

Pain from parching grounds

Drought and violence against adolescents in Southern Africa

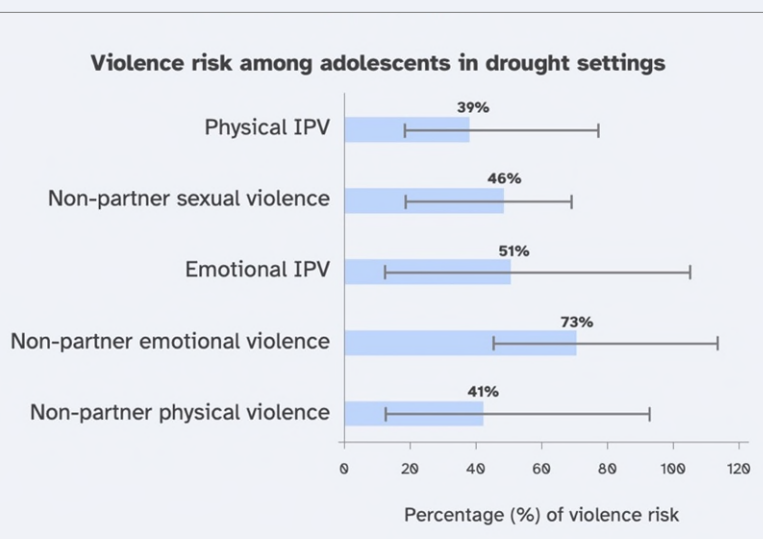


Executive summary

Drought is one of the most devastating climate-related crises affecting Southern Africa, with severe implications for livelihood, health, and social stability.¹ This evidence brief summarises research from Zimbabwe, Mozambique, and Lesotho, which reveals statistically significant associations between drought exposure and increased risk of violence against adolescents and youth, by both intimate partners and non-partner perpetrators. The analysis combines three cross-sectional, nationally-representative Violence Against Children Surveys (VACS) – covering 20,290 adolescents and young people aged 13–24 in Zimbabwe, Mozambique, and Lesotho – with Standardised Precipitation and Evapotranspiration Index (SPEI) data to measure drought exposure.

Key findings

- **Non-partner violence:** Each unit increase in drought exposure was associated with a higher likelihood of non-partner sexual violence (46%), emotional violence (73%), and physical violence (41%).
- **Intimate partner violence (IPV):** Drought exposure was associated with 51% and 39% higher likelihood of emotional and physical IPV, respectively.
- **Gendered patterns of violence exposure:** Adolescent girls and young women experienced a higher likelihood of non-partner sexual violence and both emotional and physical IPV.
- **Age and residence:** Young participants aged 18–24 years and those living in rural areas experienced greater vulnerability to violence.



The pathways linking drought to violence are multifaceted. Climate-driven economic, food, and water insecurity deepen poverty, erode protective community norms, and weaken family safety nets. These dynamics heighten risks of exploitation, abuse, and multi-type violence. These findings align with UNFPA analysis showing that one in three women globally experience gender-based violence (GBV), and that unchecked climate change (through extreme heat and drought) could nearly triple IPV in sub-Saharan Africa by 2060.² Drought was therefore identified as a social risk multiplier, which reinforces inequalities and undermines progress toward SDG 3 (Health), SDG 5 (Gender Equality), and SDG 13 (Climate Action).

To break this cycle, climate action must proactively integrate GBV prevention and sexual and reproductive health and rights (SRHR). Embedding rights-based, gender-responsive, age-sensitive violence prevention and SRHR services within climate adaptation and disaster risk reduction can mitigate cascading risks before they escalate, strengthening resilience amongst the most vulnerable populations and ensuring no one is left behind.

Background

Southern Africa faces recurrent and intensifying droughts driven by climate change and unsustainable human activity, resulting in profound physical, social, economic and mental health impacts.³ By 2050, the region may experience up to 30% reduction in water availability, with rainfall variability already undermining agricultural productivity and livelihoods.¹ Roughly 70% of the population relies on rain-fed agriculture, making the region acutely vulnerable to rainfall shocks and droughts.⁴

The impacts of drought are rooted in structural inequality and pre-existing vulnerability. When crops fail and income declines, households face cascading effects: rising poverty, food insecurity, and psychological distress. These pressures intersect with entrenched gender inequities, which can intensify in times of crisis and heighten the risk of violence, particularly for girls and women.⁵

