

IN THE AFRICAN COURT ON HUMAN AND PEOPLES' RIGHTS

ARUSHA, UNITED REPUBLIC OF TANZANIA

APPLICATION NO, 001/2025

IN THE MATTER OF A REQUEST BY THE PAN AFRICAN LAWYERS UNION FOR AN
ADVISORY OPINION ON THE OBLIGATIONS OF STATES WITH RESPECT TO THE
CLIMATE CRISIS

AMICUS CURIAE BRIEF

**Submitted under Rule 84(2) of the Rules of the African Court on Human and Peoples'
Rights**

Brief filed by SECTION27

(INCORPORATING THE AIDS LAW PROJECT)

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“As an African proverb says: the earth is not ours, it is a treasure we hold in trust for our children and grandchildren. We must be worthy of that trust. By working together, every nation and every individual...we can defeat the threat of global warming. Let us act now, not tomorrow.”

– Kofi Annan, Former Secretary-General of the United Nations

SUMMARY OF SUBMISSIONS

1. SECTION27's submissions address the impact of climate change on the rights to basic education and access to health, with specific reference to evidence of these impacts in the SADC region.
2. The climate crisis poses a systemic and escalating threat to the full enjoyment of all rights protected under the African Charter on Human and People's Rights ("ACHPR"), including the rights to education, health, dignity, equality, and life. These impacts are not evenly distributed. Rather, they disproportionately affect children, women and girls, persons with disabilities, and other vulnerable groups, thereby deepening pre-existing structural inequalities across the continent.
3. These submissions are directed at the specific questions placed before the Court by the Pan African Lawyers Union ("PALU"). In particular, they assist the Court in answering question 94(a) concerning the obligations of States towards present and future generations;

question 94(b) concerning the positive obligations of States to protect vulnerable groups, including children, women and girls, and persons with disabilities; question 94(d) concerning the implementation of adaptation, resilience and mitigation measures; and question 94(f) concerning the responsibilities of States in relation to third parties, including transnational corporations and other business enterprises. SECTION27 addresses these questions through the lens of the rights to education and health, and through the situation of children, who stand at the intersection of the present and future generations whose rights the Request seeks to protect.

4. SECTION27's experience in the protection of healthcare and education rights enables it to provide this Court with integrated analysis that connects climate risk to the practical functioning of education and healthcare systems.
5. In light of this, SECTION27 submits that States have a positive obligation of due diligence to identify, assess, and address climate-related risks to the enjoyment of human rights, including the rights to education and healthcare. This includes the systematic conduct of evidence-based climate risk and vulnerability assessments across all sectors essential to the realisation of rights including education, health care, food systems, transport networks, and public infrastructure. It also requires children's rights impact assessments. Such an approach is necessary to ensure that climate impacts are anticipated and integrated into planning rather than addressed only after harm occurs.
6. Flowing from this obligation, States are required to adopt and implement effective adaptation and mitigation measures that are capable of protecting individuals and communities from foreseeable climate-related harm. These measures must be practical, responsive, and context-specific, and must prioritise those most affected by climate change. In particular, adaptation frameworks must be gender-responsive, disability-inclusive, and grounded in the best interests of the child, consistent with States' existing obligations under the ACHPR and the African Convention on the Rights and Welfare of the Child ("ACRWC").

The obligations of African States with respect to the right to education

7. In respect of the right to education, SECTION27 submits that the rights under Article 17 of ACHPR and Article 11 of the ACRWC must be interpreted to include a duty on States to ensure climate-resilient educational systems. This encompasses not only the protection of school buildings, but also the infrastructure and systems that enable access to education, including learner mobility, scholar transport, admissions processes, and learner nutrition programmes. These systems must be designed to remain functional under foreseeable climate shocks, ensuring that no learner is excluded from education due to preventable disruptions in access or service delivery.
8. In addition, SECTION27 submits that States are under a duty to ensure that public educational infrastructure is climate-resilient, safe, and capable of sustaining the continuous enjoyment of the right to education. This requires States to anticipate foreseeable climate risks, undertake vulnerability assessments, and implement reasonable adaptation measures, including investment in resilient infrastructure. The principle of inclusive education further requires that universal design be embedded in infrastructure planning, ensuring accessibility and continuity for all learners, including learners with disabilities.
9. SECTION27 also submits that the impacts of climate change on children require that the best interests of the child be treated as a primary consideration in all climate-related decision-making. Failure to integrate this principle into climate governance risks undermining the protection of both the right to health and the right to education, particularly in contexts of repeated climate-related disruption.

The obligations of States with respect to the right to health

10. In respect of the right to health, SECTION27 submits that the Court should affirm that the rights to health, equality, non-discrimination and a satisfactory environment, read together with the obligations contained in the African Charter, the Maputo Protocol and the African Charter on the Rights and Welfare of the Child, require States to adopt gender-responsive, child-sensitive and climate-resilient health systems capable of protecting individuals and communities from the foreseeable impacts of climate change.

11. In particular, the Court is invited to find that States' obligations in relation to the right to health encompass:

- i. the integration of gender-responsive climate change adaptation, mitigation and disaster-risk reduction measures into health policies, legislation, planning, budgeting, implementation and monitoring processes;
- ii. ensuring the meaningful participation and representation of women and girls, including those from marginalised and vulnerable communities, in the design, implementation and oversight of climate and health-related decision-making processes;
- iii. undertaking regular climate vulnerability and health-risk assessments to identify populations, geographic areas and health systems that are most vulnerable to climate-related harms;
- iv. strengthening and climate-proofing public health infrastructure, including clinics, hospitals, laboratories, medicine storage facilities and emergency response systems, particularly in areas exposed to flooding, droughts, cyclones, extreme heat and other climate-related hazards;
- v. building the human-resource capacity of health systems to prevent, prepare for and respond to climate-sensitive health risks, including infectious diseases, heat-related illnesses, maternal and reproductive health complications, and mental health impacts;
- vi. investing in climate-resilient and accessible healthcare systems and allocating the maximum available resources towards the underlying determinants of health, including access to clean water, adequate nutrition, sanitation, food security and menstrual hygiene management;
- vii. ensuring the continuity and accessibility of essential healthcare services, including maternal, sexual and reproductive healthcare services, during climate-related emergencies and disasters;

- viii. adopting targeted measures to protect women, girls, children and other vulnerable groups from the disproportionate health impacts of climate change, including climate-related food insecurity, gender-based violence, displacement and disease outbreaks; and
 - ix. progressively realising universal health coverage as an essential component of climate-resilient health systems, ensuring that all persons are able to access affordable, quality healthcare services without discrimination, including during climate-related disruptions.
12. These measures are necessary to ensure that States are able to fulfil their obligations to respect, protect and fulfil the right to health in a manner that responds to the realities of a changing climate and addresses the disproportionate burden borne by women, girls and other vulnerable groups.
13. Finally, SECTION27 submits that the effective protection of human rights in the context of climate change requires robust regulation of private actors, requiring due diligence. States therefore have a duty to adopt legislative, regulatory, administrative, and other measures to prevent, mitigate, and address human rights harms arising from the activities of transnational corporations, including those in the fossil fuel industry and other business enterprises. This is particularly important where such activities contribute to environmental degradation, greenhouse gas emissions, and climate-related harm affecting the enjoyment of rights protected under the ACHPR, including the right to a satisfactory environment under Article 24.

INTRODUCTION

14. These proceedings arise from a Request for an Advisory Opinion submitted by the Pan African Lawyers Union (“PALU”) concerning the obligations of African States in relation to the climate crisis (“the Request”), in terms of Article 4 of the Protocol to the African Charter on Human and Peoples’ Rights on the Establishment of the African Court on Human and Peoples’ Rights and Rule 82 of the Rules of the African Court on Human and Peoples’ Rights (“the Rules”).
15. In recognising the significance of the issues raised in the Request and their implications for the protection and realisation of human rights across the continent, SECTION27 (Incorporating the AIDS Law Project) (“SECTION27”) applied for leave to participate in these proceedings as *amicus curiae* on 1 December 2025 and supplemented its application on 31 March 2026. The Court granted SECTION27 such leave on 26 May 2026.
16. These submissions are accordingly filed by SECTION27 pursuant to Rule 84(2) of the Rules and in accordance with the leave granted by the Court.
17. SECTION27 is an independent public interest law organisation based in Johannesburg, South Africa, with over 30 years of experience in human rights advocacy. SECTION27 uses research, advocacy, legal literacy, community mobilisation, and litigation, to advance the constitutional rights to access to healthcare and basic education in South Africa. We use the law to advance social justice and to ensure that everyone can access quality healthcare and basic education with dignity and without discrimination.
18. SECTION27’s work focuses on the rights to healthcare and basic education, but also extends beyond these rights to encompass the broader range of rights upon which their realisation depends, including the rights to a clean, healthy and sustainable environment, food, dignity, equality, and life. It approaches climate change not solely as an environmental concern, but as a human rights challenge that threatens the realisation of socio-economic rights and undermines substantive equality and social justice.

19. The Request by PALU presents the Court with an important opportunity to clarify the obligations of African States in responding to the climate crisis. While climate change is often framed as an environmental challenge, its consequences are fundamentally human.
20. Across the continent, climate-related harms are already affecting access to education, healthcare, food, water, and other conditions necessary for a life of dignity.¹ The impacts of climate change are particularly acute in Africa. Although the continent has contributed least to global greenhouse gas emissions, it bears a disproportionate share of the resulting harms.² Extreme heat, droughts, floods, environmental degradation and pollution are increasingly disrupting the enjoyment of rights protected under the African Charter on Human and Peoples' Rights ("ACHPR"), particularly for children, women, persons with disabilities, and communities living in poverty.
21. The importance of this Advisory Opinion also lies in the need for an African human rights response to an African lived reality. Climate change in Africa is experienced against the backdrop of poverty, inequality, weak public infrastructure, unequal access to health and education services, food insecurity, gender inequality, disability exclusion and limited adaptive capacity. These conditions shape the way climate harms are experienced and determine who is most affected. The interpretation of States' climate obligations must therefore be grounded in the African human rights system and responsive to the conditions facing rights holders on the continent.
22. SECTION27 submits that this Court is uniquely placed to provide guidance that reflects both the universality of human rights and the particular realities of African communities. In doing so, the Court can clarify that climate action is not only a matter of environmental governance, but also a legal duty to protect dignity, equality, health, education, development and life. An Advisory Opinion rooted in African instruments, African jurisprudence and African conditions would assist States in developing responses that are not abstract or imported, but are

¹ SA Dersso, "Human and peoples' rights implications of climate change: Implications for vulnerable groups and corporate accountability" (2024) *African Commission on Human and Peoples' Rights*, available at <https://achpr.au.int/en/news/press-releases/2024-11-08/implications-climate-change-implications-vulnerable-groups-and> (accessed 09 July 2026).

² World Meteorological Organization, "Africa suffers disproportionately from climate change" *World Meteorological Organization* (2023), available at <https://wmo.int/news/media-centre/africa-suffers-disproportionately-from-climate-change> (accessed 10 July 2026).

capable of addressing the concrete ways in which climate change affects people across the continent.

23. SECTION27's submissions are informed by its work with communities across South Africa and its experience addressing the impacts of climate change on the enjoyment of the rights to access healthcare services and basic education. Through litigation, research, advocacy, client engagement and community mobilisation and empowerment, SECTION27 has observed how climate-related harms disproportionately affect poor and marginalised communities, exacerbating existing inequalities and creating additional barriers to the realisation of fundamental rights.
24. In relation to the right to healthcare, SECTION27 has worked with communities in the Vaal Triangle, a heavily industrialised area that is one of South Africa's most polluted regions. This work has highlighted the relationship between fossil fuel-based energy production, air pollution, and adverse health outcomes, particularly for communities living in close proximity to industrial facilities. SECTION27 also represented the *Vaal Environmental Justice Alliance* as amicus curiae in *African Climate Alliance and Others v Minister of Mineral Resources and Energy and Others (56907/2021) [2024] ZAGPPHC 1271*, commonly known as the #CancelCoal case, where it placed evidence before the Court on the health, equality, and human rights impacts of new coal-fired power generation. This work has provided SECTION27 with insight into the ways in which climate change and environmental degradation place additional strain on public health systems and undermine access to healthcare, particularly for vulnerable communities.
25. SECTION27 has similarly witnessed the effects of climate change on the right to basic education. Through its work in Komani (formerly Queenstown) in the Eastern Cape Province of South Africa and other communities affected by extreme weather events, SECTION27 has observed how flooding and damage to public basic education infrastructure can disrupt teaching and learning, limit access to schools, and undermine the safety and dignity of learners. These experiences have reinforced the interconnected nature of climate change and socio-economic rights, particularly for children living in rural and under-resourced communities.

26. The experiences of communities in the Vaal Triangle and Komani illustrate the varied ways in which climate change affects the enjoyment of socio-economic rights in practice. Accordingly, in addressing the impacts of climate change on human rights, States are required to engage with the interconnected nature of these rights.
27. SECTION27 therefore, welcomes the opportunity to assist the Court in its consideration of the Request. These submissions focus on two rights that lie at the heart of human development and human dignity: the rights to education and health.
28. We seek to assist the Court in understanding how climate change threatens the enjoyment of these rights and how existing obligations under the Charter require States to prevent, mitigate and respond to those harms.
29. This submission will be structured as follows:
- i. First, we examine the implications of climate change for the right to basic education;
 - ii. Second, we assess the implications of climate change for the right to access healthcare and its disproportionate impact on women and girls as a vulnerable group. We support this with expert evidence from the Southern African Consortium for Climate Change and Health ("SACCCH") on the disproportionate impact of climate events on health, particularly for women and girls;
 - iii. Third, we consider the role of climate risk assessments, as well as adaptation and mitigation planning in protecting and progressively realising these rights;
 - iv. Fourth, we make a request to the court to make oral submissions;
 - v. Last, the submission concludes by drawing together these considerations in relation to States' obligations under the African human rights system.

OVERARCHING LEGAL FRAMEWORK

30. As noted above, SECTION27's submissions focus primarily on the obligations of States with respect to the rights to education and health in the context of the climate crisis. In addressing these rights, SECTION27 relies on the ACHPR, ACRWC, and the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa ("Maputo Protocol"), among other relevant regional treaties.
31. Articles 60 and 61 of the ACHPR permit reliance on international human rights instruments, principles of international law, legal precedent, and other persuasive sources in the interpretation and application of the rights enshrined in the ACHPR. In light of these provisions, SECTION27 draws on relevant international climate change instruments including the United Nations Framework Convention on Climate Change ("UNFCCC"), Kyoto Protocol to the United Nations Framework Convention on Climate Change ("Kyoto Protocol"), Paris Agreement, other and relevant United Nations human rights treaties and general comments, resolutions of regional and international bodies, and other authoritative sources that assist in clarifying the human rights obligations arising in the context of climate change.
32. SECTION27 places particular reliance on the Advisory Opinion of the International Court of Justice (ICJ) on the *Obligations of States in Respect of Climate Change* as a source of important persuasive guidance.³ On 23 July 2025, the ICJ held that States have international obligations to respect and ensure the effective enjoyment of human rights by taking necessary measures to protect the climate system and other parts of the environment.⁴ The ICJ further held that international human rights law, the climate change treaties and customary international law "inform each other", so that States must take their human rights obligations into account when implementing their climate obligations, and their climate obligations into account when implementing their human rights obligations.⁵ Of particular significance for the present Request, the ICJ expressly identified Article 24 of the ACHPR as a regional expression of the right to a clean, healthy and sustainable

³ International Court of Justice, *Obligations of States in Respect of Climate Change*, Advisory Opinion of 23 July 2025 (ICJ Climate Advisory Opinion).

⁴ *Id* dispositif, para 3(E).

⁵ *Id* at para 404.

environment, and held that such an environment is a precondition for the enjoyment of the rights to life, health and an adequate standard of living, and is itself a human right inherent in the enjoyment of other rights.⁶ This reasoning confirms that this Court, as the guardian of Article 24, is uniquely placed to give that right content in the African context.

33. SECTION27 further relies on relevant jurisprudence from African and sub-regional human rights bodies, including decisions that have elaborated the content of the rights to education and health and the corresponding obligations of States. These sources provide important guidance on the interpretation of the rights in the ACHPR in a manner that is responsive to the lived realities of rights holders.
34. SECTION27's submissions proceed from the understanding that the Article 24 right to a healthy environment in the ACHPR is inextricably bound with the fulfilment and realisation of all other rights, including the right to education and healthcare. Rights cannot be fulfilled in an unsafe and degraded environment, that is harmful to health and wellbeing. Equally, the provision of education and healthcare is necessary to ensure an environment that is truly conducive to human development.
35. The interpretation of States' climate obligations must also be informed by foundational principles of the African human rights system, including equality, non-discrimination, dignity, substantive justice, and the best interests of the child. These principles are particularly important in the climate context because climate change does not affect all persons equally. Its impacts are shaped by existing social, economic, gendered, geographic and structural inequalities.
36. SECTION27's submissions place particular emphasis on the rights of children. The Request expressly invites the Court to determine the obligations of States towards "present and future generations" (question 94(a)) and their positive obligations to protect children as a vulnerable group (question 94(b)). Children occupy a distinctive position in both inquiries. They are rights-holders in the present, bearing the full protection of the ACHPR and the ACRWC. They are also the constituency through whom the interests of future generations

⁶ Id at paras 390 and 393.

are most concretely represented, since the climate conditions created by present decisions will be inherited by the current generation of children and those yet to be born.

37. The ICJ has confirmed that intergenerational equity “is an expression of the idea that present generations are trustees of humanity tasked with preserving dignified living conditions and transmitting them to future generations”, and that due regard for the interests of future generations must be taken into account whenever States decide upon and implement climate measures.⁷ The same Court recognised that the preamble to the Paris Agreement requires States, when taking climate action, to respect and promote their obligations towards children and intergenerational equity, and that the right to life protected by Article 6 of the Convention on the Rights of the Child depends on the measures States take to protect the environment against the adverse effects of climate change.⁸
38. Within the African human rights system, this principle finds concrete and binding expression in the best interests of the child. Article 4(1) of the ACRWC provides that in all actions concerning the child undertaken by any person or authority, the best interests of the child shall be the primary consideration. SECTION27 submits that, in the climate context, the best interests principle operates not merely as one factor to be weighed among others but as a substantive interpretive standard that governs how States identify, assess and respond to climate-related risks. It requires that the foreseeable, long-term and frequently irreversible effects of climate change on children – on their survival, development, education, health and dignity – be treated as a paramount consideration in climate legislation, planning, budgeting and adaptation, and that children’s own views be heard in decisions that will shape the environment they inherit.
39. Understood in this way, the protection of children offers the Court a principled and workable answer to questions 94(a) and 94(b) of the Request. It anchors the obligations of States towards future generations in the concrete and justiciable rights of identifiable, present-day rights-holders. The submissions that follow apply this framework to the two rights on which SECTION27 focuses – education and health – and demonstrate that the measures those

⁷ Id at paras 155–157.

⁸ Id at paras 374 and 377.

rights require are the very measures through which States discharge their intergenerational obligations to the children of the continent.

40. While these submissions address the rights to education and health separately, SECTION27 emphasises that the two rights are closely connected. Climate-related events such as droughts, floods, extreme heat, food insecurity, water scarcity and displacement can simultaneously disrupt access to education, undermine physical and mental health, increase care burdens, and deepen existing inequality. The impacts experienced by children in schools are therefore connected to the broader conditions experienced by families and communities, particularly women and girls.
41. SECTION27 accordingly submits that the effects of climate change on education and health must be understood as interconnected manifestations of broader threats to human dignity, equality, development and the enjoyment of rights protected under the ACHPR, the ACRWC and the Maputo Protocol. The sections that follow apply this framework to the rights to education and health, before addressing the cross-cutting obligations of States to undertake climate risk assessments, adopt adaptation and mitigation measures, and regulate private actors whose activities contribute to climate-related harm.

OBLIGATIONS OF STATES WITH RESPECT TO THE RIGHT TO BASIC EDUCATION

42. The right to education is protected under Article 17 of the ACHPR and Article 11(1) of the ACRWC.
43. In interpreting Article 11(1) of the ACRWC, General Comment No. 9 (“GC9”) states that Article 11(3)(d) of the ACRWC places two correlating obligations on States.⁹ First, to take measures that encourage regular attendance of learners at schools and second, to take measures to reduce school dropouts.¹⁰ GC9 affirms that States must ensure that education is accessible, affordable, adaptable and of good quality for all children,¹¹ and that measures

⁹ General Comment No.9 on Article 11 of the African Charter on the Rights and Welfare of the Child on the Right to Education (“GC9”).

¹⁰ Id at Para 58.

¹¹ Id at para 19, which identifies “accessibility, affordability, quality and adaptability” as the four critical elements of the right to education.

aimed at securing access to education must respond to contemporary challenges that impede children's enjoyment of this right.

44. GC9 notes that causes of irregular attendance and school dropout in Africa include "emerging and context specific issues, mainly conflict, climate change and related hazards such as floods, heatwaves, droughts and typhoons that disrupt the education of millions of children in Africa."¹² (own emphasis)
45. GC9 further emphasises that States have an obligation to ensure the continuity of education during and after climate-related disasters, including through the implementation of child-sensitive climate policies focused on adaptation, the strengthening of climate-resilient school infrastructure, and the development of child-sensitive early warning and emergency response systems.¹³
46. SECTION27 submits that the right to basic education encompasses the broader enabling conditions necessary for effective learning. These include safe and adequate school infrastructure, learner transport, school feeding and nutrition programmes, access to water and sanitation, inclusive education measures, an appropriate curriculum and other interventions aimed at removing barriers to learning. Harm to any of these components undermines the enjoyment of the right to basic education and accordingly falls within the scope of States' obligations to respect, protect, promote, and fulfil that right.
47. We begin by considering the duty to incorporate climate education in the curriculum before addressing the impact of climate change on the other constitutive elements of this right.

Climate and the curriculum

48. SECTION27 notes that the right to education also includes education about climate change. Article 11(2)(g) of the ACRWC requires that the education of the child be directed to fostering

¹² Id.

