37 (2018), para. 53.

⁹⁰ United Nations Development Programme, "Overview of linkages between gender and climate change" (2016), p. 6.

⁹¹ Ibid.

⁹² Christina Kwauk and Amanda Braga, "Three platforms for girls' education in climate strategies", p. 27.

⁹³ Kate Sims, "Education, girls' education and climate change", p. 17.

⁹⁴ See <https://www.un.org/en/climatechange/women-scientists-forefront-climate-action>.

D. International cooperation

37. The Committee on the Rights of the Child has stated, in relation to article 4 of the Convention on the Rights of the Child, that the obligations of international cooperation of each State depend in part on the situation of that particular State. In the context of climate change, such obligations are appropriately guided by taking into account the historical and current emissions of greenhouse gases and the concept of common but differentiated responsibilities and the respective capabilities of States, in the light of different national circumstances. Articles 9 and 11 of the Paris Agreement require, among other things, that developed States provide technical and financial assistance to developing States. It has been noted that developing countries need far greater financial resources than are currently available, in order to prevent, minimize and address adverse climate impacts on girls' education, including as part of adaptation and loss and damage finance.⁹⁵

38. International cooperation is particularly important, since the impacts of loss and damage from climate change are already being felt every day as a result of ongoing climate-related impacts and those who have historically contributed the least to the current climate change are disproportionately affected.⁹⁶ As described earlier in the present report, there are multiple direct and indirect costs to education owing to loss and damage caused by climate change. They include both economic losses, such as damage to school buildings, and non-economic losses and damage that cause incalculable loss to communities and harm girls' right to education, such as through subsequently missing school days, with girls less likely than boys to return to school, or education being interrupted by harmful climate change coping mechanisms, such as child marriage.⁹⁷

IV. Promising practices of girls' equal enjoyment of the right to education in the context of climate change

39. There are currently gaps in all three dimensions of the right to education in the context of climate change and the environmental degradation it causes. The submissions for the present report highlighted a need for State-led initiatives that specifically target all dimensions and that capture all aspects of each dimension, some of which are outlined below.

40. To reduce the risks to physical access to education, it was noted in the submissions that participatory development of risk assessments and risk reduction plans, jointly by parents' committees and teachers, may strengthen schools' resilience in the face of climate-induced emergencies. In Cambodia, for example, the Ministry of Education, Youth and Sport has adopted the Safe School guidelines to support educational decision-makers and practitioners in creating schools that are resilient in the face of climate change. The guidelines were developed in collaboration with civil society organizations and include advice on building flood-resistant schools, disaster risk management and how solutions should start with child-centred risk assessments.⁹⁸

41. Other initiatives focus on addressing the discontinuation of girls' education because of climate change. In the United Republic of Tanzania, programmes run by the Ministry of Education under the secondary education quality improvement project aim to get the 12,000 girls and young women, aged 13 to 20, who have dropped out of secondary school for various reasons, including the adverse impacts of climate change, to return to school. The complementary basic education programme does similar work at the primary school level. Civil society organizations in the country reach out to girls not enrolled in school, identify the specific climate change challenges that pushed them away from school and develop and

⁹⁵ United Nations Environment Programme, *Making Peace with Nature* (2021) and submission by Sight Savers, p. 4.

⁹⁶ *Intergovernmental Panel on Climate Change, Climate Change 2023, Synthesis Report*, pp. 5 and 42.

⁹⁷ Plan International, "From the frontlines: youth call for action to address loss and damage caused by climate change" (2022).

⁹⁸ Submission by joint Civil Society Cambodia, p. 4.

implement work plans for each out-of-school girl to address those challenges, including linking them to the education quality improvement programmes.⁹⁹

42. In relation to rights within education for girls, in Ecuador, the Climate Change Education Initiative, led by a coalition of government agencies and environmental NGOs, develops curriculum materials and teacher training programmes focused on integrating climate change education into the national education system.¹⁰⁰

43. In Malawi, through the UNICEF Green Girls Initiative, girls attend training courses on green skills and get opportunities to take climate action and learn about alternative sources of fuel and other practical solutions for reducing environmental impact.¹⁰¹ Other submissions noted that having equal enjoyment in education may result in opportunities to gain important life skills or learn key survival skills, such as swimming.¹⁰²

44. Some countries have opted to include climate change directly in the primary and/or secondary education curricula and in libraries, focusing on topics such as education for sustainable development or environmental protection.¹⁰³ In Brazil, for example, it is prescribed by law that everyone has the right to an ecologically balanced environment. The law further stipulates that environmental education be promoted at all levels of education and for public awareness of environmental preservation.¹⁰⁴ In Ecuador, a curriculum has been developed that incorporates principles and skills for the achievement of sustainable ways of life, with a specific focus on the Galapagos Islands.¹⁰⁵ In Ghana, the Ministries of Education and of Environment, Science, Technology and Innovation have integrated environmental education into school syllabuses to ensure education for sustainable development.¹⁰⁶