Adolescent girls and young women are among the most affected. They often shoulder disproportionate responsibility for unpaid domestic work, farming, and the collection of water and fuelwood from long distances, while having less access to climate-resilient technologies, financial resources, and agricultural support.⁶ Harmful coping mechanisms such as school dropout, child labour and transactional sexual relationships, further increase their exposure to exploitation, harassment and violence, as well as exacerbate harmful practices like child marriage and female genital mutilation (FGM).^{7,8}

Environmental vulnerability is layered onto an already high burden of violence against adolescents. In Southern Africa, 17% of girls and women experience forced sex and over 60% of children are subjected to violent discipline in their lifetime.⁹ Adolescence is a critical developmental period, and violence at this stage is associated with long-term consequences, including depression, risk-taking behaviours, poor health outcomes, and even early adult mortality.¹⁰

As climate shocks intensify, these overlapping vulnerabilities compound, creating heightened risks of violence and exploitation. [UNFPA's 'Resilient Futures' SRHR-Gender-Climate Manual \(2025\)](#) underscores that the links between climate change and GBV are not incidental but systematic – rooted in unequal access to power, resources, and decision-making. Without urgent and coordinated action across sectors including climate adaptation and violence prevention, climate disasters will continue to undermine progress towards ending violence against children, jeopardising broader development goals across health, education, gender equality, and economic resilience.

Existing evidence

Evidence linking climate disasters and increased violence risk is growing. Studies across sub-Saharan Africa have shown that climate-induced stress, especially from drought and heat, correlates with increased IPV, early marriage, and transactional sex.¹¹⁻¹⁴ These effects arise as environmental shocks exacerbate economic strain, displacement, and weakened protection systems. Illustrative examples from Southern Africa include:

In Lesotho, frequent and prolonged droughts heighten poverty and food insecurity, both main drivers of existing high rates of HIV and GBV. National analyses linking drought exposure to Lesotho Population-based Impact Assessment (Le-PHIA) show that the 2014-2016 severe drought was associated with higher HIV prevalence, lower educational attainment, and higher engagement in transactional sex among rural adolescent girls (15–24 years), further increasing their vulnerability and risk of exploitation.¹⁵

Zimbabwe is one of the world's most drought-prone countries, with about 1-in-3 women (aged 15–49) report experiencing a form of GBV.¹⁶ Evidence reviews show that traditional and inequitable gender norms are often exacerbated during climate disasters, which may further increase GBV vulnerability.⁸ One critical example is the burden of water fetching from long distances being placed on young women and girls, increasing their vulnerability to victimisation. According to CARE Australia, women and girls in rural Zimbabwe typically travel a distance of 4km to fetch water, which significantly increases during drought periods.¹⁷ Evidence further shows that drought exposure is linked to higher levels of violence at water collection points – including physical, sexual, and emotional violence – with risks rising by 5.16% during severe droughts. Notably, these elevated risks were observed when the water-fetcher was a woman or a girl, underscoring the gendered nature of climate-induced vulnerabilities.¹⁸

Mozambique has the highest prevalence of child marriage in Southern Africa, affecting almost one in every two girls.¹⁹ The country is highly vulnerable to intense and recurrent droughts, aggravated by El-Niño. Following the 2015-2016 severe drought, an assessment by CARE International highlighted that many families resorted to child marriage as a coping mechanism to improve their income through the payment of a bride price (dowry). Additionally, reports of gifts-for-sex increased as girls engaged in water collection activities far from home.²⁰ Case

studies highlighted the need to diversify livelihoods, ensure inclusive and gender-sensitive water distribution, and strengthen humanitarian and development responses before, during, and after climate shocks.

Drought may further heighten the risk of violence against adolescents and young people through several interconnected pathways:

- **Economic stress and food insecurity.** Drought-related poverty and food insecurity, may result in a) increased economic dependence of females on male partners, sometimes prompting transactional relationships, b) heightened caregiver distress and intra-household conflict, c) increased controlling behaviours by partners, and d) elevated alcohol misuse.²¹
- **Negative coping behaviours.** Beyond child marriage, families affected by drought may resort to sending their children away for work to supplement household income where boys in particular face higher risks of physical violence from employers or strangers.²²
- **Reduced access to services and schooling disruption.** UNICEF Zambia highlights increased barriers to reproductive health services and strained GBV referral pathways.²³ Across 19 sub-Saharan African countries, women exposed to drought during childhood received fewer years of formal education.²⁴

UNFPA's brief on [Climate Change Impacts and IPV in Sub-Saharan Africa \(2024\)](#) projects that, under high-emission scenarios, IPV prevalence in the region could nearly triple, rising from 48 million in 2015 to 140 million in 2060. Yet national climate policies rarely integrate SRH, gender equality, or violence prevention, limiting countries' ability to anticipate and mitigate the social consequences of climate shocks, particularly for adolescents. Despite progress, most research to date focuses on adults, leaving the specific experiences, bodily autonomy and needs of adolescent girls and boys under-examined. This analysis addresses this gap.