¹³ Id at para 59.

respect for the environment and natural resources, and GC9 provides that school curricula must be reformed to include comprehensive climate change and environmental education.¹⁴

49. Climate change education is itself an adaptation measure: learners who understand climate risks are better able to protect themselves during extreme weather and to build the adaptive capacity of their communities, while curricula that are silent on climate change leave the generation most exposed to its consequences least equipped to respond. The gap is real rather than hypothetical: a 2026 analysis of South Africa's national curriculum found that climate change is directly specified in the compulsory phase of schooling only in Grade 9 Natural Sciences, in the final term of the final compulsory year, and that climate justice is absent from the curriculum altogether.¹⁵

Safe and Adequate School Infrastructure

50. The effective enjoyment of the right to education under Article 17 of the ACHPR and Article 11 of the ACRWC depends on the existence of safe, adequate, accessible and functional public basic education infrastructure, which extends beyond classrooms and school buildings to include water and sanitation, electricity, access roads, drainage, and digital infrastructure. These components are not ancillary to the right to education; they are the conditions that make education possible.
51. Climate change increasingly threatens these foundational conditions across Africa.¹⁶ Rising temperatures, prolonged droughts, flooding, cyclones, severe storms and other climate-related events are damaging school facilities, disrupting essential services and limiting

¹⁴ ACRWC Article 11(2)(g); para 35 of GC9. Parallel obligations arise under Articles 28 and 29(1)(e) of the UN Convention on the Rights of the Child read with General Comment 26, and under UNFCCC Articles 4(1)(i) and 6 and Articles 11 and 12 of the Paris Agreement. These obligations are developed in detail in the submissions of other amici: see UCC Cork's submissions at pp 68 to 73; UNSR Environment's submissions at pp 41 to 43; Environmental Law Clinics Coalition's submissions at pp 81 to 82. SECTION27 aligns itself with those submissions.

¹⁵ S Cohen, "An Analysis of Climate Justice in the South African School Curriculum" *UNESCO Chair: Education Law in Africa, University of Pretoria* (2026) 5 and 7; see also M Brodie, "Climate-Proofing the South African Basic Education System: The Legal Obligations of the South African Government" *UNESCO Chair: Education Law in Africa, University of Pretoria* (2026) 7 and 29.

¹⁶ S Tshabalala, W Lunga & C Baloyi, "Climate Change Education: Preparing African Youth for Future Challenges" (2025) 17:10 *Sustainability* 5.

physical access to schools.¹⁷ The impacts are particularly acute in the Southern African Development Community (“SADC”), where climate hazards intersect with existing infrastructure deficits, poverty and inequality.¹⁸

52. When school buildings are damaged, access roads become impassable, or water, sanitation and electricity supplies are disrupted, schools may be forced to close or to operate under conditions that are not conducive to learning. Learners lose valuable instructional time, assessments and examinations may be delayed, and educational progress is disrupted. Across Southern Africa, climate-related disasters have repeatedly disrupted education systems.¹⁹
53. In 2022, the KwaZulu-Natal Province in South Africa experienced South Africa’s worst flood disaster in terms of its impact on human life.²⁰ The United Nations International Children’s Emergency Fund (“UNICEF”) reported that over 440 people died, including 57 school children.²¹ More than 600 schools were affected by the floods, with 124 seriously damaged and 101 completely inaccessible. Over 320 000 learners were affected by the floods.²² Attribution research demonstrates the pronounced role of climate change in the severity of these floods.²³

¹⁷ SA Gandidzanwa and M. Togo, “Impacts of cyclone IDAI and the road to recovery in education systems in Zimbabwe” (2021) 3 *Cyclones in Southern Africa: Implications for the Sustainable Development Goals* 97.

¹⁸ SADC Secretariat, “Southern African Development Community Climate Change Outlook 2023” (2023) *Southern African Development Community* 21 and 31-32, available at <https://www.sadc.int/sites/default/files/202508/SADC%20Draft%20Climate%20Change%20Outlook%20Report-Rev0.pdf> (accessed 09 July 2026).

¹⁹ K Sutherland and S Jacobs, “Bridging the Gap: Planning for Education and Climate Risks in South Africa” (2023) *Equal Education Law Centre* at 3.

²⁰ FA Engelbrecht *et al*, ‘Extreme Event Attribution Using km-Scale Simulations Reveals the Pronounced Role of Climate Change in the Durban Floods’ (2025) 6 *Communications Earth & Environment* 506.

²¹ UNICEF, “Children’s lives and rights at risk due to KwaZulu-Natal floods” (2022) *Press Centre*, available at <https://www.unicef.org/southafrica/press-releases/childrens-lives-and-rights-risk-due-kwazulu-natal-floods> (accessed 16 June 2026).

²² *Id.*

²³ See above note 20.20

54. More recently, in May 2026, destructive gale-force winds and severe storms caused severe infrastructure damage to 64 schools across the Western Cape, South Africa.²⁴ Six schools had to close because of accessibility, as roads surrounding the schools were washed away and/or damaged.²⁵
55. These extreme weather events are not unique to South Africa. In 2019, Cyclone Idai struck Mozambique, Malawi and Zimbabwe, causing widespread loss of life and extensive damage to infrastructure, with severe consequences for education. In Zimbabwe, 42 schools in the Chimanimani district were affected, disrupting teaching and learning for an extended period.²⁶ In Mozambique, 3,400 classrooms were estimated to have been destroyed or damaged, with experts fearing that disruption could “compound what were already low rates of school enrolment and ‘learning achievement’ in Mozambique.”²⁷ In Malawi, UNICEF estimated that almost half a million learners in more than 400 schools nationwide were affected in the aftermath of Idai.²⁸
56. Similar impacts were documented in Malawi following Cyclone Freddy in 2023, where classrooms, sanitation facilities and feeding shelters were damaged and school buildings were used as displacement shelters, disrupting learning.²⁹
57. These events demonstrate that climate change does not create educational inequality in isolation; rather, it exacerbates existing vulnerabilities within education systems. Schools that already operate with inadequate infrastructure, insufficient maintenance, overcrowding

²⁴ SABC News, “Six schools still closed after storm damage in Western Cape: Maynier” (2026) *SABC News*, available at <https://www.sabcnews.com/sabcnews/six-schools-still-closed-after-storm-damage-in-western-cape-maynier/> (accessed on 09 July 2026).

²⁵ *Id.*

²⁶ See above note 17.

²⁷ United Nations, “More than 3,400 classrooms damaged or destroyed by Cyclone Idai in Mozambique, says UN Children’s Fund” (2019) *UN News Global Perspectives and Human Stories*, available at <https://news.un.org/en/story/2019/04/1037001> (accessed on 09 July 2026).

²⁸ J Chavula, “School-in-a-box kits ease Cyclone Idai’s devastating effects” (2020) *UNICEF*, available at <https://www.unicef.org/malawi/stories/school-box-kits-ease-cyclone-idais-devastating-effects> (accessed 09 July 2026).

²⁹ United Nations Children’s Fund (UNICEF), “Cyclone Freddy Disrupts Education” (2023), available at [UNICEF Malawi – Cyclone Freddy Disrupts Education](#) (accessed on 09 July 2026). The report notes that Cyclone Freddy damaged classrooms, toilets, feeding shelters and other school infrastructure, disrupted schooling, and left thousands of learners unable to continue their education; See further Save the Children, “Nearly Half A Million Children in Malawi Unable to Attend School Due to Cyclone Freddy” (2023) *Save the Children*, available at <https://www.savethechildren.net/news/nearly-half-million-children-malawi-unable-attend-school-due-cyclone-freddy> (accessed 09 July 2026).

or limited resources are often least able to withstand climate-related shocks. Learners living in rural, low-income and marginalised communities therefore bear a disproportionate burden of climate-related disruptions.

58. SECTION27 submits that Article 17 of the ACHPR and Article 11 ACRWC must be interpreted in a manner that responds to these contemporary realities. The right to education necessarily includes a right to educational environments that are reasonably safe, accessible and capable of functioning in the face of foreseeable climate-related risks.
59. The obligations arising from these rights therefore include duties of due diligence, prevention, preparedness, adaptation and resilience. States must identify climate-related risks affecting educational infrastructure, integrate climate resilience into education planning and budgeting, and adopt measures to reduce foreseeable harm.
60. This includes developing climate-informed infrastructure standards, investing in resilient school construction, upgrading vulnerable facilities, strengthening drainage and water systems, protecting access routes to schools, and ensuring that schools can continue operating during and after climate-related events. Particular attention should be given to schools and communities facing heightened climate vulnerability.
61. The growing foreseeability of climate-related harms means that failures to adopt reasonable adaptation measures can no longer be characterised as unavoidable consequences of natural disasters. Almost all African States have adopted climate adaptation and disaster management frameworks that recognise these risks.³⁰ However, the recurring destruction of schools, prolonged school closures, and repeated disruptions to learning demonstrate that implementation remains inadequate. The persistence of these harms raises important questions regarding States' compliance with their obligations to respect, protect and fulfil the right to education.
62. SECTION27 therefore submits that the Court should recognise that Article 17 of the ACHPR and Article 11 ACRWC impose a positive obligation on States to ensure that public educational infrastructure is climate-resilient and capable of supporting the continuous enjoyment of the right to education. This requires States to anticipate foreseeable climate-

³⁰ African Development Bank Group, "African Development Bank at COP25" (2019) available at African Development Bank COP25 Page (accessed 23 June 2026).

related risks, undertake vulnerability assessments, implement reasonable adaptation measures, and prioritise investment in resilient public basic education infrastructure.³¹ Such an interpretation is consistent with the best interests of the child, the protective purpose of Article 17 of the ACHPR and Article 11 ACRWC, and the broader obligation of States to secure Charter rights in the context of a changing climate.

63. The impacts of climate change are, moreover, not confined to school grounds: learners must also be able to reach school safely. SECTION27 therefore turns to the implications of climate change for scholar transport.

Scholar Transport

64. Access to education requires that learners be able to reach school safely, consistently and with dignity. Article 17 of the ACHPR and Article 11 of the ACRWC therefore encompass not only the provision of educational institutions, but also the conditions that make attendance possible. Scholar transport is, in many contexts across Southern Africa, the decisive mechanism through which the right to education is either realised or effectively denied.
65. This understanding is firmly rooted in constitutional and jurisprudential authority. In *Tripartite Steering Committee and Another v Minister of Basic Education and Others* [2015] ZAECHGHC 67, the Eastern Cape Division of the High Court in South Africa recognised that access to school is a necessary condition for the realisation of the right to basic education, and that the right would be rendered hollow if learners cannot physically reach educational institutions.³² The court held that where learners' access to school is hindered by distance and an inability to afford the costs of transport, the State is obliged to provide transport to them.
66. The scale of reliance on scholar transport across Southern Africa illustrates this point starkly. Hundreds of thousands of learners depend on state-supported transport systems to access schooling, while millions more are required to walk long distances daily due to insufficient

³¹ Aligned submissions on climate-resilient educational infrastructure and continuity of education are made in 17. 30032026 CRIN paras 40 to 46; 12. 27032026 NANHRI paras 62 to 64; 20. 30032026 Georgetown HRI section VII (pp 34 to 42); 18. 30032026 Environmental Law Clinics Coalition pp 81 to 82; 10. 27032026 Greenpeace Africa para 105; and 41. 22052026 UKZN para 37.

³² *Tripartite Steering Committee and Another v Minister of Basic Education and Others* 2015 (5) SA 107 (ECG) paras 18 and 19.

provision.³³ Learners traverse rural roads, informal paths, and unsafe terrain, frequently without reliable transport infrastructure or protection.³⁴ In many cases, the absence of scholar transport is not a marginal gap in service delivery but a structural barrier to education itself.

67. Learners in rural and peri-urban areas often walk extremely long distances to school, sometimes exceeding ten kilometres per trip. Learners face exposure to extreme heat, heavy rainfall, flooding, and dangerous terrain.³⁵ Incidents of injury, drowning, and violence on school routes underscore the intersection between education access and physical safety.³⁶
68. Climate change intensifies each of these pre-existing vulnerabilities. The SADC region is already characterised by infrastructure deficits, unequal spatial development, and underinvestment in rural transport systems.³⁷ Climate-related hazards such as flooding, storms, droughts, and heatwaves compound these structural weaknesses. Roads become impassable, bridges collapse, and routes become unsafe, so that learners cannot reach even schools that remain structurally intact. In this sense, climate change does not merely damage infrastructure; it disrupts the functional chain of access through which the right to education is exercised.
69. The consequence is a shift from episodic disruption to systemic exclusion. These disruptions directly affect educational outcomes, reducing instructional time, impairing continuity of learning, and increasing the risk of dropout.³⁸

33 M Magome, “Long walk to school: 30 years into freedom, many kids in South Africa still walk miles to class” (2023) *APNews*, available at <https://apnews.com/article/south-africa-schools-transport-inequality-ce5750af0ff0e6e1570b2fd6248bd62b> (accessed on 18 June 2026); J Stone, “In Pictures: Tanzanian girl’s long walk to education” (2013) *BBC*, available at <https://www.bbc.com/news/world-africa-23239800> (accessed on 18 June 2026).

34 S Joseph and J Carpenter, “Scholar Transport” in *Basic Education Rights Handbook: Education Rights in South Africa* (2017) *Section 27* 278.

35 *Section 27*, “Basic Education Rights Handbook: Education Rights in South Africa” (2017) *Section 27*.

36 *Id.*

37 P Mutwanamba, “Innovative Mobility Solutions for South African Challenges: Some Prospects” (2025) *University of Venda, Department of Urban and Regional Planning* at 4-5.

38 World Bank, “Argentina: Program to Support the Federal Policy for Enhancing Foundational Literacy” (2024) *World Bank* 60.

70. Importantly, these impacts are not distributed equally. Learners in rural and impoverished communities are disproportionately affected, as they are more likely to depend on long-distance travel and public or subsidised transport systems.³⁹ Climate-related disruptions to scholar transport therefore deepen existing inequalities in access to basic education.
71. Learners with disabilities face additional barriers where transport systems are disrupted, particularly where vehicles are not adapted or where infrastructure is inaccessible. Girls may face increased risks of violence, harassment, or exploitation during prolonged or unsafe travel. SECTION27 makes further submissions on these points under the heading “Inclusive and Safe Education” below.
72. The governance context within which scholar transport operates further exacerbates these challenges. Responsibility for learner mobility is often fragmented across multiple departments, including education, transport, infrastructure, and disaster management. Coordination failures frequently result in gaps in planning, implementation and accountability. Fragmentation of responsibility cannot justify predictable disruptions to learner attendance; States remain responsible for the resulting impairment of the right to education.
73. SECTION27 therefore, submits that Article 17 of the ACHPR and Article 11 of the ACRWC must be interpreted to include a clear obligation on States to ensure that learner mobility is protected as an essential component of the right to education. This includes the duty to ensure that scholar transport systems, transport infrastructure, and associated routes are planned, designed, and maintained in a manner that is resilient to foreseeable climate-related risks.
74. This obligation is preventative and forward-looking. It requires the integration of climate risk assessments into transport planning, the identification of vulnerable routes, the development of contingency transport arrangements, and the maintenance of safe alternative access pathways to schools.

³⁹ B Duri, T McKay, & A Gunter, “Safety and security challenges of scholar transport in South Africa” (2025) 19(0) *JTSCMI*.

75. SECTION27 accordingly submits that the Court should affirm that the right to education under Article 17 of the ACHPR and Article 11 of the ACRWC includes an obligation on States to ensure climate-resilient learner mobility systems. This obligation is necessary to ensure that no learner is effectively excluded from education due to foreseeable and preventable disruptions in access.⁴⁰ In a changing climate, the protection of education requires not only the protection of schools, but the protection of the pathways through which learners reach them.
76. Having addressed the impact of climate change on learner transport, SECTION27 now turns to School Feeding and Nutrition Programmes.

School Feeding and Nutrition Programmes

77. School feeding and nutrition programmes are state-administered interventions designed to ensure that learners in public schools receive at least one nutritious meal per school day as part of the broader ecosystem of the right to basic education.⁴¹ The African Committee of Experts on the Rights and Welfare of the Child (“ACERWC”) has identified school feeding programmes as one of the measures that State parties must undertake to realise the right to education.⁴² It provides that school feeding and nutrition programmes must be implemented in schools by prioritising marginalised and economically disadvantaged communities and areas, and States should ensure the provision of healthy meals in schools where feeding schemes are applicable.⁴³
78. School feeding and nutrition programmes have been adopted by several SADC countries including Angola, Botswana, Lesotho and Mauritius.⁴⁴ Governments, supported by regional and international partners, have increasingly institutionalised school meals within national policy frameworks, with 28 African Union (“AU”) Member States recording dedicated school

⁴⁰ See also Human Rights Watch’s submissions at 1 to 2 and 6, documenting climate-displaced families in Saint-Louis, Senegal, left without affordable transport to schools and healthcare.

⁴¹ Department of Basic Education, “National School Nutrition Programme” (2026) *Department of Basic Education*, available at <https://www.education.gov.za/Programmes/CareandSupport/NationalSchoolNutritionProgramme.aspx> (accessed 19 June 2026).

⁴² See above note 9.

⁴³ Id at para 17.

⁴⁴ African Union, “African Union Biennial Report on Home-Grown School Feeding (2019-2020)” (2021) *Addis Ababa, African Union* 1-109, available at https://au.int/sites/default/files/documents/40022-doc-final_biannual_report.pdf (accessed 19 June 2026).

feeding budget lines in their national budgets and 80% of financing across the continent sourced domestically.⁴⁵

79. In the South African context, this programme, referred to as the National School Nutrition Programme (“NSNP”), is implemented primarily by provincial education departments, funded through conditional grants and with oversight from the Department of Basic Education. Its central objective is not merely welfare relief, but the removal of hunger as a barrier to learning, thereby enabling concentration, participation and learning.
80. The NSNP constitutes one of the most significant redistributive interventions in South Africa’s basic education system and is directly linked to the realisation of the right to basic education.⁴⁶ Its scale alone underscores its constitutional importance; over 9 million learners across South Africa depend on the programme for at least one daily nutritious meal during school days.⁴⁷
81. Zimbabwe adopted its Home-Grown School Feeding Programme (“HGSFP”) in 2016.⁴⁸ In 2020, about 2.5 million children in pre-school and in primary school received meals through the HGSFP.⁴⁹ In 2025, Statutory Instrument 13 of 2025 mandated all schools to provide learners with at least one hot meal per day. The HGSFP is currently implemented in 8 014 primary schools.⁵⁰
82. Since 1999, the World Food Programme and the Government of Malawi have implemented a school feeding programme in some of the country’s most food-insecure districts, currently

⁴⁵ Id at Key Messages and Annex II.

⁴⁶ Department of Basic Education, “Report on the Implementation Evaluation of the National School Nutrition Programme FULL REPORT” (2016) *Department of Basic Education*, available at <https://evaluations.dpme.gov.za/evaluations/528> (accessed 17 June 2026).

⁴⁷ Id Table 1, recording a national average of 9 131 836 learners fed in 2013/2014. The Department of Basic Education, in its 2024/2025 Annual Report, estimates that “every day, 9.7 million learners depend on [school nutrition] programme” See Department of Basic Education, “Annual Report 2024/2025” (2025) *Department of Basic Education* 6, available at https://www.gov.za/sites/default/files/gcis_document/202511/dbeannualreport20242025.pdf (accessed 09 July 2026).

⁴⁸ School Meals Coalition, “Zimbabwe” (2025) *Country Progress Review*, available at https://schoolmealscoalition.org/sites/default/files/2025-08/SMC_CountryProgress_Zimbabwe.pdf (accessed 17 June 2026).

⁴⁹ Global Child Nutrition Foundation, “Global Survey of School Meal Programs” (2021), available at https://gcnf.org/wp-content/uploads/2022/04/Zimbabwe_2021_final2.pdf (accessed 17 June 2026).

⁵⁰ See above note 48.

reaching approximately 600,000 learners across seven districts.⁵¹ Evidence from Malawi indicates that school feeding has reduced absenteeism and learner drop-out rates while significantly increasing school attendance.⁵²

83. However, the COVID-19 pandemic exposed structural vulnerabilities in the design and implementation of the school feeding programmes.⁵³ In South Africa, the suspension and intermittent delivery of school meals revealed that, despite its centrality to the right to education, the programme remains vulnerable to administrative breakdowns, budgetary constraints, and inconsistent implementation across provinces.

84. In *Equal Education and Others v Minister of Basic Education and Others* 2021 (1) SA 198 (GP) (“Equal Education Case”), the Gauteng Division of the High Court, Pretoria in South Africa considered a challenge to the state’s discontinuation of the national school feeding scheme during the COVID-19 pandemic. That litigation was brought by Equal Education and two Limpopo school governing bodies, represented by SECTION27 and the Equal Education Law Centre,

85. The court affirmed that nutrition is not peripheral to education but integral to it. The court recognised that the rights to basic education and basic nutrition are interdependent, and that the absence of adequate nutrition directly undermines learners’ ability to access, remain in, and meaningfully benefit from schooling.

86. The resulting court order affirmed that the State bears a constitutional and statutory duty to ensure continuity of nutrition support, whether learners are physically in school or not. Following this litigation, National Treasury amended the conditional grant funding to allow continuity of the NSNP in circumstances where schools have been closed due to a declared state of disaster.⁵⁴

⁵¹ World Food Programme, “2021 School Feeding Programme Factsheet – WFP Malawi” (2021), available at <https://www.wfp.org/publications/2021-school-feeding-programme-factsheet-wfp-malawi-may-2021> (accessed 09 July 2026).

⁵² *Id.*

⁵³ K Matidza, “The Effects of COVID-19 on In-School Nutrition” (2023) *Centre for Social Development in Africa University of Johannesburg* 5.

⁵⁴ South Africa National Treasury, “Division of Revenue Act” (2026) 164, available at [https://www.treasury.gov.za/legislation/bills/2026/B5-2026%20\(DoRB\).pdf](https://www.treasury.gov.za/legislation/bills/2026/B5-2026%20(DoRB).pdf) (Accessed 17 June 2026).

87. Nutrition is intrinsically linked to other components of access, including attendance, concentration, and learner retention.⁵⁵ Where feeding schemes are interrupted, there is a demonstrable increase in absenteeism and dropout risk, particularly among younger learners and those in rural or peri-urban settings.⁵⁶
88. School feeding programmes rely on fresh agricultural produce, and increasingly promote sustainable local food production, including through school gardens and procurement of fresh produce from local small-scale farmers. Successful implementation of these programmes is therefore heavily reliant on agricultural production.⁵⁷
89. In SADC, where food insecurity and climate vulnerability intersect, the implications for school feeding programmes are even more pronounced. Climate-related shocks, such as droughts, floods, and disruptions to agricultural systems, exacerbate household poverty, and place additional demand for school nutrition programmes.⁵⁸
90. At the same time, these shocks reduce agricultural productivity, driving up the cost of fresh produce and of delivering school meals. Without adaptive planning and resilient procurement and delivery systems, nutrition programmes become fragile precisely when they are most needed.
91. The GC9 states that access to education does not simply mean that children should be able to enrol but that learners are also supported to attend and remain in school. Accordingly, any interpretation of the State's obligations under Article 17 of the ACHPR and Article 11 of the ACRWC must include a clear understanding that access to education encompasses access to nutrition.