45. In relation to developing specific skills to respond to the consequences of climate change, in Brazil, the Changemakers Schools programme encourages schools to train children and young people to take an active role in making the necessary changes related to climate change by developing skills such as empathy, teamwork, creativity and protagonism.¹⁰⁷ The programme does this by linking schools to a community consisting of a variety of actors, including journalists, professors, representatives of the Government and artists.¹⁰⁸ In Ethiopia, the Norwegian Refugee Council trained young women in environmentally friendly irrigation and agriculture, who then formed a youth self-help group with their start-up materials.¹⁰⁹ In Sri Lanka, under a World Vision programme, young people are equipped with the knowledge, competencies and values they need to contribute to issues affecting their lives and communities, and adolescents contribute to climate action projects, such as tree planting and waste management.¹¹⁰ The United Nations Educational, Scientific and Cultural Organization (UNESCO) Greening Education Partnership, a collaborative platform for Governments and other stakeholders, prepares learners to acquire the knowledge, skills, values and attitudes to tackle climate change and promote sustainable development.¹¹¹

46. Various initiatives also focus on the participation of girls in facilitating the meaningful engagement of disaster-affected young people in existing youth advocacy spaces and

⁹⁹ Joint submission by Children Education Society and Tanzania Alliance for Climate and Sustainable Society, p. 4.

¹⁰⁰ Submission by Broken Chalk, pp. 9 and 10.

¹⁰¹ Submission by UNICEF, p. 4.

¹⁰² Plan International, "Climate change: focus on girls and young women", p. 10, and submission by Geneva Global Hub for Education in Emergencies, p. 6.

¹⁰³ Submissions by National Human Rights Commission Mauritius, p. 1, and joint Civil Society Cambodia, p. 4.

¹⁰⁴ Submission by the Human Rights Clinic of the postgraduate law programme at Pontifícia Universidade Católica do Paraná, p. 4.

¹⁰⁵ Submission by Ecuador, p. 4 (in Spanish).

¹⁰⁶ Submission by World Vision, p. 4.

¹⁰⁷ Submission by the Human Rights Clinic, Pontifícia Universidade, p. 5.

¹⁰⁸ See <https://escolatransformadoras.com.br/the-program/about/?lang=en>.

¹⁰⁹ Submission by Geneva Global Hub for Education in Emergencies, p. 6.

¹¹⁰ See submission by World Vision and <https://www.wvi.org/sites/default/files/2024-02/IMPACT%2BBrief.pdf>.

¹¹¹ Submission by UNESCO, p. 6.

networks to ensure that they are sufficiently represented in policymaking processes. In Azerbaijan, with the help of UNICEF, youth climate envoys have participated in comprehensive educational programmes in order to advance the climate agenda locally and globally.¹¹² In the Democratic Republic of the Congo, youth advocates serve among others as climate change ambassadors. Notable in this effort is the inclusion of an advocate with albinism to promote understanding of the combined impacts of climate change and albinism.¹¹³

V. Conclusions and recommendations

47. The adverse impacts of climate change can result in additional demands and pressures on education for girls in households and communities where girls are already disproportionately affected by ingrained gender inequalities, stereotypes and structural discrimination. Challenges to the enjoyment of the right to education for girls in the context of climate change often result from multiple factors that are interlinked. They include climate-induced displacement; child, early and forced marriage; gender-based violence, including sexual violence; the lack of essential facilities and infrastructure to meet the needs of girls and young women; a lack of security; entrenched gender stereotypes affecting the representation of girls in science, technology, engineering and maths; and the underrepresentation of women and girls in political decision-making processes.¹¹⁴

48. A scarcity of disaggregated data, including at the global level, makes it difficult to analyse quantitatively the connection between gender, age, inequality in the context of climate change and how girls' equal enjoyment of the right to education is specifically affected. However, qualitative information that is available indicates that climate change can exacerbate existing challenges to the right to education, in particular for girls.

49. Girls may experience difficulties with regard to physical access to education, including as a result of damaged infrastructure, including schools and water, sanitation and hygiene facilities. Travelling to and from school after a climate change-induced event may exacerbate gender-specific risks for girls, and displaced and migrant girls are at even greater risk of losing their access to education and of dropping out of school. Similarly, girls living in crisis situations can be at greater risk of sexual and gender-based violence and exploitation. Households that are affected by economic shocks related to climate change may adopt negative coping strategies – for instance, arranging child marriages or pulling girls out of school to help with domestic work or care and support responsibilities.