Research methods

This analysis utilises nationally representative data from the Violence Against Children Surveys (VACS) and climate-based drought indices to examine how drought exposure influences risks of sexual, emotional, and physical violence among adolescents. It also examines how these risks are moderated by gender, age, and rural residence.

The analysis includes household data from 20,290 adolescents and young people aged 13–24 in Zimbabwe (n= 8715), Mozambique (n= 3007), and Lesotho (n= 8568), combined with drought data for matched years from the Standardised Precipitation and Evapotranspiration Index (SPEI). Multivariate logistic regression models estimate associations between drought exposure and multiple forms of violence. Interaction models test whether gender, age, and rural residence moderate these associations.

All models adjust for key covariates, including gender, age, rural/urban residence, informal housing, head-of-household gender, and educational attainment alongside country-specific economic, cultural, and demographic characteristics.

Key findings

This analysis finds a positive association between drought exposure and the risk of experiencing violence among adolescents and young people. For the whole sample, each unit increase in drought exposure was associated with **increased likelihood of non-partner violence, including sexual violence (46%), emotional violence (73%), and physical violence (41%)**. Drought was also linked to elevated risks of intimate partner violence, with **emotional and physical IPV increasing by 51% and 39%, respectively**.

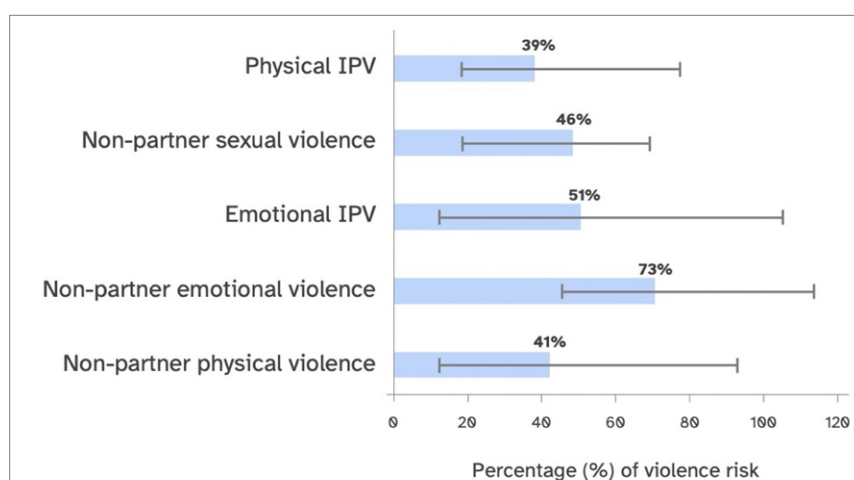
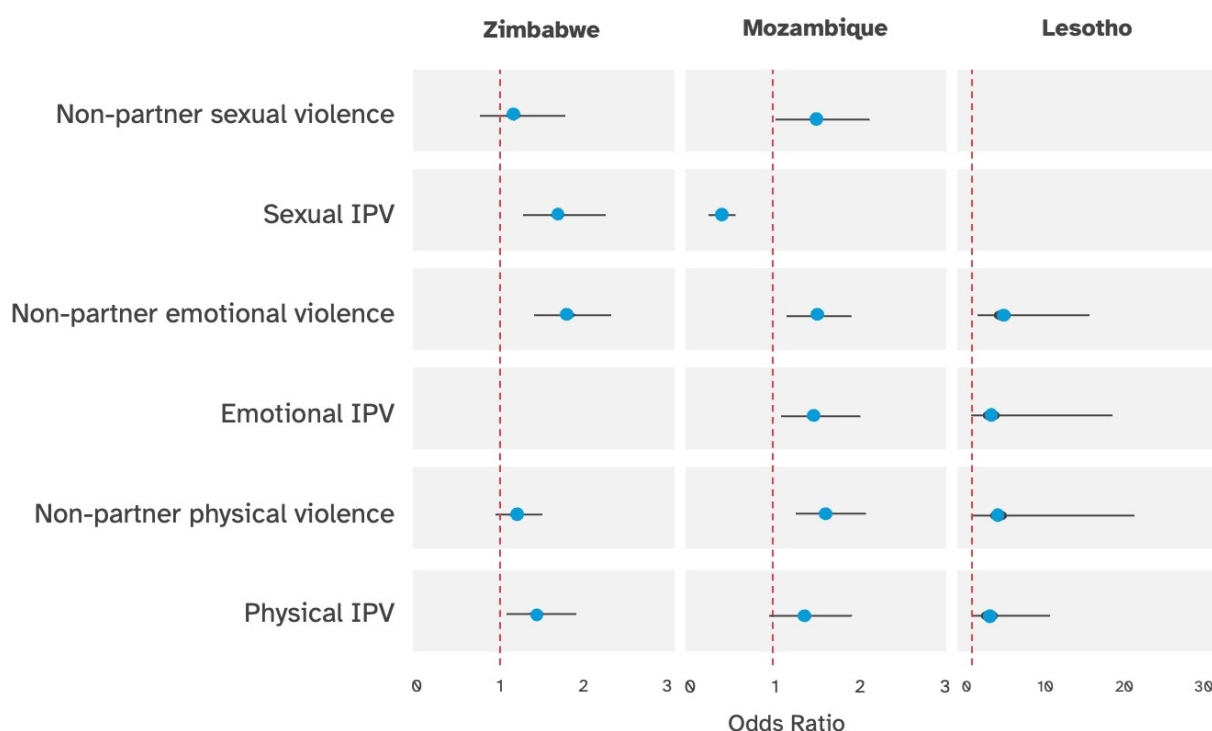