⁵⁵ K Weseni, "School Meals and School Attendance: Creating a foundation for academic success" (2024) *World Vision*, available at <https://www.wvi.org/opinion/view/school-meals-and-school-attendance-creating-foundation-academic-success> (accessed 17 June 2026).

⁵⁶ TA Desalegn *et al*, "The effect of school feeding programme on class absenteeism and academic performance of schoolchildren in Southern Ethiopia: a prospective cohort study" (2021) 24:10 *Public Health Nutrition* 3066.

⁵⁷ Food and Agriculture Organization and World Food Program, "Home-Grown School Feeding" (2018) *United Nations* at vii, section 3.5 (from p 52) and pp 73 to 74.

⁵⁸ ABM Nurullah *et al*, "The Role of Climate-Induced Disaster in Multidimensional Poverty: A Systematic Review and the Multidimensional Climate–Poverty Dynamics (MCPD) Framework" (2026) 18:3 *Sustainability* 1667.

92. This includes ensuring the uninterrupted implementation of school feeding programmes, strengthening contingency planning for emergencies, and integrating nutrition security into broader education sector planning.
93. Learner nutrition is not a discrete feeding intervention, but a complex logistical and institutional ecosystem. It depends on procurement systems, transport networks, storage facilities at schools, local supplier chains, and in some instances school-based agricultural production. Each of these components is structurally exposed to climate variability. Flooding damages roads and disrupts delivery routes; extreme heat affects food storage and spoilage; storms interrupt procurement schedules and access to schools; and drought conditions affect agricultural inputs and local food production.⁵⁹
94. The submission therefore builds on the established proposition that nutrition is integral to education by demonstrating that its enabling systems are themselves increasingly climate-sensitive and require deliberate legal and policy attention.

The Right to Food Security

95. School feeding programmes are closely connected to both the right to adequate nutrition and the broader right to food security. Adequate nutrition is fundamental to children's physical health, cognitive development, school attendance, concentration, and therefore, educational attainment.⁶⁰ As a result, learner nutrition programmes operate at the intersection of the rights to education, health, nutrition, and food security.
96. The ACHPR does not explicitly mention the right to food security; however, the African Commission has interpreted it as a justiciable entitlement, as detailed below. The right is

⁵⁹ Evidence before the Court from other amici confirms the stabilising role of school feeding programmes: see Georgetown HRI's submissions at 38 to 39; and NANHRI's submissions at paras 58 to 61.

⁶⁰ M Amodu *et al*, "Risk Factors of Malnutrition among In-School Children and Adolescents in Developing Countries: A Scoping Review" (2024) 11(4):476 *Children* 2.

protected as an indispensable component of the rights to life, health, and economic, social, and cultural development.⁶¹

97. The importance of food security within the African human rights system was recognised by the African Commission in *Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) v. Nigeria* (Communication 155/96), where the Commission held that the right to food is implicit in the African Charter and is inseparably linked to the enjoyment of other rights, including the rights to health, education, work, and dignity.
98. Outside of the ACHPR, food security is closely linked with education and health rights across the African human rights system. Article 14 of the ACRWC requires States to take measures to ensure the provision of adequate nutrition and to combat disease and malnutrition through appropriate healthcare interventions. Article 15(a) of the Maputo Protocol requires States to provide women with access to clean drinking water, sources of domestic fuel, land and the means of producing nutritious food, and Article 15(b) requires States to establish adequate systems of supply and storage to ensure food security.
99. Climate change presents one of the most significant threats to food security on the continent.⁶² Rising temperatures, prolonged droughts, changing rainfall patterns, floods, pests, and crop diseases are increasingly affecting agricultural production and reducing crop yields. The ability of States to provide nutritious meals to learners, and to ensure broader food security within communities depends on food systems that are increasingly vulnerable to climate-related disruption.
100. The African Commission has recognised the relationship between climate change and food insecurity. In its Resolution on the Right to Food and Nutrition in Africa, the Commission

⁶¹ M Aboneka, "Upholding the right to food in emergencies in Africa"(2025) *Global Campus of Human Rights*, available at <https://www.gchumanrights.org/preparedness/upholding-the-right-to-food-in-emergencies-in-africa/> (accessed on 23 June 2026).

⁶² FAO Regional Office for Africa, "Climate change in Africa: The threat to agriculture" (2009) *UNCC:Learn*, available at <https://www.uncclearn.org/wp-content/uploads/library/fao34.pdf> (accessed 23 June 2026).

recalled that food insecurity is a first and overarching result of protracted crises, natural disasters and climate-related shocks.⁶³

101. The impacts of climate change are particularly severe for smallholder farmers, who form the backbone of food production in a significant number of African States. Many such farmers depend on climate-sensitive agricultural activities for both household consumption and income.⁶⁴ Climate-related losses in agricultural production not only undermine livelihoods and in turn, increase poverty, but also reduce the availability and affordability of food for households and public programmes, including school feeding and nutrition programmes.
102. Climate impacts are not confined to food production. Extreme weather events can disrupt transport networks, damage roads and bridges, interrupt supply chains, and impair food storage and distribution systems.⁶⁵ Droughts and water scarcity may affect food processing and preparation, while extreme heat can compromise refrigeration systems and cold-chain infrastructure necessary for the safe transportation and storage of perishable food.⁶⁶
103. Heavy rainfall and flooding can contaminate water sources, reduce food safety and increase the spread of waterborne and foodborne diseases, with significant implications for both public health and educational outcomes.
104. The consequences of food insecurity are experienced disproportionately by women and girls.⁶⁷ Across many African communities, women play a central role in food production, household nutrition, water collection, and caregiving. As climate-related pressures increase,

⁶³ Resolution on the Right to Food and Nutrition in Africa - ACHPR/Res.431(LXV)2019, adopted 10 November 2019.

⁶⁴ K Descheemaeker, "Climate change: impacts and adaptation in smallholder farming systems in sub-Saharan Africa" in *Pathways to African Food Security* (London: Routledge, 2025).

⁶⁵ I Das, PK Singh, & S Seth, "Climate Change and Its Impact on the Supply Chain and Food Security" in *Climate-Smart Agriculture: Innovative Approaches for Plant Production and Crop Management* (Rajasthan: Mahima Publishers, 2024).

⁶⁶ Food and Agricultural Organization of the United Nations, "The Impact of Disasters on Agriculture and Food Security: Avoiding and Reducing Losses Through Investment in Resilience" (2023) *United Nations* xv, available at <https://openknowledge.fao.org/server/api/core/bitstreams/069ceb86-59b2-4b6e-90e0-b7bd26a58c76/content> (accessed on 23 June 2026).

⁶⁷ G Aboud, "Gender and Food Security in Brief" (2026) *Institute of Development Studies*, available at <https://www.ids.ac.uk/publications/gender-and-food-security-in-brief/> (accessed on 24 June 2026).

women and girls often bear the burden of securing scarce food and water resources, travelling longer distances to collect water, and absorbing the effects of household food shortages.⁶⁸

105. The African Commission has acknowledged that women are more likely to live in poverty and to be affected by malnutrition, and has called on States to take appropriate policy, institutional and legislative measures to ensure the full enjoyment of the right to food.⁶⁹

106. As climate change places increasing pressure on agricultural production, food supply chains, and household livelihoods, States are required to adopt measures that strengthen the resilience and sustainability of such programmes.

107. SECTION27 submits that States' obligations under the rights to food, health, and education require governments to adopt climate-responsive food security measures that strengthen resilience across the entire food system. This includes supporting climate-resilient agriculture, protecting smallholder farmers, safeguarding water resources, strengthening food supply and storage systems, protecting transport and cold-chain infrastructure, and ensuring that learner nutrition programmes remain operational during climate-related disruptions.

108. These obligations further require States to ensure that learner nutrition programmes are themselves resilient to foreseeable climate-related risks. This includes integrating climate risk assessments into programme design and implementation; ensuring adequate food storage and preparation facilities at schools; developing contingency plans for food procurement and distribution during extreme weather events; and promoting sustainable local procurement and school food gardens where appropriate. Such measures recognise that the effectiveness of learner nutrition programmes depends on the resilience of the broader systems that support them.

109. The Court is accordingly invited to affirm that the rights to food, health, and education impose positive obligations on States to address the climate-related risks facing food

⁶⁸ G Anjum and M Aziz, "Climate change and gender vulnerability: A systematic review of women's health" (2025) 21 *Women's Health* 1-2.

⁶⁹ See above note 63 at preamble and para 1.

systems and learner nutrition programmes. In the context of a changing climate, States must take reasonable adaptation and mitigation measures to ensure that food insecurity does not undermine children's health, educational participation, and overall development, particularly for those communities already experiencing heightened vulnerability.⁷⁰

110. We now turn from school feeding and nutrition programmes and food security to inclusive and safe education as a further and essential dimension of the right to education.

Inclusive and Safe Education

111. Climate change has for two decades been recognised as a “threat multiplier”,⁷¹ meaning that it has the effect of exacerbating preexisting social, economic, political, and environmental vulnerabilities and inequalities. The intersectional consequences of the climate crisis result in worse outcomes for those who already belong to marginalised or otherwise vulnerable groups.⁷²

112. Climate-induced disasters present a unique set of barriers for both female learners and learners with disabilities. As such, the climate crisis “risks entrenching existing educational inequality and perpetuating intergenerational injustice.”⁷³

113. Of the 55 AU Member States, 51 provide a constitutional guarantee of the right to education, the universality of which implicitly protects the rights of female, as well as

⁷⁰ Aligned submissions on climate-related food insecurity and the right to food are made in Promise Institute and SOMO's submissions at paras 51 to 52; the Kenya Meteorological Society's submissions at paras 216 to 217; and NANHRI's submissions paras 58 to 61.

⁷¹ United Nations, “Climate change recognized as ‘threat multiplier’, UN Security Council debates its impact on peace” *UN News* (2019), available at <https://news.un.org/en/story/2019/01/1031322> (accessed 10 July 2026); S Goodman, “National Security and the Threat of Climate Change” *The CNA Corporation* (2007), available at <https://apps.dtic.mil/sti/tr/pdf/ADA469156.pdf> (accessed 10 July 2026).

⁷² J Birkmann *et al*, “Poverty, Livelihoods and Sustainable Development” in H-O Pörtner *et al* (eds), *Climate Change 2022: Impacts, Adaptation and Vulnerability: Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge: Cambridge University Press, 2022) 1171–1274, available at <https://www.ipcc.ch/report/ar6/wg2/chapter/chapter-8/> (accessed 10 July 2026).

⁷³ M Brodie, “Climate-Proofing the South African Basic Education System: The Legal Obligations of The South African Government” *The UNESCO Chair: Education Law in Africa* (2026) 6, available at https://drupalwebprod-files.up.ac.za/Public/2026-05/Climate-Proof%20SA%20Legal%20Obligations%20Policy_2.pdf?VersionId=uuqvG1B7IG3KS.F.BZnspdQbwXZdo6.A (accessed 9 July 2026).

disabled learners. The remaining four AU Member States that do not have explicit constitutional protection for the right to education, provide for the right to in national legislation.⁷⁴ Moreover, the ACRWC, which has been ratified by 52 of 55 AU Member States,⁷⁵ provides in Article 11 that “[e]very child shall have the right to education.”⁷⁶

114. Inclusive and safe education, in the context of climate change, must be understood as a substantive and system-wide dimension of the right to basic education rather than a narrow question of physical access to school buildings. This obligation is grounded in the principles of non-discrimination, survival, protection and development, and the best interests of the child contained in the ACRWC.

115. Accordingly, an inclusive and safe education system is one that is resilient to climate impacts and responsive to the distinct needs of marginalised learners, including girls and learners with disabilities, ensuring that climate-related shocks do not undermine educational continuity, equality, dignity, or developmental outcomes.

Disability-Inclusive Education and Universal Design

116. The disruptions caused by climate change-induced weather events have compounding effects for learners with disabilities.⁷⁷ The combination of environmental stressors, social and economic stigmatisation, and preexisting gaps in educational infrastructure makes climate change an existential threat to disabled children’s right to education in Africa.

117. All AU member states recognised by the United Nations have signed and ratified or acceded to the UN Convention on the Rights of Persons with Disabilities (“UNCRPD”),

⁷⁴ The African Child Policy Forum, “The Right to Education in International/Regional Instruments” (2013) *The African Child Policy Forum*, available at https://clr.africanchildforum.org/Harmonisation%20of%20Laws%20in%20Africa/other-documents-harmonisation_20_en.pdf (accessed 9 July 2026). Note: Six African states have adopted new constitutions since 2013 all of which recognize a right to education; those states are Zimbabwe (2013), Tunisia (2014), Egypt (2014), Mali (2023), Chad (2023), and Gabon (2024).

⁷⁵ The states which have not at this point ratified or acceded to the ACRWC are Morocco, South Sudan, and Tunisia. See “Ratifications Table”, *African Committee of Experts on the Rights and Welfare of the Child* (2026), available at <https://www.acerwc.africa/en/member-states/ratifications> (accessed 9 July 2026).

⁷⁶ African Charter on the Rights and Welfare of the Child (adopted July 1990, entered into force November 29 1999), Article 11.

⁷⁷ “Climate Change and Inclusive Education” (2026) *Perkins School for the Blind*, available at <https://www.perkins.org/asia-pacific-climate-change-and-inclusive-education/> (accessed 9 July 2026).

Article 24 of which recognises the “rights of persons with disabilities to education.”⁷⁸ Article 24 obliges States Parties to ensure access to free, quality education, with reasonable accommodation and individualised support.

118. The ACERWC has described Article 11 of the ACRWC as “a clear legal safeguard for the education of children with disabilities.”⁷⁹ Article 13 of ACRWC expands on the rights of disabled children, requiring States to provide them special protection in order to ensure the enjoyment of their rights and their fullest participation in society.⁸⁰

119. The African Disability Protocol (“ADP”), adopted by the AU in 2018, recognises in Article 16 a universal right to education for disabled individuals that is on “an equal basis with others.” It requires reasonable accommodation and effective individualised support for disabled learners.⁸¹ The treaty is binding on the 17 AU member states that have ratified or acceded to it.

120. Of the 55 AU Member States, only 23 provide constitutional protection of the rights of disabled persons.⁸² Many also or instead have standalone disability rights legislation, including education rights.⁸³

121. In practice, children with disabilities are too often excluded from schooling. The ACERWC estimates that school enrolment of children with disabilities is between 5 and 10% across the continent, and that “an estimated one-third of all out-of-school children at the primary

⁷⁸ UN Convention on the Rights of Persons with Disabilities (adopted December 12 2006, entered into force May 3 2008), Article 24.

⁷⁹ “Webinar on Education of Children with Disabilities” (2025) *African Committee of Experts on the Rights and Welfare of the Child*, available at <https://www.acerwc.africa/en/article/news/webinar-education-children-disabilities-africa> (accessed 9 July 2026).

⁸⁰ African Charter on the Rights and Welfare of the Child, Article 13.

⁸¹ Those states are: Angola, Burkina Faso, Burundi, Cameroon, Congo, Kenya, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Rwanda, South Africa, Sahrawi Arab Democratic Republic, Uganda, and Zimbabwe.

⁸² The 23 AU member states with explicit constitutional protection of the rights of persons with disabilities are: Angola, Burundi, Cabo Verde, Democratic Republic of the Congo, Egypt, Eritrea, Eswatini, Ivory Coast, The Gambia, Ghana, Kenya, Malawi, Morocco, Mozambique, Rwanda, Somalia, South Africa, South Sudan, Sudan, Tunisia, Uganda, Zambia, and Zimbabwe. There are other states which implicitly provide for the protection of the rights of persons with disabilities through provisions providing for the equality of all citizens—though disability is not an explicitly protected class.

⁸³ AJ Mphidi, “Disability and access to justice in four African countries: strong laws, weak in practice” (2026) *The Conversation*, available at <https://theconversation.com/disability-and-access-to-justice-in-four-african-countries-strong-laws-weak-in-practice-263987> (accessed 10 July 2026).

level have a disability.”⁸⁴ Even where countries have on paper exemplary protections for persons with disabilities, there exists a wide “chasm between policy and practice.”⁸⁵

122. The obstacles facing disabled children and their caregivers are not uniform; however, some of the most common barriers are: lack of institutional support and training for teachers, inadequate infrastructure at schools, inaccessible transportation, and social stigmatization.⁸⁶ In many schools, “the school, transport, or toilets may be physically inaccessible”,⁸⁷ there is a lack of publicly funded accessible transportation,⁸⁸ and instructors who are not equipped to “teach children with different needs and abilities effectively.”⁸⁹ Where special education schools do exist, they are often chronically underfunded⁹⁰ and not available uniformly, making them inaccessible to many disabled learners, especially those in rural areas.⁹¹

⁸⁴ See above note 79; See also “Disability-Inclusive Education in Africa Program” (2025) *World Bank Group*, available at <https://www.worldbank.org/en/topic/disability/brief/disability-inclusive-education-in-africa-program>.

⁸⁵ “A Call to Action: Bridging the Divide in South Africa’s Inclusive Education” (2025) *National Council of & for Persons with Disabilities*, available at <https://ncpd.org.za/a-call-to-action-bridging-the-divide-in-south-africas-inclusive-education/> (accessed 10 July 2026).

⁸⁶ H Kruper, A Saran & H White, Rapid Evidence Assessment (REA) of What Works to Improve Educational Outcomes for People with Disabilities in Low- and Middle-Income Countries” 14 (2018) *International Centre for Evidence in Disability*, available at https://assets.publishing.service.gov.uk/media/5b8ea83040f0b67d9a6fe669/Education_Rapid_Review_full_report.pdf (accessed 10 July 2026).

⁸⁷ Id.

⁸⁸ R Chirowamhangu, “Inclusive education pandemic: Learning barrier for children with disabilities in South Africa” (2024) *African Journal of Disability*, available at <https://ajod.org/index.php/ajod/article/view/1462/3026> (accessed 09 July 2026).

⁸⁹ Id.

⁹⁰ South Africa, which has one of the more robust special education programs on the continent, has been criticized by civil society and disability rights groups for its underfunding of special education schools. See L Van der Merwe, “Media statement: committee concerned about lack of funding for special needs schools” (2026) *South African Parliamentary Communications Services*, available at <https://www.parliament.gov.za/press-releases/media-statement-committee-concerned-about-lack-funding-special-needs-schools> (accessed 10 July 2026).

⁹¹ See above note 79; See also “Disability-Inclusive Education in Africa Program” (2025) *World Bank Group*, available at <https://www.worldbank.org/en/topic/disability/brief/disability-inclusive-education-in-africa-program>

⁹¹ “A Call to Action: Bridging the Divide in South Africa’s Inclusive Education” (2025) *National Council of & for Persons with Disabilities*, available at <https://ncpd.org.za/a-call-to-action-bridging-the-divide-in-south-africas-inclusive-education/> (10 July 2026)

123. During periods of crisis, children with disabilities are often the first to be excluded and the last to return.⁹² Notably, where accessibility is already a primary force behind insufficient educational attainment for disabled learners, climate change can contribute to a further erosion of services in vulnerable areas.
124. For example, scholar transport systems and school infrastructure often fail to accommodate wheelchairs or assistive devices even in ordinary conditions; under climate stress, these failures are compounded when roads and ramps are damaged, routes are altered, transport schedules become irregular, and learners have to change classrooms or even schools. The result is not merely disruption, but prolonged exclusion from education.
125. This vulnerability is further intensified by the fragility of support systems required for inclusive education. Learners with disabilities often depend on assistive devices, learning support assistants, adapted learning materials, or specialised communication methods. When pressure is placed on already tenuous or overextending educational systems, continuity of these services is frequently interrupted, at times indefinitely.
126. SECTION27 submits that States' obligations in this regard require continuity planning for disability-related support services, ensuring that reasonable accommodation does not cease during climate emergencies. This includes maintaining accessible learning materials during school closures, ensuring that relocated schools remain physically accessible, and guaranteeing that disability-specific support personnel are included in emergency preparedness and response planning.⁹³

Gender-Responsive Education and Learner Safety

127. Climate change is not gender neutral. The impacts of climate-induced disasters disproportionately affect female learners by exacerbating existing inequalities in educational attainment and reinforcing the deprioritisation of girls' education.

⁹² See above note 77 which records that children with disabilities are “often the first to be excluded and the last to return”; see also H Higginson, “Inclusive education: the missing piece of the climate resilience puzzle” (2026) *Sightsavers*, available at <https://www.sightsavers.org/blogs/2026/04/inclusive-education-the-missing-piece-of-the-climate-resilience-puzzle/> (accessed 10 July 2026).

⁹³ Aligned submissions on disability-inclusive climate action are made in NANHRI's submissions at paras 127 to 144; and Greenpeace Africa's submissions at para 77, amongst others.

128. Already, the gender gap in educational attainment remains a significant challenge across the continent. It is estimated that girls aged 6 to 11 in Africa are significantly more likely than boys of the same age to never attend school.⁹⁴ The gender gap is not geographically consistent. Sub-Saharan Africa has lagged behind other regions in achieving educational parity,⁹⁵ and it is estimated that just over two-thirds of girls complete primary school.⁹⁶ Even in the highest performing region, Southern Africa, there still remains a gap, with 99 girls attending primary school for every 100 boys.⁹⁷
129. The United Nations Convention on the Elimination of All Forms of Discrimination Against Women (“CEDAW”), which has been adopted by all AU Member States recognised by the UN, requires parties to eliminate all forms of gender discrimination. Article 10 of CEDAW specifically relates to equal education and creates a positive obligation on the part of signatory states to reduce female drop-out rates.⁹⁸
130. The Maputo Protocol adopted by the AU in 2003 and currently ratified by 46 out of 55 Member States, similarly creates a right to equal education for female learners.⁹⁹
131. Article 12 requires State Parties to “guarantee opportunity and access in the sphere of education” and take active steps to raise female literacy rates, participation in all educational fields, and retention in school.¹⁰⁰
132. Four of the core barriers to girls’ education are: poverty, child marriage, menstruation, and gender-based violence.¹⁰¹ More generally, cultural attitudes which prioritise boys’ education

⁹⁴ ER Aikins and J Cillier, “Education: Rates of gender exclusion” (2026) *Institute for Security Studies: African Futures & Innovation Programme* 2.

⁹⁵ “Beijing Declaration and Platform for Action” (1995) *United Nations* 44.

⁹⁶ Q Wodon, C Male & A Onagoruwa, “Educating Girls and Ending Child Marriage in Africa: Investment Case and the Role of Teachers and School Leaders” *UNESCO IICBA* (2024) 2.

⁹⁷ See above note 94 at 2.

⁹⁸ Convention on the Elimination of All Forms of Discrimination against Women (ratified December 18 1979, entered into force September 3 1981), Article 10.