50. The information available further suggests that girls face the risk of lower academic performance, as there may be a higher degree of absenteeism among them, including in the context of climate crises. Furthermore, once displaced, girls may be forced to stay in overcrowded emergency shelters and are subsequently at greater risk of experiencing sexual and other violence.

51. Girls are often underrepresented in science, technology, engineering and maths in academic schools. Furthermore, women are still underrepresented in political processes and decision-making and because of this, they have less opportunity to effectively influence the policies that affect them, including in relation to climate change. Addressing their rights within education may help to build the skills girls need to address the impacts and consequences of climate change and to develop the skills needed for the green economy, including by facilitating their opportunities for education in science, technology, engineering and maths. Girls may be able to develop other skills within education, such as problem identification and problem solving, which

¹¹² Submission by the Ombudsman of Azerbaijan, p. 3. See also <https://www.unicef.org/azerbaijan/press-releases/azerbaijan-appoints-youth-climate-envoys-advocate-climate-rights-local-and-global>.

¹¹³ See <https://www.unicef.org/drcongo/en/node/3186>.

¹¹⁴ See Human Rights Council resolution 54/19.

will help them to have a greater say in the political processes related to the environment. Such efforts will benefit not only the girls involved, but the political processes and the environment itself.

52. Education can help girls to identify climate change risks and hazards, and enhance their abilities and understanding of the measures required to reduce, mitigate and face those risks. Education can also help girls to address the causes of climate change and environmental degradation, which can include building skills, knowledge, competencies and behaviours to reduce greenhouse gas concentrations and emissions, conserve nature and protect the planet.¹¹⁵

53. International cooperation is critical both to efforts to realize the right to education and to establishing adaptation measures for and mitigating the effects of climate change. States should take immediate steps and measures to fully comply with their international obligations in that regard, guided by the principles of equity and their common but differentiated responsibilities and capabilities in the light of different national circumstances.

54. On the basis of the analysis contained in the present report, the High Commissioner recommends that States take the following actions in collaboration with educational institutions, national human rights institutions, civil society, international organizations, children and youth groups, and other stakeholders:

(a) Take a holistic approach to the impacts of environmental harm and climate change on girls' education by addressing the right to access education, rights in education and rights through education, and by paying particular attention to the specific needs of girls in that holistic approach;

(b) Address the current gaps in data by enhancing the collection and analysis of data, disaggregated by sex and gender, race, age, disability, income, race, ethnicity, migratory status, geographical location and other characteristics, to identify and address disparities in educational opportunities and their impacts, with strict safeguards and in accordance with international human rights law and a human rights-based approach to data;

(c) Allocate adequate resources and budgets so that schools, other educational facilities and infrastructure are built to withstand climate change and the damage caused by climate change, and are reconstructed on the basis of sound risk assessments, and prioritize underserved communities;

(d) Give priority to the rebuilding and rehabilitation of schools, other educational facilities and infrastructure (including health and water, sanitation and hygiene facilities) in case of damage caused by climate change, ensuring that girls continue to enjoy physical access to education facilities and that underserved communities are prioritized;

(e) Allocate resources and budgets so that schools and other educational facilities can address the wider gender inequality outside the school environment in relation to climate change, which affects girls' equal enjoyment of education, including in relation to increasing care and support responsibilities, food insecurity and displacement;

(f) Improve the adaptability of education, including through the curricula, to evolving job markets caused by and in relation to climate change, such as the development of green skills;

(g) Invest in education programmes that develop girls' leadership skills and support girls to become agents of change with regard to the climate and the environment within their communities;

¹¹⁵ Kate Sims, "Education, girls' education and climate change", p. 8.

(h) Ensure that girls have equal access to training and skills development programmes on climate change, so that girls and women can fully participate in climate action initiatives;

(i) Foster, recognize and support the positive contribution of children to environmental sustainability and climate justice through the education curricula, empowering them to advocate for their rights;

(j) Promote teaching consistent with the principles of gender equality that challenges and contributes to changing the harmful gender stereotypes, norms and ideologies that prevent girls from freely and fully exercising and enjoying the right to education;

(k) Ensure that environmental values are reflected in the training of all professionals involved in education, including with regard to the teaching methods, technologies and approaches used in education and in preparing children for green jobs;

(l) Ensure that women and girls have equal access to information, including in relation to scientific research, and education regarding climate change. That information should form part of the core educational curricula and should be age-appropriate;

(m) Strengthen international cooperation, in line with the principle of common but differentiated responsibilities, on adaptation and mitigation measures and measures to avert and minimize loss and damage, including those necessary to fulfil and protect the right to education by girls;

(n) Actively engage with the United Nations human rights mechanisms, such as the treaty bodies, the special procedures of the Human Rights Council and the universal periodic review process, and implement their recommendations and guidance in relation to the realization of the right to education, in particular as regards girls.