Figure 1. Percentage increases of statistically significant associations between drought exposure and violence risk among adolescents in drought settings

Gender and rural residence significantly shaped the association between drought and violence risk. Adolescent girls and young women faced higher likelihood of non-partner sexual violence, as well as partner and non-partner emotional violence, compared to males. Similarly, young people aged 18-24 experienced higher risks of non-partner sexual and emotional violence, and physical and emotional IPV than their younger counterparts (aged 13-17). Lastly, those living in rural areas were more likely to experience non-partner physical violence in comparison to those in urban ones. In addition, sustained exposure to drought significantly heightened adolescents' vulnerability: a prolonged period of drought over 2 years was associated with up to doubled risks of all forms of violence.

Associations between drought and violence forms varied depending on the country. Zimbabwe and Mozambique showed similar positive associations across forms of violence. However, in Zimbabwe, adolescents and young people living in drought areas were more at risk of sexual IPV, while those in Mozambique experienced a reduced risk. Estimates in Lesotho showed increased risk for non-partner emotional violence and physical IPV. Zimbabwe's dataset did not include emotional IPV data and estimates for sexual violence forms in Lesotho were removed due to reduced drought variability and high collinearity.

Figure 2. Country specific associations between drought exposure and violence risk among adolescents in Zimbabwe, Mozambique and Lesotho.



All models control for: gender, age, rural residence, informal housing, head of household gender, and education attainment. Zimbabwe's dataset does not collect data for emotional IPV. Lesotho's estimates for non-partner sexual violence and sexual IPV were removed due to limited drought variability and high collinearity with sexual violence forms, which also contribute to the large confidence intervals for estimates presented.

Recommendations

UNFPA's ['Resilient Futures' SRHR-Gender-Climate Manual](#) calls for gender-transformative climate adaptation that enhances bodily autonomy and leaves no one behind by connecting protection, rights, and resilience. Building on the findings of this study and UNFPA's regional frameworks, the following entry points for programming and policy action can help governments and partners prevent and respond to GBV in drought-affected contexts:

- **Mitigate economic and psychosocial stress caused by drought.** Couple drought warning systems with timely social protection and gender-responsive climate resilience interventions to protect families and communities' livelihoods, such as cash transfers, food security support and violence prevention programmes. Climate and social protection programmes that include anticipatory action initiatives, cash-for-resilience schemes, livelihood diversification, and psychosocial support can stabilise households and mitigate violence.