⁹⁹ Amnesty International (note 104 below): 46 of 55 AU Member States had ratified the Maputo Protocol as at 28 August 2025.

¹⁰⁰ Protocol to the African Charter on Human and Peoples Rights on the Rights of Women in Africa (adopted July 11, 2003, entered into force November 25, 2005), Article 12.

¹⁰¹ UNICEF “Girls’ education: Gender equality in education benefits every child”, (2026), available at <https://www.unicef.org/education/girls-education> (accessed 9 July 2026).

and/or the domestic duties of adolescent girls are responsible for perpetuating the gender gap.

133. The impacts of climate change work to reinforce such pre-existing obstacles. Following a climate disaster, female learners are more likely to drop out due to increased domestic responsibilities and familial pressure to work towards securing food and water and/or caring for younger siblings.¹⁰²
134. Following floods, girls may be withdrawn from school to help households recover through domestic or paid work; in periods of drought, girls may miss school because they must walk further and wait longer to collect water.
135. Climate change, similar to other social pressures, can exacerbate problems of gender-based violence, as well as child and early forced marriage. Damage to infrastructure often forces learners onto longer and less secure routes to school, increasing exposure to sexual and gender-based violence, abduction and exploitation.
136. Already, 246 million children annually are harassed and abused on their way to school and girls are disproportionately targeted.¹⁰³ For particularly vulnerable families, climate-induced disasters can trigger household economic shocks, leading caregivers “to engage negative coping responses” which can include “withdrawing girls from school ... to be married off in exchange for bride price”.¹⁰⁴
137. Additionally, extensive damage to school buildings and sanitation facilities, as well as a lack of clean water can make education increasingly difficult for menstruating learners. Social stigmatisation around menstruation is already acknowledged as a barrier to female education. When schools lack adequate, private, and gender-separated bathrooms,

¹⁰² Plan International, “Climate Change and Girls’ Education: Barriers, Gender Norms and Pathways to Resilience” *Plan International* (2023) 5 and 18, available at https://plan-international.org/uploads/2023/11/Climate-Change-and-Girls-Education_Synthesis-Report_Nov2023.pdf (accessed 9 July 2026).

¹⁰³ L Rodriguez, “7 Obstacles to Girls’ Education and How to Overcome Them” *Global Citizen* (2019), available at <https://www.globalcitizen.org/en/content/barriers-to-girls-education-around-the-world/> (accessed 9 July 2026).

¹⁰⁴ C Kwauk and L Steer, “Four Ways that Climate Change Impacts Girls’ Education in Africa” *Global Center on Adaptation* (2023), available at <https://gca.org/4-ways-that-climate-change-impacts-girls-education-in-africa/> (access 9 July 2026).

menstruating learners may face increasing pressure to stay home out of fear of harassment, disease, or inadequate general hygiene.¹⁰⁵

138. Accordingly, SECTION27 submits that the Court is entitled to find that States' obligations under the right to education require the integration of disability inclusion, safety planning, sustained support for female learners and adaptive admissions systems into climate resilience strategies for education.¹⁰⁶

139. This does not require the Court to prescribe technical standards, but rather to affirm the normative principle that inclusive education must remain functional, accessible, and safe under foreseeable climate conditions. In practical terms, this means ensuring that universal design is embedded in infrastructure planning, that scholar transport systems are resilient and disability-inclusive, that safety is incorporated into all mobility planning, and that admissions systems are capable of operating under conditions of disruption.

¹⁰⁵ Id at section 3; See *also* above note 103.

¹⁰⁶ Aligned submissions on the gendered educational impacts of climate change are made in Georgetown HRI's submissions at section VIII (pp 42 to 52); UCC Cork's submissions at pp 68 to 79; Environmental Law Clinics Coalition's submissions at pp 55 to 60; 24. Kenya Meteorological Society's submissions at paras 112 to 113.

OBLIGATIONS OF AFRICAN STATES WITH RESPECT TO THE RIGHT TO HEALTH

140. Climate-related disruptions also affect the enjoyment of the right to health protected under Article 16 of the ACHPR. Across the SADC region, increasingly frequent floods, cyclones, droughts, heatwaves, and other extreme weather events have placed considerable strain on public healthcare systems, disrupted access to essential healthcare services, and heightened existing health vulnerabilities.¹⁰⁷
141. During Cyclone Idai in 2019, Mozambique's primary healthcare system suffered extensive damage, with more than 90 health facilities destroyed and immunisation programmes disrupted, resulting in medicine shortages, overcrowding, and reduced access to healthcare.¹⁰⁸ Similar patterns have emerged across the SADC region. In Malawi, recurrent flooding has contributed to cholera and malaria outbreaks that have overwhelmed already under-resourced health facilities, while in Zimbabwe drought-related water shortages have been linked to outbreaks of typhoid and diarrhoeal diseases.¹⁰⁹ In South Africa, the 2022 KwaZulu-Natal floods resulted in the closure of healthcare facilities and disrupted the provision of essential maternal and child healthcare services.¹¹⁰
142. The consequences of these disruptions are not experienced equally. Climate change exacerbates existing social, economic, and gender inequalities, resulting in disproportionate impacts on populations that are already vulnerable. Factors such as age, gender, disability, poverty, geographic location, and pre-existing health conditions shape both exposure and resilience to climate-related harms.¹¹¹

¹⁰⁷ C Boakye-Agyemang, "Southern African countries launch climate-resilient health initiative with WHO support" (2025) *World Health organization Africa*, available at <https://www.afro.who.int/news/southern-african-countries-launch-climate-resilient-health-initiative-who-support> (accessed 9 July 2026).

¹⁰⁸ C Musarurwa *et al*, "Health Inequalities in Primary Care: A Comparative Analysis of Climate Change-Induced Expansion of Waterborne and Vector-Borne Diseases in the SADC Region" (2025) 22:1242 *Int. J. Environ. Res. Public Health*.

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ R Zahnow *et al*, "Climate change inequalities: A systematic review of disparities in access to mitigation and adaptation measures" (2025) 165 *Environmental Science & Policy* 2.

143. This section commences with an overview of the disproportionate impact of climate change on the health and well-being of women and girls in the SADC region and follows with an analysis of the corresponding obligations of African States under the ACHPR and the Maputo Protocol. SECTION27 submits that the realisation of the right to health in the context of climate change must be grounded in the principles of equality, non-discrimination, substantive equality, and gender responsiveness.

The Chersich Report on the Disproportionate Impact of Climate Change on Women and Girls

144. The disproportionate impact of climate change on women and girls does not arise because they are inherently vulnerable, but because climate-related harms operate within societies already marked by unequal power, resources and responsibilities.¹¹² In comparison to other members of society, women and girls are more likely to experience unequal access to land, income, education, healthcare, transport, information and decision-making processes.¹¹³ They also frequently carry a greater share of unpaid care and household responsibilities, including securing water, food and fuel, caring for children, older persons and the sick, and maintaining household wellbeing during periods of crisis.¹¹⁴ Climate change, therefore, has a disproportionate impact on women and girls because it magnifies existing gender inequality and exposes women and girls to heightened risks to their health, safety, education, dignity and overall well-being.

145. This understanding is supported by the Intergovernmental Panel on Climate Change ("IPCC"), the United Nations body responsible for assessing the science related to climate change. The IPCC has recognised that climate-related hazards often intensify existing gender inequalities and produce distinct gendered impacts. These impacts include increased unpaid care and household workloads, heightened occupational and environmental risks, greater exposure to food and water insecurity, psychological distress, adverse sexual and reproductive health outcomes, and increased mortality and morbidity

¹¹² Chersich Report (Annexure A), Introduction and section "Structural inequalities related to Climate Change and health"; T Shimels *et al*, "The intersections of climate change, gender, migration, and sexual and reproductive health in Sub-Saharan Africa: A scoping review" (2025) 26 *The Journal of Climate Change and Health* 100604.

¹¹³ *Id.*

¹¹⁴ See above note 102.

during and after climate-related disasters.¹¹⁵ This evidence demonstrates that climate change does not operate on a neutral social terrain. Rather, its impacts are mediated by existing inequalities, with the result that women and girls often experience climate-related harms more severely and with fewer resources to mitigate or recover from them.

146. Given the specialised nature of the issues arising in relation to climate change and health, SECTION27 sought expert evidence from **Professor Matthew Chersich** to assist the Court in understanding the current scientific evidence regarding the impacts of climate change on health, particularly for women and girls in the SADC region (“Chersich Report”). The Chersich Report is attached hereto and marked annexure “**A**”.

147. Professor Chersich is a Research Professor at the University of the Witwatersrand, where he is the Executive Director of the Wits Planetary Health Research Division, one of the largest research units on climate and health worldwide. He is also a Research Fellow at Trinity College Dublin, Ireland. He has more than two decades of experience in clinical medicine, epidemiology, public health, and health policy research in Africa. His work focuses on maternal health, HIV and the relationship between climate change and health, and he has contributed to numerous World Health Organisation global health guidelines and technical processes.

148. Professor Chersich is also a contributing author to the Africa chapter of the Sixth Assessment Report of the IPCC and currently provides technical support to the development of national guidance on heat and health, as well as health-sector climate adaptation measures in South Africa. He has authored more than 230 peer-reviewed publications and has led or participated in extensive research on the health impacts of climate change, particularly in relation to maternal health, vulnerability, adaptation, and public health systems in Africa.

149. SECTION27 relies on the Chersich Report because it provides a comprehensive assessment of the available scientific evidence concerning the impacts of climate change on access to healthcare in SADC. Of particular relevance to these proceedings, the report

¹¹⁵ IPCC, Climate Change 2022: Impacts, Adaptation and Vulnerability, Working Group II Contribution to the Sixth Assessment Report (2022), Chapter 8; see above note 72; see *also* the Chersich Report, section “Introduction”.

examines the disproportionate impacts of climate change on women and girls and shows the implications of those impacts for the obligations of States under regional human rights instruments.

150. The report identifies four interrelated pathways through which climate change is already affecting the enjoyment of the right to health and is likely to do so with increasing severity in the future. These are: exposure to extreme heat; climate-sensitive infectious diseases; gender and child-specific health impacts, including violence, mental health and food insecurity; and structural inequalities that heighten vulnerability and limit adaptive capacity.

Heat exposure and maternal health

151. The report notes that rising temperatures and increasingly frequent heatwaves are associated with increased mortality and morbidity across populations, particularly among groups already experiencing heightened vulnerability, including pregnant women, young children, older persons, and individuals living with chronic illnesses. Of particular concern is the growing body of evidence linking heat exposure during pregnancy to adverse maternal, foetal and neonatal outcomes.¹¹⁶
152. The report highlights studies demonstrating increased risks of hypertensive disorders, gestational diabetes, pre-eclampsia, pre-term birth, stillbirth and prolonged labour. These risks arise because extreme heat places significant physiological strain on pregnant women, including dehydration, endocrine disruption and impaired placental functioning.¹¹⁷
153. The report further notes that heat-related harms extend beyond individuals and affect the functioning of health systems themselves, including damages to medicines from extreme heat, and disruptions to medicines cold chains, laboratory services, medical equipment, and electricity-dependent healthcare infrastructure. Studies cited in the report recorded waiting-room temperatures exceeding 38°C in rural South African clinics, and attributed 32%

¹¹⁶ Chersich Report, sections “The impact of heat exposure on health” and “The impact of heat on women and children”.

¹¹⁷ Chersich Report, section “The impact of heat on women and children”.

of heat-associated neonatal deaths across 29 low- and middle-income countries to climate change.¹¹⁸

Climate-sensitive infectious diseases

154. The report demonstrates that climate change is altering the epidemiology and distribution of infectious diseases across the region. Changes in temperature and rainfall patterns create favourable conditions for the transmission of vector-borne diseases such as malaria and dengue fever, as well as water-borne and diarrhoeal diseases. These impacts are particularly significant in Africa, which continues to bear the overwhelming burden of malaria-related mortality globally, with pregnant women and children under the age of five facing the highest risk.

155. Climate-related disruptions to water availability and quality further increase the prevalence of infectious diseases by undermining sanitation and hygiene practices. The report notes that both droughts and excessive rainfall compromise access to clean water, while extreme heat can disrupt food preservation and transportation systems, increasing exposure to food-borne illnesses. In South Africa, for example, research has demonstrated a correlation between rising temperatures and increased rates of childhood diarrhoeal disease. These findings illustrate the complex pathways through which climate change threatens the health of women, children and communities.¹¹⁹

Gender and child specific impacts

156. The report emphasises that climate change interacts with existing gender inequalities in ways that disproportionately affect women and girls. Across Africa, women continue to perform the majority of unpaid care and domestic work, including responsibilities related to water collection, food preparation, caregiving and household management.

157. Climate-related events such as droughts, heatwaves and water scarcity increase the burden associated with these responsibilities and expose women and girls to additional

¹¹⁸ Chersich Report, sections “The impact of heat exposure on health” and “The impact of heat on women and children”.

¹¹⁹ Chersich Report, section “Climate Sensitive infectious diseases”.

physical and health risks. The report notes, for example, that prolonged drought conditions often require women and girls to travel longer distances to secure water and fuel, increasing exposure to extreme heat, exhaustion, dehydration and violence. Children, particularly girls, may be withdrawn from school or required to spend significant time supporting household survival strategies during periods of climate stress. These impacts not only affect educational outcomes but also have long-term consequences for physical health, safety and development.¹²⁰

Violence, mental health and food insecurity

158. The report identifies a strong relationship between climate-related disasters and increased levels of gender-based violence. Extreme weather events, displacement, food insecurity, economic hardship and the breakdown of community and institutional support systems can increase women's and girls' exposure to domestic violence, sexual violence and exploitation. The report records, for example, an association between each 1°C increase in annual mean temperature and a mean increase of 4.5% in the prevalence of intimate partner violence.¹²¹ Climate change also has significant implications for mental health.

159. The report notes that exposure to extreme weather events, displacement, loss of livelihoods, food insecurity and uncertainty about the future can contribute to anxiety, depression, trauma and other mental health conditions. Children, adolescents, women and persons already experiencing social or economic disadvantage are particularly vulnerable. In addition, the report identifies food insecurity as a critical pathway through which climate change affects health. Climate-related shocks undermine agricultural production, household food availability and nutritional outcomes, with women and children bearing a disproportionate share of these impacts. The resulting malnutrition and undernutrition increase susceptibility to disease and adversely affect maternal and child health.¹²²

Structural inequalities and adaptive capacity

¹²⁰ Chersich Report, section “Caregiving, domestic duties and providing”.

¹²¹ Chersich Report, section “Gender based violence and climate hazards”.

¹²² Chersich Report, sections “Violence including Gender based violence” and “Mental health”.

160. Finally, the report demonstrates that the health impacts of climate change cannot be separated from the broader structural inequalities that shape vulnerability across the region. Women and girls frequently face unequal access to land, income, financial resources, healthcare services, education and decision-making processes, limiting their ability to adapt to climate-related risks.

161. These inequalities are often most pronounced in rural areas, where healthcare infrastructure is under-resourced and access to services remains constrained. The report highlights that health systems in countries such as South Africa and Malawi continue to face significant challenges, including shortages of healthcare workers, inadequate infrastructure, insufficient emergency response capacity and unequal geographic distribution of services. Climate-related events place additional pressure on these already strained systems, further reducing access to healthcare for those who need it most. The report further records UNICEF findings that climate hazards disrupted the schooling of at least one in seven students globally in 2024 and that, in Africa, where 107 million children are already out of school, climate hazards place a further 20 million at risk of leaving school.¹²³

162. SECTION27 submits that the evidence presented in the Chersich Report demonstrates that climate change poses a direct and foreseeable threat to the enjoyment of the right to health under Article 16 of the African Charter and the health-related protections contained in Article 14 of the Maputo Protocol.

SECTION27's experience with communities whose right to health has been impacted by climate change

163. The Chersich Report's findings are consistent with what SECTION27 has observed through its work with communities affected by environmental harm, inadequate public infrastructure, poverty and unequal access to public services.

164. For women and girls with disabilities, the risks are often compounded by barriers to accessible healthcare, transport, information, emergency planning and support services.

¹²³ Chersich Report, section "Structural inequalities related to Climate Change and health".

165. This context matters because many African States have already recognised the need to address gender inequality through constitutional, legislative, policy and regional human rights commitments. The Maputo Protocol, ratified by 46 of 55 African States,¹²⁴ the ACHPR and related instruments require States to pursue substantive equality and to remove barriers that prevent women and girls from enjoying their rights on an equal basis.
166. The foreseeability of climate-related health harms is central to the content of States' obligations. The evidence before the Court demonstrates that climate change is already producing identifiable and predictable risks for access to healthcare, food security, water, sanitation, safety and wellbeing. Where such harms are scientifically established, foreseeable and capable of being reduced through planning, States cannot satisfy their obligations by responding only after harm has occurred.
167. This duty to act in advance of harm is confirmed by customary international law as recently restated by the ICJ, which held unanimously that States have a duty to prevent significant harm to the climate system by acting with due diligence and using all means at their disposal, and that the applicable standard of due diligence is "stringent".¹²⁵ A State that confines itself to responding after foreseeable and preventable climate-related health harms have materialised therefore fails to meet the standard that international law requires of it.
168. In particular, the Maputo Protocol does not merely require formal equality. It requires States to address the conditions that prevent women and girls from enjoying their rights equally and in practice. Climate change threatens to undermine those existing equality commitments by intensifying the very forms of disadvantage that States are already required to remedy. A climate response that does not account for the specific risks faced by women and girls would therefore be inadequate, because it would allow climate change to deepen existing inequality under the appearance of neutral policy.

¹²⁴ Amnesty International, "CAR: Ratification of the Maputo Protocol, an essential step – sustained efforts to guarantee women's and girls' rights must follow" (2025) available at <https://www.amnesty.org/en/latest/news/2025/08/car-maputo-protocol-womens-rights/> (accessed 23 June 2026).

¹²⁵ ICJ Climate Advisory Opinion, *dispositif*, para 3(B)(a), and para 138.

169. SECTION27 accordingly submits that the foreseeable and disproportionate impact of climate change on women and girls gives rise to a heightened duty of care. This duty is the means through which States must give practical effect to their obligations to protect the rights to health, equality, dignity and a satisfactory environment in the climate context for women and girls. It requires States to take targeted, evidence-based and gender-responsive measures to identify, prevent, reduce and remedy the specific climate-related risks faced by women and girls.

170. SECTION27 therefore submits that the Court should affirm that the rights to health, equality, non-discrimination and a satisfactory environment impose positive obligations on States to identify, prevent and address the disproportionate impacts of climate change on women and girls. Such an interpretation is necessary to give practical effect to the protections contained in the ACHPR, Maputo Protocol and ACRWC, and to ensure that climate action advances, rather than undermines, substantive equality and human dignity across the continent.¹²⁶

171. The evidence further demonstrates that climate change threatens the availability, accessibility, acceptability and quality of healthcare services. Heatwaves, floods, droughts and cyclones damage healthcare infrastructure, interrupt medicine supply chains, compromise cold-storage systems, disrupt transport networks and reduce access to essential health services. In rural areas, where healthcare systems are already under-resourced, climate-related disruptions may significantly impede access to maternal healthcare, reproductive healthcare and other critical services. The right to health under Article 16 therefore requires States not only to provide healthcare services, but to ensure that those services remain accessible and functional under foreseeable climate conditions.

172. SECTION27 accordingly submits that the obligations arising from Articles 2, 16, 18 and 24 of the ACHPR, read together with the relevant provisions of the Maputo Protocol and the ACRWC, entitle the Court to find that, in practical terms, a heightened duty of care requires States to conduct health-sector climate vulnerability assessments that identify the differentiated impacts of climate change on women and girls, including women and girls with

¹²⁶ Aligned submissions on the disproportionate health impacts of climate change on women, girls and children are made in AIDA's submissions at pp 47 to 51; Georgetown HRI's submissions at section VI (pp 25 to 34); UNSR Environment's submissions at pp 35 to 36 and 43 to 45; Greenpeace Africa's submissions at paras 68, 74 and 104.

disabilities; integrate gender-responsive climate adaptation and disaster-resilience measures into health policies, budgets and monitoring systems; ensure the continuity of essential healthcare services during climate-related disruptions; strengthen climate-resilient health infrastructure; address the underlying determinants of health, including water, sanitation, nutrition and food security; and ensure the meaningful participation of women and girls in climate and health-related decision-making. Properly understood, the heightened duty of care is therefore not an abstract standard. It is the legal vehicle through which States are required to manage and mitigate the specific and foreseeable health risks that climate change poses to women and girls.

OBLIGATIONS ON STATES

173. Having considered the implications of climate change for the rights to basic education and health, we turn in this section to address the corresponding state obligations to respect, protect and fulfil these rights. We highlight three specific sets of obligations:

- a. Obligations in respect of private actors, specifically transnational corporations and other major business enterprises;
- b. Obligations to conduct climate risk and vulnerability assessments; and
- c. Obligations of mitigation and adaptation.

Obligations in Respect of Private Actors

174. SECTION27 submits that the Court must also address the role of transnational corporations and other business enterprises as significant drivers of climate-related harms and resulting rights violations.

175. Climate change is not only the result of State action or inaction, but is also substantially influenced by private actors operating across borders and within key sectors of the global economy, including energy production, extractive industries, manufacturing, and large-scale infrastructure development. The activities of these actors contribute materially to greenhouse gas emissions, environmental degradation, and associated human rights impacts across the continent.

176. These impacts have direct consequences for the enjoyment of rights protected under the ACHPR, particularly the right to a satisfactory environment under Article 24, as well as interconnected rights including health and education. While business enterprises are expected to respect human rights in their operations, under the current international legal framework, States remain the primary duty-bearers. There is no binding treaty that directly imposes comprehensive human rights obligations on private actors. It is therefore through States that regulation, prevention, and accountability must be secured.
177. In this regard, States are required to adopt and implement legislative, regulatory, administrative, and judicial measures to prevent, mitigate, and remedy human rights harms arising from business activities within their territory or jurisdiction, including those with transboundary and extraterritorial climate impacts. This duty is well established in international human rights law and is reflected in the United Nations Guiding Principles on Business and Human Rights, which affirm the State obligation to protect against human rights abuses by third parties, including business enterprises, through appropriate policy, regulation, monitoring, and enforcement mechanisms.¹²⁷
178. At the regional level, there is growing recognition of the need for more robust governance of corporate conduct in Africa. The African Commission on Human and Peoples' Rights has adopted Resolution 550 on Business and Human Rights in Africa, which acknowledges the adverse human rights impacts of business activities and calls for the development of a binding regional instrument to regulate transnational corporations and other business enterprises.¹²⁸ At the international level, the intergovernmental working group on transnational corporations and other business enterprises is currently elaborating and negotiating a legally binding treaty on business and human rights, reflecting a broad and emerging consensus that voluntary frameworks are insufficient to address systemic harms in line with Resolution 26/9.¹²⁹

¹²⁷ United Nations Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework, UN Human Rights Council, UN Doc A/HRC/17/31 (21 March 2011).

¹²⁸ African Commission on Human and Peoples' Rights, Resolution 550 on Business and Human Rights in Africa, ACHPR/Res.550(LXXIV)2023 (adopted 11 May 2023).

¹²⁹ United Nations General Assembly, Resolution 26/9, "Elaboration of an international legally binding instrument on transnational corporations and other business enterprises with respect to human rights," (2014) A/HRC/RES/26/9, available at: <https://docs.un.org/en/a/hrc/res/26/9> (accessed 10 July 2026).

179. These developments highlight a clear normative trajectory: the protection of human rights in the context of climate change requires effective regulation of private actors whose activities contribute to environmental harm.

180. The ICJ has confirmed these duties to regulate private actors in its 2025 Advisory Opinion. The ICJ held that all states have a duty to prevent significant harm to the environment and the climate system, by acting with due diligence;¹³⁰ a duty that extends to private actors.¹³¹ The “[f]ailure of a State to take appropriate action to protect the climate system from [greenhouse gas] emissions — including through fossil fuel production, fossil fuel consumption, the granting of fossil fuel exploration licences or the provision of fossil fuel subsidies — may constitute an internationally wrongful act which is attributable to that State.” On this reasoning, the question is not whether the emissions of private corporations can be attributed to a State, but whether the State has exercised the regulatory due diligence that international law requires of it – a standard the Court described as “stringent”.¹³²

181. The ICJ explained that, at minimum, due diligence requires that “*where there are plausible indications of potential risks*”, a State “*would not meet its obligation of due diligence if it disregarded those risks*”, confirming that the “*precautionary approach is also an integral part of the general obligation of due diligence*”.¹³³

182. In the context of proposed fossil fuel projects – including the mining, extraction, processing and burning of fossil fuels – due diligence requires States to conduct rigorous scrutiny through assessments of the potential climate change and human rights impacts of these actions. Such scrutiny is particularly required in all licensing, environmental authorisation, and planning decisions by the State, that have the effect of authorising polluting activities by private actors.

183. Such assessments must incorporate assessments of the impact of proposed fossil projects on human rights generally and children’s rights specifically. To that end, the UN

¹³⁰ ICJ Climate Advisory Opinion at paras 130 – 137, citing *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, *Judgment ICJ Reports 2010* para 101 and para 197; *Legality of the Threat or Use of Nuclear Weapons*, *Advisory Opinion ICJ Reports 1996* at para 29.

¹³¹ ICJ Climate Advisory Opinion at paras 427 – 428.

¹³² *Id* para 138.

¹³³ *Id* at para 294.

Committee on the Rights of the Child, in its General Comment 26, has emphasised that there is a specific obligation on States to conduct a child's rights impact assessment where policies and projects are anticipated to have significant environmental and climate change consequences.¹³⁴ Echoing its earlier guidance in General Comment 14, the Committee has emphasised that these impact assessments should be undertaken "*as early as possible in the decision-making process*".¹³⁵

184. SECTION27 accordingly submits that the Court should affirm that States' obligations to regulate transnational corporations and other business enterprises include a duty to require climate-responsive human rights due diligence. A State's failure to regulate the climate-related conduct of transnational corporations and other business enterprises within its jurisdiction, including in the licensing, subsidisation and oversight of fossil fuel activities, engages its responsibility under the ACHPR, and in particular its duty to protect the right to a satisfactory environment under Article 24..

Climate Risk and Vulnerability Assessment

185. SECTION27 submits that the effective protection of human rights in the context of climate change requires States to move beyond reactive responses to climate-related disasters and towards systems of anticipatory governance. Climate change is no longer characterised by isolated or unforeseen events. Scientific evidence now enables States to identify, with increasing accuracy, the climate hazards likely to affect particular regions, sectors and populations. Floods, droughts, extreme heat events, cyclones, disease outbreaks and food insecurity are increasingly foreseeable.

186. In these circumstances, the obligations arising under the ACHPR, the ACRWC, and the Maputo Protocol necessarily require States to identify and assess foreseeable climate-related risks before those risks materialise into violations of protected rights. This aligns

¹³⁴ UN Committee on the Rights of the Child General Comment 26 (2023) CRC/C/GC/26: "Children's rights and the environment with a special focus on climate change" at para 75: "*All proposed environment-related legislation, policies, projects, regulations, budgets and decisions, and those already in force, require vigorous children's rights impact assessments, in accordance with article 3 (1) of the Convention. States should require the assessment, both before and after implementation, of the possible direct and indirect impact on the environment and climate, including the transboundary, cumulative, and both production and consumption effects, on the enjoyment of children's rights.*"

¹³⁵ Id at para 77.

with the precautionary principle, which is already a settled feature of international environmental law.¹³⁶

187. The obligation to assess climate-related risks arises from the broader duty of States to respect, protect and fulfil human rights.¹³⁷ States cannot take reasonable measures to prevent harm if they have not first identified the nature and extent of the risks facing rights holders.

188. Climate risk and vulnerability assessments therefore serve as an essential mechanism through which States can understand how climate change threatens the enjoyment of rights and determine what measures are necessary to prevent or mitigate those harms. Without such assessments, policy responses are likely to be fragmented, reactive and incapable of addressing the specific vulnerabilities faced by affected communities.

189. SECTION27 submits that climate risk assessments should not be approached as purely environmental or technical exercises. Climate change affects people through the systems upon which they depend for the enjoyment of their rights. The relevant question is therefore not merely whether a particular area is vulnerable to flooding, drought or extreme heat, but how those hazards affect access to education, healthcare, food, water, sanitation, transport, housing and other services essential to human dignity and wellbeing. A rights-based approach to climate risk assessment requires States to identify both the physical hazards associated with climate change and the likely impact of those hazards on the enjoyment of protected rights.

190. In this regard, SECTION27 submits that States should be required to undertake regular and evidence-based sectoral climate risk and vulnerability assessments. Climate-related risks do not manifest uniformly across sectors. The vulnerabilities facing educational institutions differ from those affecting healthcare systems, transport networks, food systems or water infrastructure. General climate assessments may identify broad environmental risks, but they are often insufficient to determine the specific measures required to protect

¹³⁶ ICJ Climate Advisory Opinion at para 294 (“*precautionary approach is also an integral part of the general obligation of due diligence*” under the ... customary duty to prevent significant harm to the environment”).

¹³⁷ *Ligue Ivoirienne des Droits de l’Homme (LIDHO) and Others v Republic of Côte d’Ivoire* Application 041/2016 [2023] AfCHPR 21 (5 September 2023) at para 182.

rights within particular sectors. Sector-specific assessments enable States to identify vulnerabilities within critical public systems and to develop targeted responses capable of preventing rights violations.

191. The Court should make clear that States do not discharge their climate-related human rights obligations by adopting policies, plans or frameworks as a matter of form. As the ICJ has held, where an obligation requires the adoption of policies and measures, compliance is not achieved by the adoption of any policy or measure; the policy and measure must be capable of achieving the required objective.¹³⁸ In the context of education and health, this means that risk assessments, adaptation plans and mitigation measures must be concrete, sector-specific, adequately resourced, periodically reviewed and capable of protecting the continued enjoyment of rights during foreseeable climate-related disruption.

192. We further submit that particular priority should be afforded to sectors that are indispensable to the realisation of socio-economic rights. These include education, health, food security and nutrition, water and sanitation, transport and public infrastructure. Failures within these sectors often have cascading consequences that affect the enjoyment of multiple rights simultaneously. For example, damage to transport infrastructure may prevent learners from accessing schools, interrupt the delivery of learner nutrition programmes, delay emergency medical services and restrict access to healthcare facilities. Similarly, drought conditions may simultaneously affect agricultural production, food security, public health, water access and educational attendance. Assessing these sectors in isolation from one another risks overlooking the interconnected nature of climate-related harms.

193. Within the education sector, climate vulnerability assessments should evaluate not only school infrastructure but also the broader systems necessary for the enjoyment of the right to education. This includes learner transport systems, learner nutrition programmes, water and sanitation services, electricity supply, admissions systems and support services for learners with disabilities. The submission before this Court demonstrates that climate-related disruptions affecting any one of these systems may impede access to education and undermine learning outcomes. Assessments should therefore identify foreseeable threats to educational continuity and determine the measures necessary to ensure that learners are able to access and benefit from education during and after climate-related events.

¹³⁸ ICJ Advisory Opinion at para 208.

194. Similarly, climate risk assessments within the health sector should evaluate both direct and indirect threats to health outcomes. This includes assessing the impacts of extreme heat, climate-sensitive infectious diseases, food insecurity, water scarcity, mental health challenges and damage to healthcare infrastructure. As the expert evidence before the Court demonstrates, women and girls experience many of these impacts disproportionately. Effective assessments must therefore identify the differentiated ways in which climate change affects various groups and ensure that resulting policies are responsive to those realities.

195. Importantly, vulnerability is not determined solely by exposure to climate hazards. It is also shaped by social, economic and structural inequalities. The same climate event may have vastly different consequences depending on the resources available to affected communities and their ability to respond and recover. Children, women and girls, persons with disabilities, rural communities and low-income households frequently experience heightened vulnerability because they face pre-existing barriers to accessing resources, services and opportunities. A rights-based climate assessment must therefore examine not only where climate risks exist, but also who is most likely to suffer their consequences and why.

196. SECTION27 further submits that climate risk assessments should be informed by principles of equality, participation and non-discrimination. Communities most affected by climate change often possess valuable local knowledge regarding environmental risks, vulnerabilities and adaptation needs. Meaningful participation by affected communities, particularly women, children, persons with disabilities and marginalised groups, can improve the quality of assessments and ensure that resulting interventions respond to lived realities. Climate risk assessments should therefore combine scientific evidence with community knowledge and participatory processes.

197. The evidence before the Court demonstrates that a failure to undertake adequate climate risk assessments often results in preventable harm. Across the SADC region, climate-related disasters continue to damage schools, disrupt healthcare services, interrupt food systems and undermine access to basic services. These impacts frequently occur despite the existence of scientific evidence identifying the underlying risks. In many instances, the

problem is not the absence of knowledge regarding climate threats, but the failure to systematically assess those threats within critical sectors and translate that knowledge into preventative action.

198. SECTION27 accordingly submits that the Court should affirm that States have an obligation to undertake regular, evidence-based and rights-sensitive climate risk and vulnerability assessments. Such assessments should be sector-specific, focused particularly on sectors critical to the enjoyment of socio-economic rights, including education, health, food security, transport, water and sanitation, and public infrastructure. They should identify foreseeable climate-related risks, assess the vulnerability of affected populations, evaluate the likely impact on protected rights, and inform the development of adaptation and mitigation measures. This obligation is a necessary component of States' broader duties to prevent foreseeable harm and to secure the effective enjoyment of Charter rights in the context of a changing climate.¹³⁹

Climate Change Mitigation and Adaptation Strategies

199. Climate risk and vulnerability assessments are only meaningful if they inform concrete action. Once climate-related risks have been identified, States are required to adopt measures capable of reducing vulnerability, strengthening resilience and preventing foreseeable harm. In the context of climate change, these measures are generally described as adaptation and mitigation strategies. While distinct in their objectives, adaptation and mitigation are complementary and mutually reinforcing responses to climate change. Together, they provide the primary means through which States can protect the enjoyment of human rights in a changing climate.

200. Adaptation refers to measures aimed at anticipating and responding to the actual or expected impacts of climate change. Its purpose is to reduce vulnerability and strengthen the capacity of individuals, communities and institutions to withstand climate-related shocks. Adaptation measures may include strengthening public infrastructure, improving disaster preparedness and early warning systems, enhancing water security, developing climate-

¹³⁹ Other amici similarly urge the recognition of climate risk and impact assessment obligations: see 10. 27032026 Greenpeace Africa section F.2 (p 61); 41. 22052026 UKZN para 38; 12. 27032026 NANHRI para 66; 24. 30032026 Kenya Meteorological Society paras 105 to 115; and 35. 31032026 RICEDH pp 92 to 93.

resilient food systems, protecting healthcare services during extreme weather events, and ensuring the continuity of educational services during periods of disruption. In essence, adaptation seeks to minimise the harm caused by climate change and to ensure that essential public services remain functional despite changing environmental conditions.

201. Mitigation, by contrast, addresses the underlying drivers of climate change. It encompasses measures aimed at reducing greenhouse gas emissions and limiting the severity of future climate impacts. While adaptation is concerned with managing the consequences of climate change, mitigation seeks to reduce the scale of those consequences over time. Effective protection of human rights requires both approaches. Adaptation alone cannot prevent increasingly severe climate impacts if global emissions continue to rise, while mitigation alone cannot protect communities already experiencing the consequences of climate change.

202. SECTION27 submits that adaptation and mitigation measures should be understood as integral components of States' obligations under the African human rights system. The rights protected under the ACHPR, the ACRWC and the Maputo Protocol cannot be effectively realised where States fail to take reasonable measures to prevent foreseeable climate-related harms. Given that climate change poses direct and indirect threats to a range of rights, including the rights to health, education, dignity, equality, life and a satisfactory environment, adaptation and mitigation measures are not merely matters of environmental policy; they are necessary tools for the protection of fundamental rights.

203. Particular priority should be afforded to the health and education sectors. The evidence before the Court demonstrates that climate-related harms frequently manifest through disruptions to healthcare systems and educational services. Damage to health facilities, interruptions to medicine supply chains, disease outbreaks, heat-related illness, food insecurity and water shortages undermine the enjoyment of the right to health. Similarly, damage to schools, disruptions to learner transport systems, interruptions to learner nutrition programmes and climate-related school closures impede the enjoyment of the right to education. These sectors are also foundational to the realisation of other rights and to broader social and economic development. Strengthening their resilience therefore generates benefits that extend far beyond the sectors themselves.

204. SECTION27 further submits that adaptation and mitigation measures must be grounded in principles of equality and non-discrimination. Climate change does not affect all people equally. Adaptation measures that fail to recognise differentiated impacts felt by women and girls, children, persons with disabilities, rural communities and low-income households risk reinforcing existing inequalities and excluding those most in need of protection.

205. States should therefore adopt gender-responsive and disability-inclusive approaches to climate adaptation and mitigation. Gender-responsive measures should recognise the disproportionate burdens borne by women and girls in relation to health, food security, caregiving responsibilities, access to resources and exposure to climate-related violence and displacement. Similarly, disability-inclusive approaches should ensure that climate planning, infrastructure development, disaster preparedness mechanisms and public services remain accessible to persons with disabilities before, during and after climate-related events. The effective protection of rights requires that those most vulnerable to climate-related harms are placed at the centre of planning and decision-making processes.

206. SECTION27 accordingly submits that the Court should affirm that States have an obligation to develop, implement and adequately resource adaptation and mitigation measures capable of protecting individuals and communities from the foreseeable impacts of climate change. Such measures should prioritise sectors critical to the enjoyment of socio-economic rights, particularly health and education, and should be informed by principles of equality, non-discrimination, participation, disability inclusion and gender responsiveness. Only through such an approach can States ensure the effective protection of Charter rights in the face of the climate crisis and comply with their obligations of due diligence under international law.

207. In respect of concrete mitigation measures, SECTION27 supports the calls by other amici for this Court to recognise a duty on all state parties to rapidly transition away from reliance on fossil fuels. SECTION27 specifically aligns itself with the extensive submissions of the Mandela Institute on this subject.¹⁴⁰ Given the indisputable link between fossil fuels and climate change, such measures are necessary to protect the climate system and to secure the rights of present and future generations, including the rights to education and healthcare.

¹⁴⁰ Mandela Institute, section IV (paras 28 to 86) and conclusion (paras 87 to 88).

REQUEST TO MAKE ORAL SUBMISSIONS

208. Should the Court decide to hold a hearing in these proceedings, SECTION27 respectfully seeks leave to make oral submissions in its capacity as *amicus curiae*.
209. SECTION27 respectfully submits that it would materially assist the Court to hold an oral hearing in this matter. First, the Advisory Opinion raises complex and interrelated questions concerning the interpretation of States' obligations under the African Charter in the context of climate change, including the protection of education, health, equality, and environmental rights.
210. These issues sit at the intersection of regional and international human rights law, climate science, infrastructure planning, and socio-economic policy. An oral hearing would enable the Court to interrogate the practical implications of the legal standards proposed, test the coherence of competing interpretive approaches, and seek clarification on areas where written submissions may necessarily be constrained by length, structure, or evidentiary framing.
211. Second, the matter concerns an evolving area of law in which factual and normative developments are rapid and not yet fully settled. The impacts of climate change on the enjoyment of rights are intensifying across the continent, while States are simultaneously developing adaptation frameworks, regulatory responses, and policy interventions. An oral hearing would therefore allow the Court to engage directly with current developments, emerging State practice, and the lived realities underlying the legal questions before it. This would assist the Court in ensuring that its Advisory Opinion is not only doctrinally sound, but also practically responsive, contextually grounded, and capable of guiding States in addressing ongoing and foreseeable climate-related harms.
212. Accordingly, SECTION27 submits that an oral hearing would not merely be useful, but would significantly enhance the Court's ability to fully appreciate the scope, complexity, and

urgency of the issues presented, and to craft guidance that is both legally robust and practically implementable.

213. SECTION27 accordingly submits that its participation in any oral proceedings may be of assistance to the Court in the determination of the issues before it.

CONCLUSION

214. In light of the above, SECTION27 respectfully submits that this Honourable Court should have regard to these submissions in clarifying the obligations of African States in respect of climate change and its impact on the enjoyment of human rights of the right to education and health care.

215. SECTION27 does not purport to address every question raised in the Request. Its submissions are directed to those questions on which its expertise in education and health, can most usefully assist the Court. In direct response to the questions placed before the Court by PALU, SECTION27 respectfully invites the Court to find:

- a. In relation to questions 94(a) and 94(b), that States owe positive obligations to present and future generations, and in particular to children, to interpret and give effect to the rights in the ACHPR and the ACRWC in accordance with the best interests of the child and the principle of intergenerational equity;
- b. in relation to question 94(b), that States must protect children, women and girls, and persons with disabilities from the foreseeable and disproportionate impacts of climate change on their rights to education and health, including through climate-resilient schools, protected learner mobility, resilient school feeding and nutrition programmes, and gender-responsive, disability-inclusive and child-sensitive health systems;
- c. in relation to question 94(d), that States must undertake regular, sector-specific climate risk and vulnerability assessments and adopt and adequately resource adaptation and mitigation measures capable of protecting the enjoyment of Charter rights, prioritising the education and health sectors;

- d. in relation to question 94(f), that States have a duty to regulate private actors, including multinational corporations and other business enterprises, whose activities foreseeably contribute to climate-related harm or environmental degradation impairing Charter rights, and that this duty includes legislative, administrative, monitoring, enforcement and remedial measures sufficient to prevent, mitigate and address such harm;
- e. that each of these obligations requires States to act in advance of foreseeable harm, consistent with the duty of prevention and the stringent standard of due diligence affirmed by the ICJ in its Advisory Opinion of 23 July 2025; and
- f. that, where climate-related acts or omissions impair the enjoyment of Charter rights, States must provide effective remedies, including measures directed at cessation, guarantees of non-repetition, rehabilitation of affected services and, where appropriate, compensation.

216. SECTION27 is grateful to the Court for the opportunity to assist in these important proceedings and respectfully requests that these submissions be taken into account in the preparation of the Advisory Opinion.

Signed and dated at **Johannesburg, South Africa**, on this day **10 July 2026**.



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IN THE AFRICAN COURT ON HUMAN AND PEOPLES' RIGHTS

ARUSHA, UNITED REPUBLIC OF TANZANIA

APPLICATION NO. 001/2025

**IN THE MATTER OF A REQUEST BY THE PAN AFRICAN LAWYERS UNION FOR AN
ADVISORY OPINION ON THE OBLIGATIONS OF STATES WITH RESPECT TO THE
CLIMATE CRISIS**

EXPERT AFFIDAVIT

I, the undersigned,

MATTHEW CHERSICH

do hereby make oath and say that:

1. I am an adult and I am a Research Professor at the University of the Witwatersrand and the Executive Director of the Wits Planetary Health Research Division - one of the largest research units on climate and health worldwide.
2. The facts set out in this affidavit fall within my personal knowledge and belief, except where the context indicates otherwise, and are true and correct.



3. I am the author of a report commissioned by SECTION27 dated 01 July 2026, titled *"Climate change impacts on health, access to healthcare, and the right to enjoy an environment not harmful to one's health and well-being, with a focus on women and girls in SADC"* ("Chersich Report"). A copy of the report is attached as "MC2".

4. The Chersich Report provides an expert opinion on the current scientific evidence regarding the impacts of climate change on health, particularly for women and girls, with particular emphasis to the impact of heat exposure to health, infectious diseases, violence, mental health and structural inequalities.

5. The Report demonstrates the adverse impacts of climate change on women and girl's health in the following key areas:

5.1 Heat exposure: a critical threat to maternal and neonatal health – Rising temperatures and extreme heat pose critical risks to maternal and neonatal health, contributing to preterm birth, stillbirth, and hypertensive disorders of pregnancy and a range of mental health disorders.

5.2 Broader health impacts of heat exposure on women, including gender-based violence – Extreme heat increases rates of cardiorespiratory disease, renal dysfunction, and mental health conditions, especially anxiety and depression. Heat also raises rates of inter-personal violence, including gender-based



violence, as stress responses, social interactions and behavioural triggers of violence escalate under high temperatures.

5.3 Extreme weather events and displacement – Droughts, floods, cyclones, and storms (which are now more frequent and severe) heighten women's and girls' exposure to injuries, malnutrition, infectious disease outbreaks and displacement. Women and girls carry disproportionate responsibilities for water and food provision, caregiving, and household survival after climate shocks.

5.4 Climate-sensitive infectious diseases – Warming temperatures and shifting rainfall patterns alter the distribution of malaria, dengue, cholera, diarrheal diseases, and other pathogens. Women are highly exposed due to domestic and caregiving roles, agricultural work, and responsibility for water collection. Pregnancy amplifies morbidity from infections, increasing risks to both mothers and newborns.

5.5 Food insecurity and undernutrition – Drought-driven crop losses, livestock death, disrupted food markets, and rising food prices increase household food insecurity, affecting women and girls first and most severely. Undernutrition during pregnancy leads to long-term intergenerational health impacts, including fetal growth restriction and developmental deficits.



5.6 Structural inequities and intensified gendered vulnerabilities – Gender inequality, poverty, informal housing, lower levels of education, and limited decision-making power restrict women's ability to prepare for, avoid, or recover from climate hazards. Health systems remain under-prepared for climate-related surges in maternal complications, heat illness, and infectious diseases. Climate change is poorly integrated into current health training and local planning in the Southern African region.

6. The report concludes that Climate change has a disproportionate impact on women and girls because it magnifies existing gender inequality and exposes women and girls to heightened risks to their health, safety, education, dignity and overall well-being.

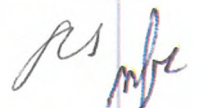
7. My qualifications are set out in my curriculum vitae, attached marked "MC1". In brief, my qualifications and expertise are as follows:

7.1 I completed my MBBCh at the University of the Witwatersrand, Johannesburg, South Africa in 1998. I then completed Diplomas in Obstetrics and child health, respectively, at the College of Medicine, South Africa in 2000 and 2001. I also studied public health at the London School of Hygiene and Tropical Medicine and doctoral studies at Ghent University, Belgium.

7.2 My career spans around 25 years of research in Africa, encompassing more than 80 studies. Currently my research focuses on climate change and health, where, since 2019, I am leading ten projects. These projects examine the health implications of heat exposure on vulnerable populations in Africa, and All the projects I lead are multidisciplinary, encompassing public health, data science, traditional biostatistics, clinical medicine, climate sciences, science of the built environment, and social sciences, with field sites in Burkina Faso, Greece, Italy, Ivory Coast, Kenya, South Africa, Sweden and Zimbabwe. They are among the first studies in Africa to investigate the impacts of heat exposure on health and adaptation measures.

7.3 I am a contributing author to the Africa chapter of the 6th Intergovernmental Panel on Climate Change report, and provide technical inputs on the South African national guidelines on heat and health, and health sector adaptation. My work on climate change has centered on assessing the impacts of climate change on maternal health and HIV, consolidating my experience in the disciplines of clinical medicine, biostatistics, epidemiology and public health. I currently serve as the research representative on the WHO Civil Society Working Group on Climate Change, and am a member of the South African National Climate Change and Health Steering Committee.

7.4 Over the course of my career, I have made substantial contributions to the World Health Organisation's policy and practice guidelines, with roles ranging



lead guideline writer, to lead on guidelines methodology or systematic reviews
expert committee member, and coordinator of technical meetings.

8. Given my qualifications and experience, I am duly qualified to express an expert opinion on the matters addressed in the Chersich Report.

9. Where I have based our opinions on journal articles, book chapters, reports, studies and other documents referenced in the Chersich Report, I confirm the reliability of these materials based on my own experience and training and further confirm that they are written by persons of established repute, proven experience in the field, or evident knowledge of the matters they address.

10. I confirm the content of the Chersich Report and the expert opinions expressed therein and confirm that the methodology relied upon in the Report is robust and credible.



MATTHEW CHERSICH



Thus signed and sworn to before me at Sandton on this 10 day of July 2026 by the deponent who has acknowledged that he knows and understands the contents of this affidavit, that he has no objection to taking the prescribed oath and that the prescribed oath is binding on his conscience.

COMMISSIONER OF OATHS

NAME: Sikelelwe Lulutho Stemele
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eng.

PS mfe

BIOGRAPHICAL SKETCH

NAME: Prof. Chersich, Matthew Francis

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
University of the Witwatersrand, Johannesburg, South Africa	MBBCh	12/1998	Medicine
College of Medicine, South Africa	Dip. Obst.	09/2000	Obstetrics
College of Medicine, South Africa	DCH	03/2001	Child health
University of the Witwatersrand, Johannesburg, South Africa	DTM&H	11/2002	Tropical medicine
London School of Hygiene and Tropical Medicine (LSHTM), University of London, United Kingdom	MPH	08/2003	Public Health in Developing Countries
Ghent University, Belgium, University of Gent, Belgium	Ph.D.	03/2007	Medicine and Health Sciences
Faculty of Public Health, United Kingdom	DFPH	11/2007	Public health

A. Personal Statement

I serve as the Director of the Wits Planetary Health Research Division. I am a medical doctor by training, a Research Professor at the University of the Witwatersrand and Research Fellow at Trinity College Dublin. My career spans around 25 years of research in Africa, encompassing more than 80 studies. Currently my research focuses on climate change and health, where, since 2019, I have secured funding for ten projects. These projects examine the health implications of heat exposure on vulnerable populations in Africa, and are funded by the US National Institutes of Health (n=2), the Wellcome Trust (n=5) and the European Union (n=2). All the projects I lead are multidisciplinary, encompassing public health, data science, traditional biostatistics, clinical medicine, climate sciences, science of the built environment, and social sciences, with field sites in Burkina Faso, Greece, Italy, Ivory Coast, Kenya, South Africa, Sweden and Zimbabwe. All the studies were investigator driven, with the proposals conceived and written by me. They are among the first studies in Africa to investigate the impacts of heat exposure on health and adaptation measures.

My university training encompassed both clinical medicine and public health across three high-ranking universities, and at the Colleges of Medicine in South Africa and the United Kingdom. More recently I spent two years as a visiting student at the Institute of Theology in Assisi, Italy. As with many researchers in Africa and other resource-constrained settings, the capacity gaps in many institutions has meant that my experience is wide-ranging from designing databases to formulating international policies. In the latter role I have made a substantial contribution to global health policy, including working at WHO headquarters, where I was the lead writer on four highly influential guidelines and coordinated several important technical meetings. Over the course of my career, I have made substantial contributions to WHO policy and practice guidelines, with roles ranging from lead guideline writer (n=7), to lead on guidelines methodology or systematic reviews for GRADE assessments (n=3), expert committee member (n=1), and coordinator of technical meetings (n=2).

PS mfe

I am a contributing author to the Africa chapter of the 6th Intergovernmental Panel on Climate Change report, and provide technical inputs on the South African national guidelines on heat and health, and health sector adaptation. My work on climate change has centered on assessing the impacts of climate change on maternal health and HIV, consolidating my experience in the disciplines of clinical medicine, biostatistics, epidemiology and public health. I currently serve as the research representative on the WHO Civil Society Working Group on Climate Change, and am a member of the South African National Climate Change and Health Steering Committee.

To date, I have authored about 240 publications in international peer-reviewed journals, with about a third of these as first or senior author. In total across the 80 research studies, I contributed mostly in the role of epidemiologist and statistician, with study designs including individual-level and cluster randomized controlled trials, quasi-experimental studies, cohort studies, methodological assessments, qualitative enquiries and implementation science projects.

I have served as the Section Editor on Climate Change and Health for the journal Globalization and Health, and as editor on special editions, including on health systems and maternal health in the Globalization and Health journal, health in inner city Johannesburg, South Africa in BMC Public Health, contraceptive implants in the South African Medical Journal, and climate change and health in the Health Policy and Planning journal. Lastly, I have supervised four doctoral students, been an external examiner for several universities, and have taught modules and supervised students in Masters of Public Health programs.

Taken together, my research and policy work on climate change and health is increasingly shaping the research and policy agenda in the field. In recent years, my work has included important initiatives to create international academic networks on climate change and health, including securing collaborations with 40 academic institutions worldwide on my projects. I obtained funding for five years of engagement of policy makers across Africa though I secured five years of funding for the CHANCE Network that coordinates the development of national policy guidelines and proposals for climate financing across Africa.

B. Positions and Honors

Positions and Employment

- 1999 – 2000: Medical Intern Doctor, King Edward VIII Tertiary-level Hospital, Durban, South Africa
- 2000 – 2001: Community Service Medical Officer, Coronation Tertiary-level Hospital, Johannesburg, South Africa
- 2001 – 2002: Trial Physician, Perinatal HIV Research Unit, University of the Witwatersrand, Soweto, South Africa
- 2002 – 2003: Locum Senior Medical Officer, National Health Service, United Kingdom (is that the right title?)
- 2003 – : Consultancies for the Department of HIV, and the Department of Maternal, Newborn, Child and Adolescent Health, World Health Organisation, including representing the Organization in field activities in India, Kenya, Lesotho, Mozambique and the United Republic of Tanzania
- 2004 – 2004: Technical Officer, Department of HIV, World Health Organisation, Geneva, Switzerland
- 2005 – 2010: Epidemiologist and statistician, International Centre for Reproductive Health, Mombasa, Kenya
- 2005 – 2010: Epidemiologist and statistician, Foundation for Alcohol-Related Research, Cape Town, South Africa
- 2007 – 2010: Technical Adviser, Reproductive Health and HIV Research Unit, University of the Witwatersrand, Johannesburg, South Africa

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- 2009 – Visiting Professor, Department of Public Health and Primary Care, Faculty of Medicine and Health Sciences, University of Gent, Belgium
- 2010 – 2014: Associate Professor, Centre for Health Policy, School of Public Health, University of the Witwatersrand, South Africa
- 2014 – 2018 Associate Professor, Wits Reproductive Health and HIV Institute, University of the Witwatersrand, South Africa
- 2018 – 2024 Research Professor, Wits Reproductive Health and HIV Institute, University of the Witwatersrand, South Africa
- 2024 – Research Fellow, Trinity College Dublin, Ireland
- 2024 – Research Professor and Director, Wits Planetary Health Research Division, Faculty of Health Sciences, University of the Witwatersrand, South Africa

Other Experience, Professional Memberships and Honors

- 1994 – 1995: South African Junior Chess Champion and representative at the 1995 World Junior Chess Championships, Halle, Germany
- 1994 – 1995: Internship with the Jesuit Refugee Services, Centro Astali, Rome, Italy
- 2000 – Registered as a medical doctor with the South African Health Professionals Council
- 2002 – 2002: Member of South African National PMTCT training working group
- 2001 – 2002: Faculty member of South African HIV Clinicians' Society
- 2002 – 2003: Associate Editor, Globalization and Health Journal
- 2002 – 2003: Registered as a Senior House Officer with the United Kingdom General Medical Council
- 2007 – 2008: Visiting Scientist in the Department of Medical Microbiology, University of Nairobi, Kenya
- 2014 – 2017: Editor of a special series on Health Systems and Maternal Health for the journal Globalization and Health
- 2016 – 2017: Editor of a special edition on Health in the Inner City of Johannesburg, South Africa for the journal BMC Public Health
- 2016 – 2017: Section editor, Climate Change and Health for the journal Globalization and Health

C. Contributions to Science (H index on Google scholar 65; 17,000 citations)

My research, spanning the African continent and parts of Europe, has documented the experiences of pregnant women during periods of extreme heat, and quantified heat effects on pregnancy outcomes, and the underlying physiological basis for these. I have evaluated simple, low-cost interventions to protect women and newborns against moderate heat extremes. My current research investigates the effectiveness of more complex interventions to safeguard populations against more severe extreme heat events, and models cost and other trade-offs between adaptive interventions and efforts to reduce carbon emissions. Initiatives to translate my research findings into conceptual frameworks and policy-relevant outputs cut across all my research, as shown here in selected publications:

- a) Scorgie F, Lusambili A, Luchters S, Khaemba P, Filippi V, Nakstad B, Hess J, Birch C, Kovats S, Chersich MF. "Mothers get really exhausted!" The lived experience of pregnancy in extreme heat: Qualitative findings from Kilifi, Kenya. Soc Sci Med. 2023 Sep 9;335:116223. doi: 10.1016/j.socscimed.2023.116223
- b) Chersich MF, Scorgie F, Filippi V, Luchters S; Climate Change and Heat-Health Study Group. Increasing global temperatures threaten gains in maternal and newborn health in Africa: A review of impacts and an adaptation framework. Int J Gynaecol Obstet. 2023. Feb;160(2):421-429. doi: 10.1002/ijgo.14381
- c) Part C, le Roux J, Chersich MF, Sawry S, Filippi V, Roos N, Fairlie L, Nakstad B, de Bont J, Ljungman P, Stafoggia M, Kovats S, Luchters S and Hajat S. Ambient temperature during pregnancy and risk of

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maternal hypertensive disorders: A time-to-event study in Johannesburg, South Africa. *Environ Res*. 2022; 212:1-8. doi: 10.1016/j.envres.2022.113596

- d) Chapman S, Birch CE, Marsham JH, Part C, Hajat S, Chersich MF, Ebi K, Luchters S, Nakstad B, Kovats S. Past and projected climate change impacts on heat-related child mortality in Africa. *Environ Res Lett*. 2022; 17(7)
 - e) Chersich MF, Pham MD, Areal A, Haghighi MM, Manyuchi A, Swift C, Werneck B, Robinson M, Hetem R, Boeckmann M, Hajat S, Climate Change Heat-Health Study Group. Associations between high temperatures in pregnancy and risk of preterm birth, low birth weight, and stillbirths: systematic review and meta-analysis. *BMJ*. 2020; 371: m3811
 - f) Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press (Chersich MF, contributing author of Africa chapter)
- 2) My expertise in epidemiology, statistical analysis and research methodology has generated a considerable body of evidence for informing decision-making. Study designs have ranged from cluster- and classic-randomized controlled trials, quasi-experimental studies, cohort studies, large population-level surveys, systematic reviews, to implementation science, qualitative enquiry and policy guidelines, as demonstrated in the following selected publications:
- a) Dolutegravir plus Two Different Prodrugs of Tenofovir to Treat HIV. *N Engl J Med*. Venter WDF, Moorhouse M, Sokhela S, Fairlie L, Mashabane N, Masenya M, Serenata C, Akpomniemie G, Qavi A, Chandivana N, Norris S, Chersich M, Clayden P, Abrams E, et al. Aug 29 2019;381(9):803-815.
 - b) Universal prevention is associated with lower prevalence of fetal alcohol spectrum disorders in Northern Cape, South Africa: a multicentre before-after study. *Alcohol Alcoholism*. Chersich MF, Urban M, Olivier L, Davies LA, Chetty C, Viljoen D. Jan-Feb 2012;47(1):67-74.
 - c) Intravaginal practices, bacterial vaginosis, and HIV infection in women: individual participant data meta-analysis. *PLoS Med*. Low N*, Chersich MF*, Schmidlin K, Egger M, Francis SC, van de Wijgert JH, Hayes RJ, Baeten JM, Brown J, Delany-Moretlwe S, Kaul R, McGrath N, Morrison C, Myer L, et al. Feb 15 2011;8(2):e1000416. Equal first author
 - d) Prevalence, motivations, and adverse effects of vaginal practices in Africa and Asia: findings from a multicountry household survey. *J Womens Health (Larchmt)*. Hull T, Hilber AM, Chersich MF, Bagnol B, Prohm A, Smit JA, Widyantoro N, Utomo ID, Francois I, Tumwesigye NM, Temmerman M, Group WGS. Jul 2011;20(7):1097-1109
 - e) 'We are despised in the hospitals': sex workers' experiences of accessing health care in four African countries. *Cult Health Sex*. Scorgie F, Nakato D, Harper E, Richter M, Maseko S, Nare P, Smit J, Chersich M. 2013; 15(4):450-465.
 - f) Antiretroviral drugs for treating pregnant women and preventing HIV infection in infants. WHO guidelines. ISBN 9241592095. 2004 (lead writer and technical support)
- 3) Lastly, my contribution lies in collating large bodies of evidence, including in systematic reviews, narrative summaries and special editions of a journal. I have led large teams of reviewers on systematic reviews which mapped and classified literature on broad topics, as well as extracted limited data from individual publications. These included the topic of maternal health interventions in low- and middle-income countries (data extracted from 2292 publications) and, more recently, a systematic review of all literature on heat and health exposure, impacts and interventions in any setting.
- a) Associations between high temperatures in pregnancy and risk of preterm birth, low birth weight, and stillbirths: systematic review and meta-analysis. Chersich MF, Pham MD, Areal A, Haghighi MM, Manyuchi A, Swift CP, Werneck B, Robinson M, Hetem R, Boeckmann M, Hajat S, Climate Change and Heat-Health Study Group. *BMJ*. 2020 Nov 4;371:m3811. doi: 10.1136/bmj.m3811.

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- b) Lakhoo D, Blake H A, Chersich MF, Nakstad B, Kovats S. The Effect of High and Low Ambient Temperature on Infant Health: A Systematic Review. *Int J Environ Res Public Health*. 2022;19(15):1-18. doi: 10.3390/ijerph19159109
- c) At the Heart of the Problem: Health in Johannesburg's Inner-City. *BMC Public Health*. Rees H, Delany-Moretlwe S, Scorgie F, Luchters S, Chersich MF. Jul 4 2017;17(Suppl 3):554 (editor of special edition)
- d) WHO IMAI district clinician manual vol. 1 & 2. 2010 (acknowledged as methodologist of evidence reviews, writer of 2 chapters and one of the overall technical editors of the manual). IMAI is adult equivalent of IMCI
- e) Intravaginal practices, bacterial vaginosis, and HIV infection in women: individual participant data meta-analysis. *PLoS Med*. Low N, Chersich MF, Schmidlin K, Egger M, Francis SC, van de Wijert JH, Hayes RJ, Baeten JM, Brown J, Delany-Moretlwe S, Kaul R, McGrath N, Morrison C, Myer L, et al. Feb 15 2011;8(2):e1000416.
- f) Mapping of research on maternal health interventions in low- and middle-income countries: a review of 2292 publications between 2000 and 2012. *Global Health*. Chersich M, Blaauw D, Dumbaugh M, Penn-Kekana L, Thwala S, Bijlmakers L, Vargas E, Kern E, Kavanagh J, Dhana A, Becerra-Posada F, Mlotshwa L, Becerra-Montekio V, Mannava P, et al. Sep 6 2016;12(1):52.

Complete List of Published Work in MyBibliography:

<https://scholar.google.com/citations?user=WZVjix0AAAAJ&hl=en&oi=ao>
<https://www.ncbi.nlm.nih.gov/pubmed/?term=chersich>

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Climate change impacts on health, access to healthcare, and the right to enjoy an environment not harmful to one's health and well-being, with a focus on women and girls in SADC

Expert report by Prof. Matthew Chersich for a SECTION27 submission to the African Court in Human and People's Rights for an Advisory Opinion on the obligations of States with respect to the climate change crisis

1 July 2026

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ABSTRACT

Climate change disproportionately harms the health, well-being, and rights of women and girls in SADC, where extreme heat, droughts, floods, and infectious disease outbreaks are becoming more frequent and severe.

Women and girls face heightened risks because of existing gender inequalities, including greater caregiving responsibilities, limited access to resources, reduced decision-making power, and increased exposure to poverty.

Rising temperatures are associated with adverse maternal and child health outcomes, including miscarriage, preterm birth, stillbirth, neonatal illness, and heat-related illness among children.

Climate-related disruptions also increase women's unpaid labour burdens, heighten risks of gender-based violence, undermine girls' education, and contribute to anxiety, trauma, and other mental health challenges.

This report sets out current evidence on the impact of climate change on women and children across the SADC region, with particular emphasis to the impact of heat exposure to health, infectious diseases, violence, mental health and structural inequalities

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INTRODUCTION

1. Climate change has caused significant damage to the world's ecosystems, natural resources and human societies, and the interdependence between these.[1] Harms are broad ranging, and include diminished water and food security, more intensive extreme weather events such as heat waves, flooding and drought, adverse impacts on human and animal health and well-being, negative economic consequences and humanitarian crises. [1] These harms will rapidly accelerate unless there are major reductions in global Greenhouse Gas emissions.[2] With the exception of a decline during the COVID-19 pandemic, emissions have continued to escalate year-on-year in recent decades (see Figure 1). Commitments by countries across the world, including in Africa, to reduce emissions have not been kept.

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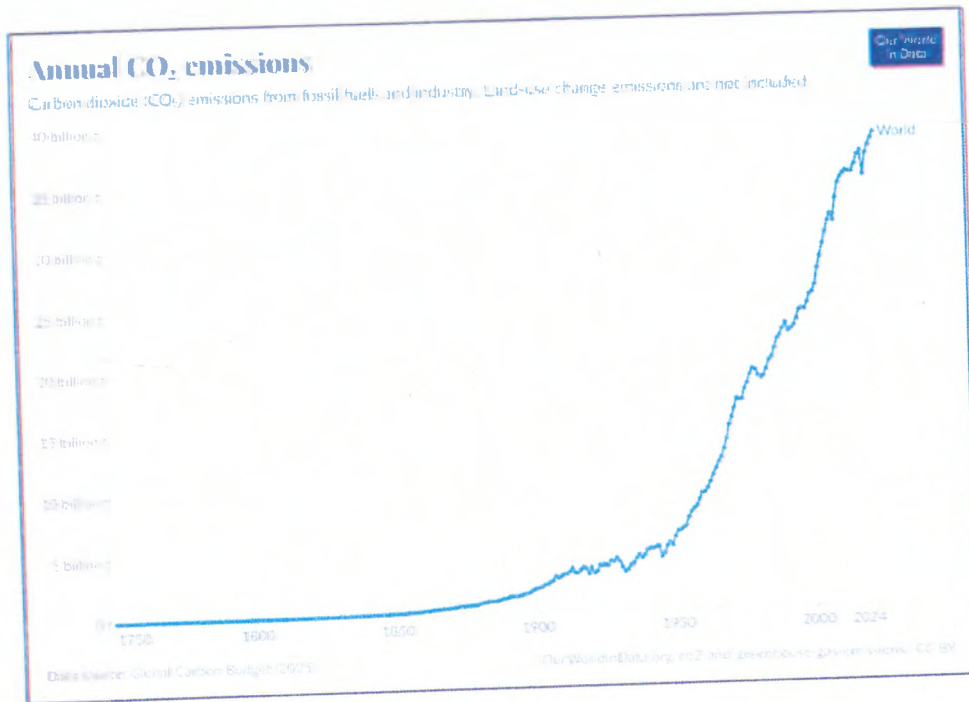


Fig. 1: Annual CO₂ emissions from 1750-2024 [2]

2. Research by Engelbrecht, University of the Witwatersrand, found that Southern Africa is one of the world's climate change hotspots.[3] The next 20 years are likely to see more multi-year droughts, with real risks of 'day zero'-type droughts like Cape Town had experienced in 2018, where cities run out of water. In the east parts of Southern Africa, heavy rainfall events are becoming more frequent, with some places now experiencing flooding as an annual event. Tropical cyclones are more frequent and intense. In 2025, for example, Mozambique was hit by Cyclone Dikeledi in January and Cyclone Jude in March, adding to the effects from the impact of Cyclone Chido in December 2024. Rain from cyclone Jude also led to flooding in Malawi. More than 1 million people were affected by Cyclone

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3. Harms from climate change harm are not evenly distributed.[5] People in Africa contribute the least to climate change, are the most vulnerable to its compounded effects, have the least resources available to adapt, and have limited influence on the global stage to reform policies around

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emissions.[1,6] Modelling by Ghio and colleagues suggests that in various climate change scenarios, people living in Africa would "reach the highest vulnerability in the world" – this is in part because large numbers of people already live in drought- and flood-prone rural areas together with their relative low levels of income and access to education.[7] Other factors on the African continent that increase vulnerability include reliance on agro-based economies with rain-fed agriculture, poor infrastructure, its unique geography and political instability in a number of regions.[8]

4. Health is a key climate change issue, and climate change, and human, animal and planetary health are intrinsically linked. More than twenty-five years ago, in 2009, the Lancet Commission already warned that climate change is "the biggest global health threat of the 21st century".[9] Figure 3 sets out how climate change impacts on health risks and outcomes, including on health systems and facilities.

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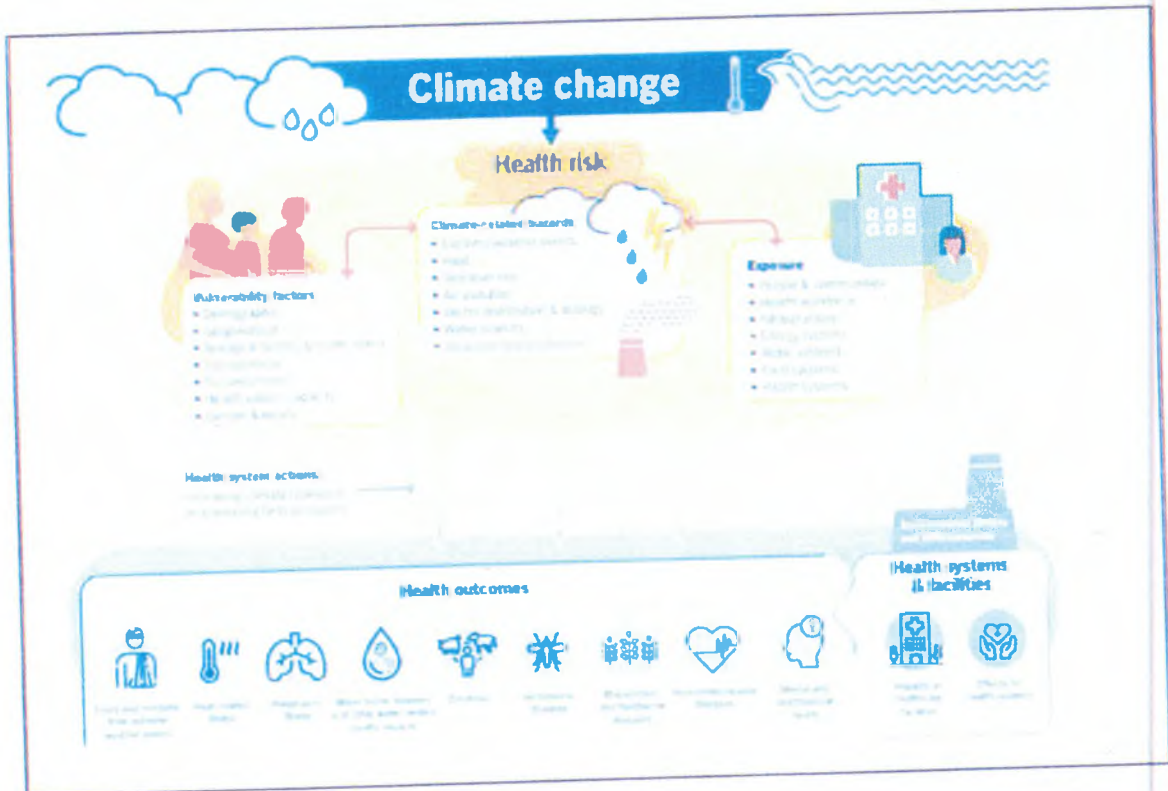


Fig 3. Climate change risks to health and health systems, and outcomes (Source: World Health Organization [10]).

5. Recognising the health implications of a more extreme and unpredictable climate, twenty health ministers and delegates from African countries adopted the 'Harare Declaration on Climate and Health in Africa' in October 2024, that called for climate change to be treated as a public health emergency.[11,12] Recently, there have been increasing calls on the World Health Organization to declare the climate crisis a "Public Health Emergency of International Concern".[13–15]
6. The impact of climate change is gendered, with research describing the disproportionate effects on women and girls in sub-Saharan Africa. [16]

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Women and girls face multifaceted threats to their health and well-being, and Figure 4 illustrates the impact on women specifically.

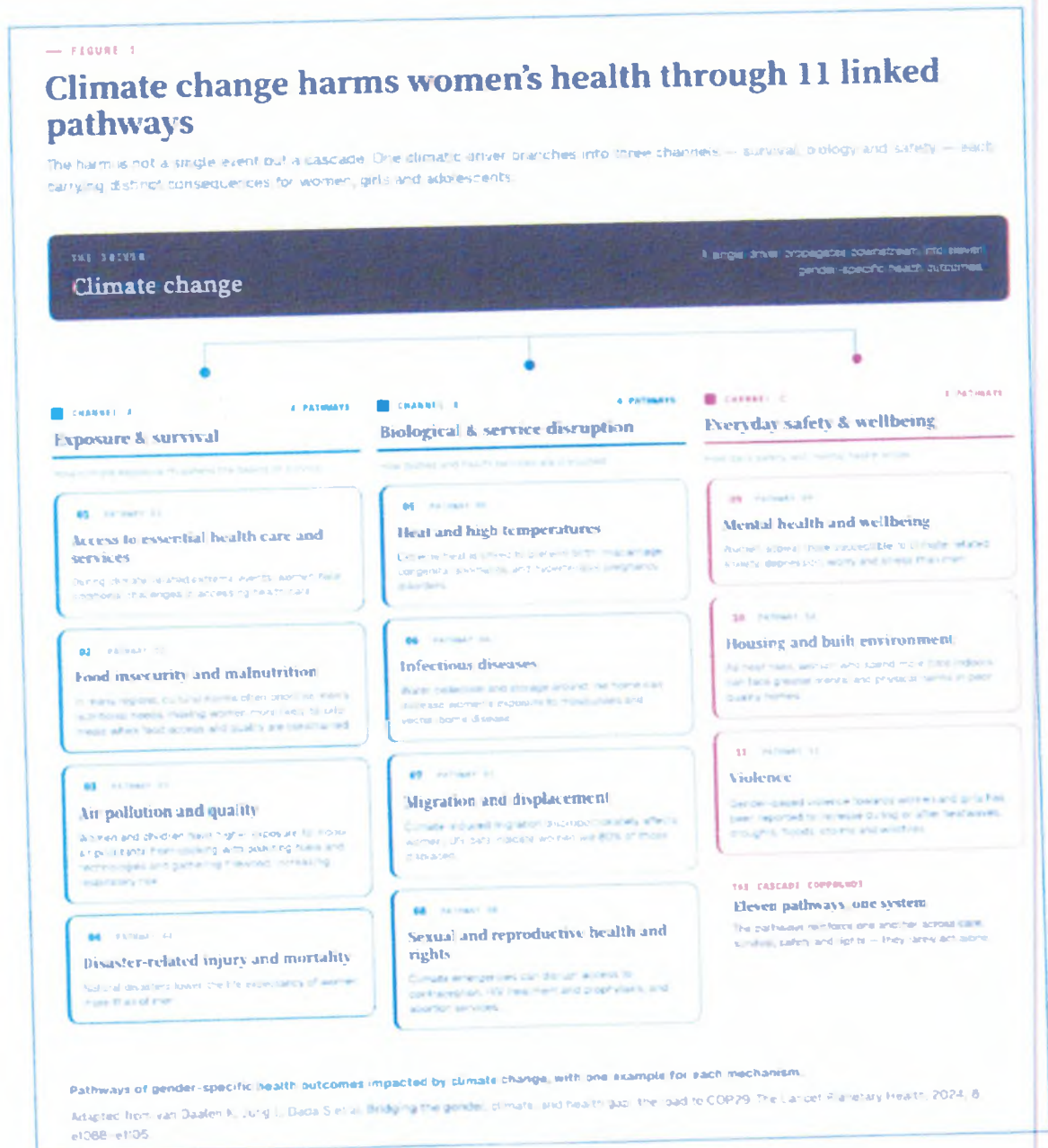


Fig 4: Climate change harms to women's health (adapted from van Daalen et al [17])

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7. The gendered impacts of climate change operate on health in two ways. In a *direct* manner, for example – extreme weather events lower women's life expectancy more than men's [18] and there is some evidence that women have an increased risk of mortality during heatwaves in comparison to men [19] - as well as *indirectly* such as through the devastating effects on women's livelihoods and quality of life, [20] particularly in the global south. Women face major health risks during pregnancy when they are less able to withstand exposure to extreme heat.[21,22] Generally, women and girls experience the greatest impact of climate change, but have the least capacity to respond to these threats.[23,24]

REPORT STRUCTURE

8. This report will present evidence on four key themes related to climate change, and the health of women and girls in southern Africa:
- 8.1. The impact of heat exposure on health
 - 8.2. Climate-sensitive infectious diseases
 - 8.3. Gender- and child-specific issues related to Climate Change and health
 - 8.3.1. Caregiving, domestic duties and providing

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8.3.2. Violence including Gender-based violence

8.3.3. Mental health

8.4. Structural inequalities related to Climate Change and health

9. The first section will describe the impact of heat exposure on women and children, while the subsequent sections will discuss climate hazards considered collectively on the health and well-being of these groups.
10. It should be noted that there is limited data on climate change and health in Africa relative to other continents [25,26]. In addition, there is insufficient gender-disaggregated data [27] and the gendered implications of climate change are understudied, but are increasingly being explored. While acknowledging these research gaps, this report draws on existing studies on women and children in southern Africa as well as extrapolating from studies in other locations where appropriate.

THE IMPACT OF HEAT EXPOSURE ON HEALTH

11. The primary manifestation of climate change is a progressive escalation in land and sea temperatures across the globe, accompanied by occasional multi-day periods of extreme heat or heatwaves, affecting people's health, wellbeing, livelihoods, food security and their surrounding

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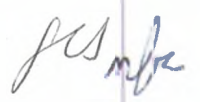
ecosystem.[28,29] The world has already warmed by an average of around 1.4°C, with the past 11 years the hottest on record.

12. Heatwaves, set against increasing background temperatures, are becoming stronger, more frequent, longer in duration and more complex. Heat extremes receive most media and policy attention, but their absolute effect on mortality and morbidity is less than that of more frequent exposures to moderately high temperatures. If unchecked, heat levels will exceed the capacity of the human and natural systems to successfully adapt in many areas, even with large-scale, transformational change. One cannot consider heat impacts on humans separately from heat effects on the rest of the natural environment, especially in countries where high proportion of the population is rural and relies on rain-fed agriculture. Heat-related soil drying, deaths of farm animals, wildlife and agriculture, and the progressive undermining of ecological resilience have major short- and long-run implications for human health.
13. Extreme heatwaves, superimposed on background warming trends, can together push heat-vulnerable people and whole geographical areas beyond physiological, occupational and liveability thresholds. Manyuchi, Chersich and colleagues describe this is a review of 11 studies in Africa.[30] Heat-health impacts, however, show marked variability between settings. This variability is sometimes referred to as 'thermal inequity'; it is a distributive justice concern.[31,32] A disproportionate burden falls on

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individuals of lower socioeconomic status, those living in substandard housing or homeless, and people in low-paid occupational groups, especially outdoor construction or agriculture workers. Heat impacts increasingly reflect entrenched racial disparities, including among those in prisons.[33]. Ultimately, the degree of risk one faces is contingent on the opportunities one has to prepare for and respond to heat hazards. It should also be noted that extreme heat is a relative concept and some people living in areas with a hot climate may become acclimatised to high temperatures. However, even these people are still vulnerable to extreme heat, and are now being exposed to temperatures at which humans cannot work, live or survive, even if accustomed to high temperatures.[22,34]

14. Increasingly, access to air conditioning is the pre-eminent determinant of heat outcomes, but universal air conditioning access is neither feasible, nor without major drawbacks.[35]
15. Scorgie, Chersich and colleagues point out gender is a key factor shaping both heat vulnerability and adaptability, particularly in the global south, because of women's high household work burdens, and their limited access to land and education.[36] Women may experience higher impacts of extreme heat in areas where culturally they are responsible for outdoor agriculture work, water collection, or in cases where they have limited mobility outside the home, which restricts their ability to access cool areas.



16. Overheating risk depends on the density of buildings and population, building characteristics, such as insulation, thermal resistance, presence of shading, thermal mass, ventilation, orientation and geographical location. People living in overcrowded urban informal settlements in Africa are at high risk as housing is often made of corrugated iron sheeting, or other material which retains heat, as shown by Parker, Chersich and others in a study in Johannesburg.[37] Studies have shown that temperatures inside such structures can be 4-5°C higher than outdoor temperatures during the hot seasons.[38]

The impact of heat on women and children

17. Heat poses unique challenges to maternal well-being and increases complications during pregnancy and childbirth.[21,39] Anatomical and physiological changes during pregnancy increase vulnerability of women and foetuses to heat exposure.[20,40] Women in low- and middle-income countries may be particular vulnerable to heat exposure, with associations between temperature and birth outcomes larger in these women than those in higher-income countries.[41] These groups have the least means or ability to mitigate their heat exposure through space cooling strategies (for example air conditioners, fans, or building infrastructure). Mushimiyimana and colleagues point out that due to poverty and lack of access to cooling resources or strategies, many pregnant women are exposed to heat beyond their tolerance levels as they have little choice but



to work outdoors and often into late stages of their pregnancy.[36,42] The overlapping impacts of high temperatures and heat waves on health and health outcomes for women and children are illustrated by Figure 6.

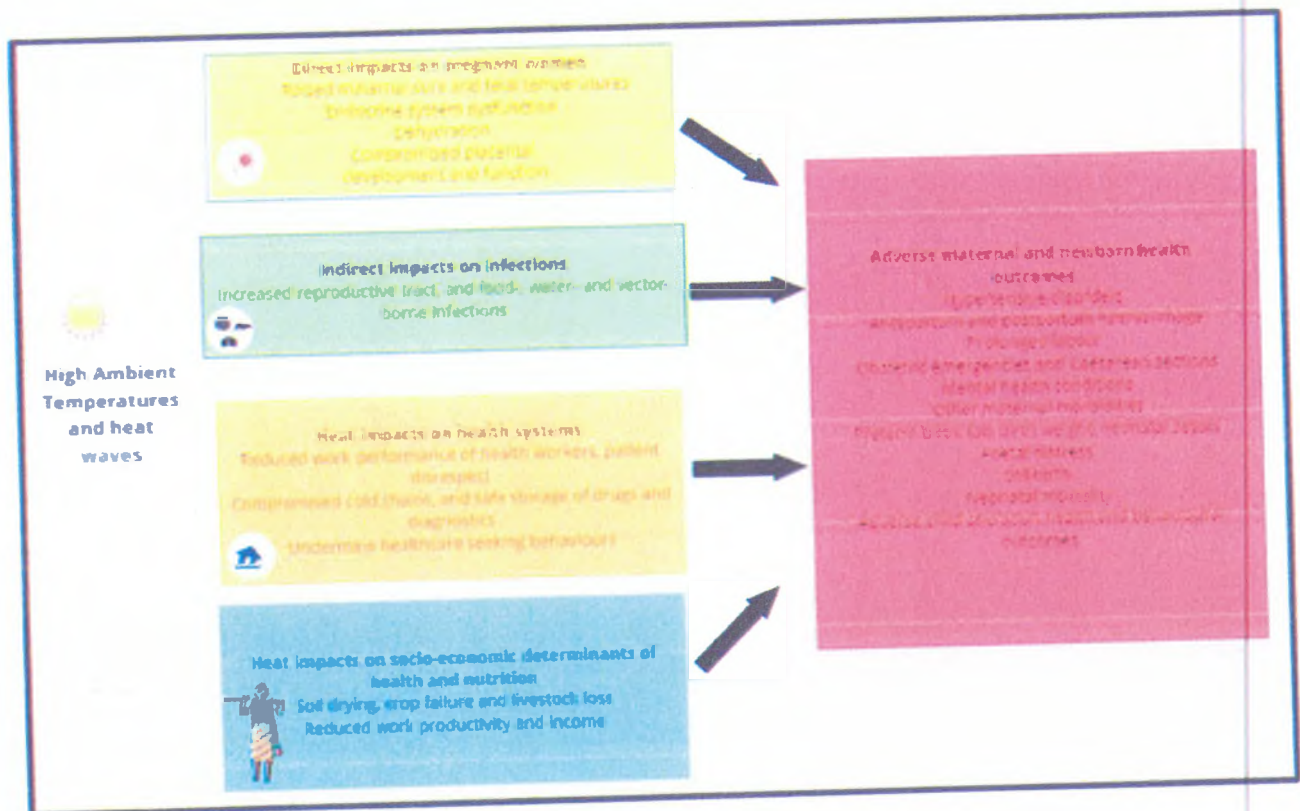


Fig 6: Direct and indirect impacts of heat on health of women and children

18. In a systematic review of heat exposure on maternal, foetal and neonatal health, Lakhoo and colleagues found consistent evidence of increased risk of hypertensive disorders, as well as a high blood sugar levels that develop during pregnancy in women who didn't have diabetes previously (called gestational diabetes mellitus).[21] High temperatures can overwhelm

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thermoregulation in pregnant women and can cause dehydration and endocrine dysfunction, and can affect functioning of the placenta. This can lead to pre-term birth [21], pre-eclampsia, stillbirth and prolonged labour.[41] In a study in rural South Africa, Moodley and colleagues assessed pregnancy data between 2012-2016, and found a relationship between maternal heat exposure during the month preceding conception and miscarriage.[43]

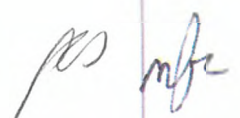
19. Heat also has far-ranging effects on health care facilities and the health system as a whole. Nakstad points out that effects of heatwaves not include patient distress on the individual level but also have a far-reaching impact on health systems such as the failure of cold storage systems and medical equipment, power failures, laboratory services problems, as well as loss of medicines, many of which degrade at high temperatures.[44] For example, Wright and colleagues tracked the temperature in waiting rooms in eight rural clinics in South Africa, and found that the highest mean temperature was over 31°C (in February 2016) and that in some clinics temperatures exceeded 38°C, considerably warmer than outdoor temperatures.[45] Similarly, a study in Ghana found that some urban health facilities were 6°C warmer at night than recorded temperatures at nearby weather stations, and attributed it to "greater thermal inertia of the buildings and the urban heat island effect".[46] Pregnant women in a study in rural Zimbabwe spoke about the heat and lack of ventilation in the clinic as suffocating. One participant noted that "The room where they assist us

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during delivery has no circulating air. You are breathing in the heat of other people", while another decided against accessing health care: "I cannot sit in the clinic with such heat. I'd rather stay at home". [47]

20. Neonates (newborn babies in their first 28 days) are at high risk of heat stress and dehydration because of their metabolism, physiology, growth, and developmental characteristics.[44] while exposure to high and low temperatures increases their risk of death. Between 2001 and 2019, climate change drove 32% of the heat-associated neonatal deaths across 29 low- and middle-income countries, according to a study by Dimitrova and colleagues.[48]
21. Throughout infancy (children under one year), babies are less able to dissipate heat and thermoregulate, while high humidity can limit their ability to lose heat through sweating.[44] Nakstad and colleagues argue that neonates and infants depend on others to keep cool and hydrated and that during extreme heat or droughts, mothers or caregivers may be so overwhelmed that it impacts the quality of the care they provide [44] often within a context where the household does not have sufficient resources for cooling or hydration.
22. There is increasing evidence that heat-related morbidity and mortality are raised in children.[49] Children have distinctive exposure and sensitivity to climate hazards, given their reliance on adults for behavioural aspects of

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cooling, and their immature thermal physiology, high metabolic rate, and large surface-area-to-mass ratio, as compared with adults.[50] With children, heat exposure and dehydration are linked with electrolyte imbalances, fever, and renal and respiratory disease. Less severe heat-exposure outcomes such as lethargy, headaches, rashes and cramps negatively affect children in school and play environments. UNICEF's Children's Climate Risk Report 2026 found that across southern and eastern Africa, one in four children (thus, more than 65 million) are exposed to three or more overlapping climate hazards.[51] These hazards include droughts and fires to floods and tropical storms. Figure 7 illustrates how climate hazards impact on children's sensitivity –defined as “the predisposition to harm based on intrinsic characteristics, such as children's heightened biological susceptibility to climate threats” - and broader systems and services.[51]

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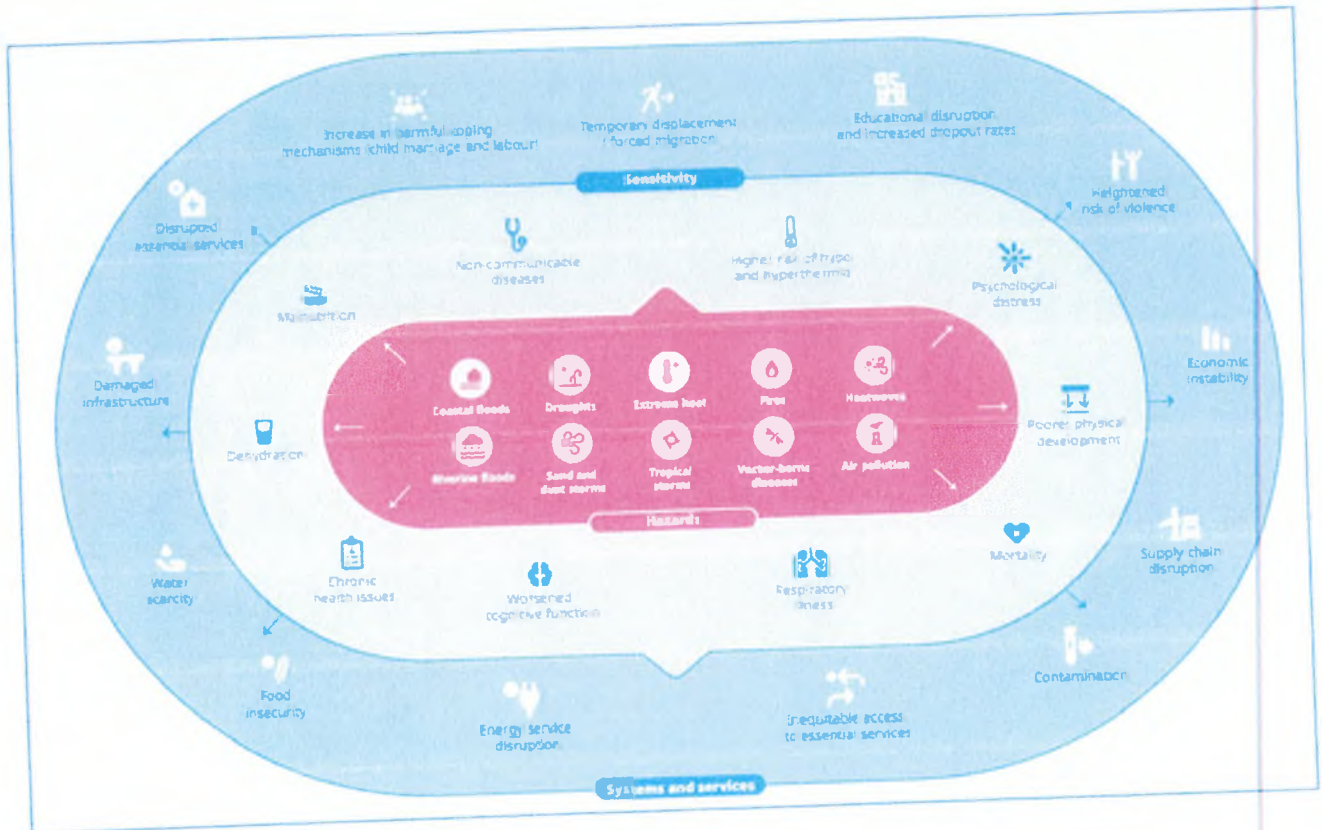


Fig 7: Understanding children's climate risk based on hazard exposure and vulnerability (Source: UNICEF [51])

CLIMATE SENSITIVE INFECTIOUS DISEASES

23. The Intergovernmental Panel on Climate Change (IPCC) warns about the increases in mortality and morbidity in Africa not only due to heat, but also to infectious diseases, including vector-borne and diarrhoeal diseases. [1] Climate change impacts on infectious diseases in various ways. An increase in temperature and changes in rain fall change the distribution of infectious diseases such as malaria, dengue fever, diarrheal infections and others, while Nel and Richards warn that a warming climate and climate

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hazards would make infectious diseases worse, regardless of whether they are spread by vectors (such as mosquitoes, ticks and others), water, air or food.[52] Mora and colleagues found that 78% of pathogenic diseases worldwide had been aggravated by climate hazards.[53]

24. Other ways that climate change impacts on the spread of diseases are through the availability of clean water and safe food. For example, droughts and very high rainfall impact on the quality of water, which can impede hand washing and other hygiene routines that can lead to the spread of the disease.[38] Hazardous heat can also create failures in the cold chains of food transportation.[38] For example, data from Cape Town showed how a 5°C rise in temperature, increased diarrhoea in children under 5 years of age, a week after the temperature rose - this suggests that the bacteria that causes diarrhoea are more prevalent at higher temperatures. [54] An example of particular implications of infectious diseases on women is provided by Azhar and colleagues who observed that women who were affected by devastating floods in Pakistan in August 2022 were at increased risk of urinary tract infections because of lack of menstrual hygiene products as well as the destruction of water and sanitation infrastructure.[55] Text Box 1 sets out the gendered impact of cholera.

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According to the WHO, 13 countries in the African region reported cholera outbreaks in early 2026. Since 2023, Southern Africa has been the dominant cholera hotspot in the continent, with major outbreaks during the 2023—2024 cyclone season.

Cholera cases in Southern Africa have risen by more than 7 times in the first six weeks of 2026 compared with the same period the year before. This is because of severe flooding triggered by cyclones, infrastructure damage and inadequate water and sanitation among displaced people.

Cholera disproportionately affect women and girls in three main ways:

- 1.) **Disease burden:** transmission of cholera is primarily through contaminated water and food. Women and girls are at increased risk of contact with highly infectious doses of cholera through domestic work such as caring for sick family members, cleaning latrines, fetching and handling untreated water and preparing contaminated raw food.
- 2.) **Emotional, physical and socio-economic toll:** due to their traditional roles in the domestic sphere and their primary roles as carers for the sick, the increased workload on women and girls results in decreased participation in community initiatives and work outside the home – such as attending school, selling at markets and engaging in subsistence agriculture, while limiting their exposure to information by not being able to attend education sessions on cholera prevention.

Text Box 1: Cholera in southern Africa in early 2026 and its gendered implications (Sources: WHO and UNFPA) [56,57]

GENDER- AND CHILD-SPECIFIC ISSUES RELATED TO CLIMATE CHANGE AND HEALTH

25. Climate change exposes the fault lines of existing inequalities and unequal power structures and amplifies the impact of these. These are particularly acute for health and well-being of women and children.

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Caregiving, domestic duties and providing

26. On average, women in Africa spend four times more time on unremunerated care and domestic work than men.[58] Traditional gender roles ascribed to women and girl children include caring for the young, the very old and the sick, while being responsible for cooking, cleaning and the provision of water and firewood for the household as a whole. Climate change exacerbates all these responsibilities – particularly for households in rural areas.
27. Selected qualitative studies below illustrate the vulnerability and resilience of women who negotiate various climate hazards, while shouldering increasing burdens of care. The articles are included as appendices A-C to this report as the photos and descriptions produced by the participants provide moving insights into the daily realities and overwhelming burdens that women carry to care for their families – often at the expense of themselves.
28. A social science project with pregnant women in extreme heat in Kilifi, Kenya illustrates some of the gendered hardships and complexities inherent in climate change.[36] When asked about the impact of the heat, the women participants spoke about exhaustion, dizziness and dehydration. Yet, despite these challenges, they were expected to complete their usual domestic, water collection and farming duties even if

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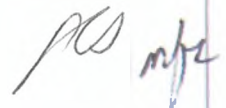
their pregnancies were far progressed, while they were not afforded sufficient decision-making power to re-negotiate existing workloads. The authors quote a chief who tellingly noted that *"it is very hard to see a pregnant women sitting at home. They have to do their duties as normal. There is no difference between when you are pregnant and when you are not"*. Women noted how conflict arose in the households if husbands returned home and not all tasks were completed. Some participants felt they would be perceived as a *"burden"* if they did not fulfil their normal duties.

29. In a similar photovoice project in rural communities of the Thyolo district, Malawi, postpartum women (women in the period directly after having given birth - typically one or two months) spoke about their struggle with access to water. During the dry season when women have to walk further to find water – sometimes rising at 2am to walk to a stream to wash their clothes - their absences for longer periods of time would cause conflict in the household as their husbands would demand to know *"what took them so long"*. [59] Drought also has profound consequences on HIV. In rural areas of Malawi, the HIV prevalence in pregnant women increased by 20.2%, comparing women before and after a famine caused by a drought. [60]
30. In children, a UNICEF report points out three main impacts of drought on rural children and particularly girl children who are often tasked with water

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provision for the household. Droughts often mean that children have to walk further to source water, which increases the risk of violence, particularly for girls and the possibility that children – particularly girls – are withdrawn from school in order to complete these tasks.[51]

31. A project in rural Zimbabwe with pregnant and postpartum women explored women's coping mechanisms with thermal vulnerability. Strategies for thermal care of their infants included using wet cloths to wipe hot infants, finding shaded breastfeeding areas, and lying on damp floors with their babies to ameliorate the heat.[47] The authors note how "extreme heat disrupts pregnancy, childbirth, and postpartum recovery with no immediate reprieve". Similar themes emerged from a photovoice project with pregnant and postpartum women in an urban township in South Africa, who struggled with infants who were overheating, while their limited ability to provide relief caused the women and infants a lot of anguish. Strategies such as bathing or wet cloths were also employed, but did not ameliorate structural issues such as water and electricity constraints, heat-trapping housing materials and poor ventilation.[43]
32. Many women are engaged in subsistence farming and agriculture in Africa, which, as outdoor work, increases workers' exposure to spikes in temperatures, poor quality of air and adverse weather events.[61] In a recent study, Matindike and Musakwa assessed the gendered health impacts of climate change on smallholder women farmers in a rural area



of Zimbabwe. Women working long in the fields with low harvest yields noted the compounded impact of the drought: "our harvest was almost nothing. Some days we go to bed without eating, and the little food we have is saved for the children".[62] This pattern of withholding food from themselves to provide for others, means that the nutritional needs of women and girls are often compromised in times of hardship.[20] This can have far-reaching generational consequences.

Violence including Gender based violence

Interactions between heat and interpersonal violence

33. Heat exposure has a range of physiological effects, including levels of comfort, emotional stability and sense of wellbeing.[63] Being in an uncomfortably hot environment foment irritability and aggressive thoughts, and reduces positive emotions such as joy and happiness.[63,64] Men appear to be particularly sensitive to the effects of heat on aggression.[65] Additionally, alcohol use, a potent trigger for violence, can increase during hot weather, while dehydration, more common on hot days, is associated with mood disturbance, confusion and anger.[66] It is therefore plausible that together these physiological and behavioural pathways may increase the likelihood of violence, particularly violence committed with the intention of harming other persons rather than violence where the aim is primarily to gain assets, such as robberies.

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34. The potential for heat to trigger violence is supported by a number of population-level studies which found that warmer regions of the globe generally have the highest rates of violence, as do warmer parts of individual countries, even after controlling for potential confounding variables.[63] In most studies, rates of violence are highest in the summer months, especially in hot summers.[67,68] In addition, most time-series studies that compare temperature and rates of violence over different time periods indicate that levels of homicide and other forms of violence increase during hot weather, relative to colder periods in the same setting.
35. In the southern African context, a study using data from all 1 158 police wards in South Africa, documented higher levels of violence, including homicides, during periods of high temperature.[69] In Tshwane, South Africa, a study assessed 5 years of temperature and crime data and found that the mean number of violent crime incidents was about 50% higher on high-temperature days compared with low-temperature days and random days selected from the dataset after the warmest and coldest days had been extracted.[70]

Gender based violence and climate hazards

36. Climate change exacerbates the interplay of factors that contribute towards violence and specifically gender based violence.

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37. Some research has found that women suffer higher levels of physical and sexual violence in hot weather. [71,72] In fact, a study of interpersonal violence (IPV) in India, Nepal, and Pakistan found a significant association between high ambient temperature and the prevalence of IPV against women during the period 2010-2018. [73]. With each 1°C increase in the annual mean temperature, it was associated with a mean increase in IPV prevalence of 4.5%.
38. In the context of natural disasters, Neumayer and Plumper noted that there is some evidence "that domestic and sexual violence against women increases due to disaster-induced stress, alcohol abuse and the (temporary) breakdown of law and order". [18] A systematic review of extreme events and gender based violence (GBV) found "a potential increase of GBV during or after extreme events related to factors such as economic instability, food insecurity, mental stress, loss of control, disrupted infrastructure (including health and judicial services), increased exposure to men, culture or tradition, and exacerbated gender inequities within patriarchal societies" [74]. Similarly, a recent study set in Zimbabwe, Mozambique and Lesotho found that exposure to drought was associated with increased violence against adolescents, with adolescent girls, older adolescents and those in rural areas being at increased risk. [75] Thurnston and colleagues suggest three hypothesised pathways which disaster affect violence against women and girls (VAWG): (i) an increase

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of stressors that trigger VAWG; (ii) an increase of enabling environments for VAWG and (iii) an exacerbation of underlying drivers of VAWG.[76]

Mental health

39. Expectedly, studies have found a strong association between extreme weather events and an increase in mental health conditions such post-traumatic stress disorder.[77,78]
40. Many who have not directly also experienced the consequences of climate hazards also bear a mental health burden. Because of its far-ranging consequences for the survival of the planet, climate change catalyses a range of negative emotions including anxiety, stress, depression, anger, guilt powerlessness and fear.[79,80]
41. In a scoping review, Ndifoin and colleagues found a limited number of research studies on mental health and climate change in Africa, but they noted an increasing trend. They concluded that "climate change has significant, complex, direct, and indirect effects on mental health across African populations, with certain groups like women, children, migrants, and rural communities being especially vulnerable".[81]
42. Eco-anxiety - defined as "a chronic fear of environmental doom" – was documented in several African countries according to the Ndifoin review



and common among young people, and women. The authors surmised that the latter could relate to women's "social roles, limited resource access, and greater household responsibilities during climate crises." [81]

STRUCTURAL INEQUALITIES RELATED TO CLIMATE CHANGE AND HEALTH

43. Structural inequalities relate to systemic disadvantages of one social group in comparison to others. Egede and colleagues write that "structural inequalities occur when differences in access, distribution of wealth, availability of resources, or power are reinforced through structural mechanisms". [82] With health and climate change this encompasses a range of issues related to poverty, education, migration, access to health care and others that are of particular concern for women and (girl) children. This section briefly outlines some of these dynamics in the context of gender and climate change.
44. Sub-Saharan Africa is home to three quarters of all women living in extreme poverty internationally – around 295 million women – while children and adolescents in this region have significantly higher poverty rates than adults. [83] Climate change deepens poverty, while economic struggles impact directly on people's ability to respond and adapt to climate change. [84] UN Women warns that by 2050 if worst-case scenarios for

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climate change hold, around 158 million women and girls will live in extreme poverty, half of whom will be in sub-Saharan Africa. [85]

45. Gender inequality plays a key role in these dynamics, and women's ability to mitigate or adapt to climate shocks is constrained by a variety of factors such as unequal access to land, financial resources and decision-making power [16] as well as poverty, lower levels of education and access to health care. Against this background, Dev and Manola observe that

Patriarchal social structures had been described as the main fabricator of the discriminated gender role and disproportionate access to resources existing in many societies. Differentiated vulnerabilities to climate change, as studies described, are influenced heavily by gender, which is defined by social structures rather than by individual characteristics. [84]

46. Female headed households are of particular concern. Figure 8 sets out key findings from a recent report by the Food and Agriculture Organization of the United Nations (FAO) on female headed households in low and middle-income countries (LMICs), in the context of climate change. Each year female heads of households in rural areas suffer significantly greater financial losses than men.

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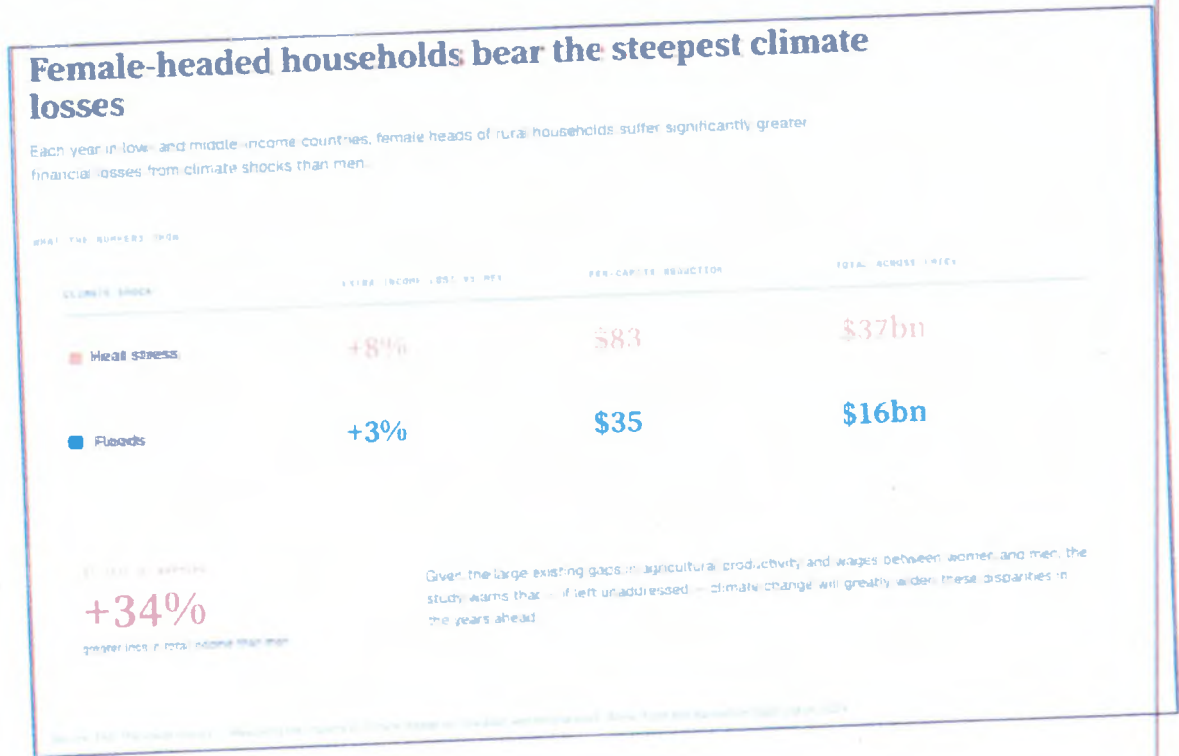


Fig 8. Key findings of an FAO report on female headed households[86]

47. Climate hazards and climate change lead to the displacement of people and migration. In a review, Mamba and colleagues found that climate change is “a significant driver of population displacement and migration” in southern Africa and that it deepens poverty and food insecurity.[87] These findings are supported by Shimels and colleagues, who noted that men migrant more than women which often leaves female-headed households with constrained adaptative capacity.[16]
48. The disruption of climate change on the education of girls is of particular concern. UNICEF assessed the impact of tropical cyclones, storms, floods, droughts and heatwaves on schooling 2024 and found that at least 1 in 7

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students had their schooling disrupted, and that in Africa - where 107 million children are already not attending school – climate hazards put another 20 million at risk of leaving school.[88] Figure 9 illustrate the various ways that climate change impact on girls' education.

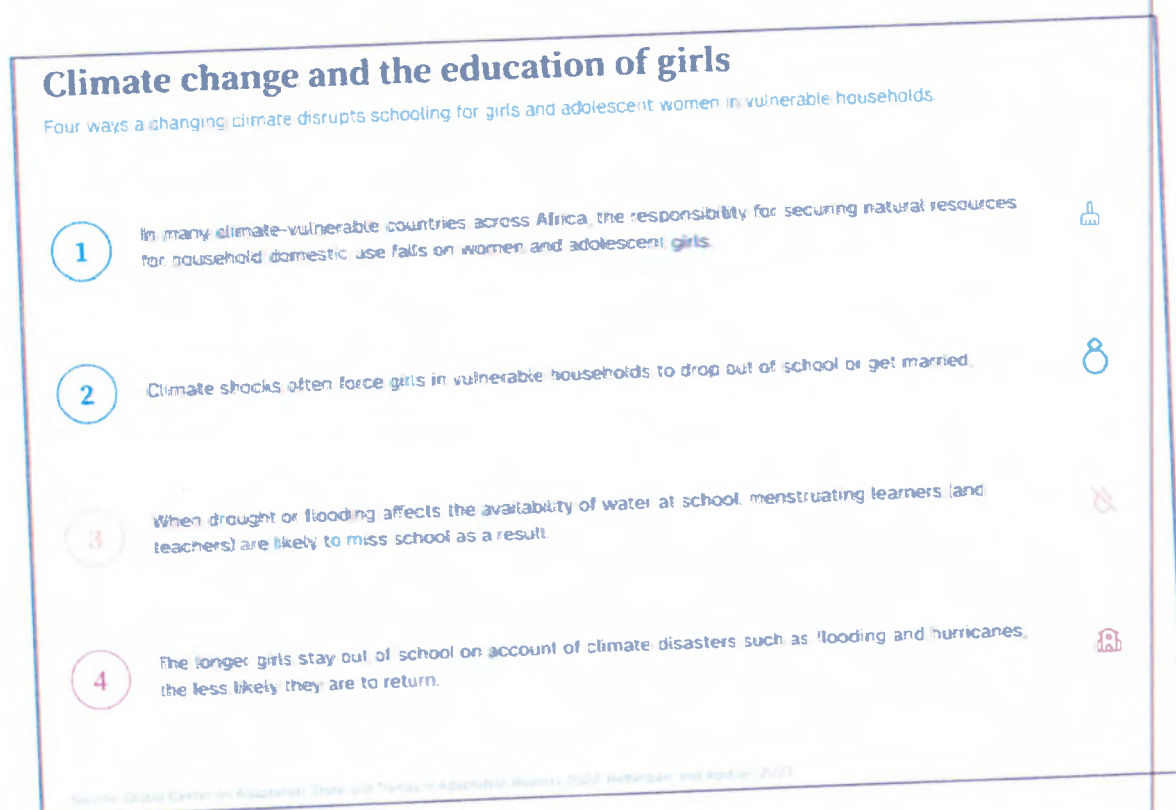


Fig 9: Climate Change impact on the education of girls [89,90]

49. Withdrawal from education will compound the future impact of climate change and have significant implications for adaptation.

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CONCLUSION

50. Climate change is materially altering lives and livelihoods of people in Southern Africa. Women, child and future generations bear the worst impacts, including risks for mortality and severe morbidity. These harms will be significantly compounded if fundamental changes to the lifestyles and consumption patterns of humans are not urgently addressed – particularly those of the wealthiest individuals and countries in the global north who are the main drivers of climate change. States have a pivotal role to play to catalyse behaviour change, and further climate justice laws and policies. Additional financing from domestic sources and mobilised through international sources such as the Green Climate Fund are needed for implementing adaptation programmes.
51. Various frameworks and models for evidence-based and gender-responsive adaptation strategies are available. [91–93] We highlight seven key recommendations flowing from the issues discussed above:
- 51.1. Take more vigorous action to curtail Greenhouse Gas Emissions, applying similar legal and policy methods to control industry that have been successfully used to limit other health-harming industries, such as lead, alcohol, tobacco, asbestos and Chlorofluorocarbons (CFCs).



- 51.2. Scale up climate and health investment, ensuring equitable financing is available to help protect communities in Africa, especially women and children, from the harms they face from emissions that have been generated elsewhere.
- 51.3. Integrate mental health and psychosocial support across national climate-health planning and preparedness frameworks, especially in communities facing repeated flooding.
- 51.4. Design climate responsive health systems and facilities that have space cooling systems – particularly in maternity wards – and reliable energy sources. [44]
- 51.5. Reduce subsidies for fossil fuel industry and heightened investment in renewable energy.
- 51.6. Design and implement gender-responsive adaptation policies based within climate justice principles that pay particular attention to vulnerable groups such rural women, those living in urban informal housing or shanty towns, and young girls. [94] Cash transfers in particular build resilience and assist pregnant women and those with young children to access adaptive interventions such as cooling systems, clean water, and nutrition. [41]

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- 51.7. Explicitly include violence prevention in climate disaster plans and climate adaptation strategies. This should include economic strengthening, school-based programmes and parenting education initiatives. [95]

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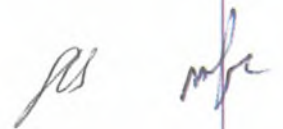
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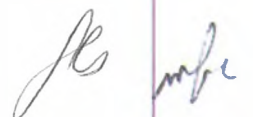
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APPENDICES A-C

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