- **Invest in multi-level, gender-transformative approaches to promote equitable social and gender norms.** Adolescent girls and young women have disproportionate responsibilities for water collection, caregiving, and domestic work, increasing their exposure to violence and limiting participation in education and decision-making. Address harmful gender and social norms in communities, working with local leaders, men, and boys, to promote gender equality and positive masculinities. Furthermore, invest in installing safe water systems and clean energy to reduce the resource burden for women and girls.
- **Integrate violence prevention, SRHR, and gender equality into climate adaptation and disaster management plans, policies and programmes.** Embed gender equality, child and adolescence protection, and SRHR strategies into national climate adaptation (including National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs)) and disaster management plans. Joint planning, pooled funding, and integrated monitoring frameworks allow interventions to address overlapping vulnerabilities. Ensure these measures are backed by adequate, sustainable, gender-responsive climate financing and accountability mechanisms, including clear indicators to track progress. [UNFPA's handbook on integrating SRHR, GBV and HP into climate policies](#) provides guidance on how to achieve this.
- **Safeguard access to integrated SRHR, GBV, mental health and psychosocial support services during climate shocks.** Climate crises often disrupt essential services at the very time they are most needed. Integrated mobile SRH/GBV clinics, one-stop centres, and integrated GBV response mechanisms must be built into humanitarian and adaptation planning, serving as critical entry points for young people to access a wider range of care, including mental health support. Preparedness efforts should include anticipatory deployment of trained staff and supplies in high-risk drought zones, ensuring services are accessible, culturally appropriate, and responsive to overlapping needs.
- **Invest in research, data and evidence for improved climate action.** Expand research on the impact of climate change on adolescents, especially girls and other marginalised groups. Fill gaps in national and subnational gender-disaggregated data to inform targeted gender-responsive policy and programmatic decisions. Use evidence to adapt interventions and guide investment toward approaches that reduce violence risks and strengthen resilience simultaneously.

Conclusion

Intensifying and more frequent droughts in Southern Africa are not only markers of a deepening climate crisis, but they are also critical drivers of violence against adolescents and young people. The evidence shows that adolescent girls and young women, and those living in rural areas, bear a disproportionate share of this burden.

The climate crisis is therefore also a protection and rights crisis. Climate policy must treat the protection of people and the protection of the planet as inseparable objectives. Findings call for urgent, coordinated action: policies must bridge climate adaptation and gender- and age-specific violence prevention to protect those most at risk. Strategic investment in these integrated measures is critical, not only to safeguard young people today, but also to disrupt entrenched cycles of violence and vulnerability across Southern Africa for generations to come.

This brief was written by Bothaina Eltigani, Luciana Leite, Mona Ibrahim, Lucie Cluver (Accelerate Research Hub/University of Oxford), Chiagozie Udeh, Zainab Yunusa, Janneke Bienert, Matseliso Khesa-Mokone, Phyllis Munyama (UNFPA) and is based on the following publication: Bothaina Eltigani, Roman Hoffmann, Lucie Cluver (2026). Drought exposure and the risk of sexual, emotional, and physical violence against adolescents in Zimbabwe, Mozambique, and Lesotho: an observational study. The Lancet Planetary Health. This work was supported by the Natural Environment Research Council (NERC) as part of the Agile Initiative at the Oxford Martin School, and the Oxford Martin Programme on Climate and Child Health.

References

1. IPCC. Global Warming of 1.5° C. An IPCC Special Report on the impacts of global warming of 1.5° C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty: ipcc Geneva; 2018.
2. United Nations Population Fund (UNFPA) UoV, International Institute for Applied Systems Analysis. Climate change impacts and intimate partner violence in sub-Saharan Africa: comprehensive analysis and projections using Demographic and Health Surveys and Shared Socioeconomic Pathways. Johannesburg: United Nations Population Fund, 2024.
3. Engelbrecht FA, Monteiro P. The IPCC assessment report six working group 1 report and southern Africa: Reasons to take action. *South African Journal of Science* 2021; **117**(11-12): 1-7.
4. Community SAD. Regional indicative strategic development plan: Southern African Development Community; 2003.
5. Gizaw MS, Gan TY. Impact of climate change and El Niño episodes on droughts in sub-Saharan Africa. *Climate Dynamics* 2017; **49**(1): 665-82.
6. Ahmed A, Lawson ET, Mensah A, Gordon C, Padgham J. Adaptation to climate change or non-climatic stressors in semi-arid regions? Evidence of gender differentiation in three agrarian districts of Ghana. *Environmental Development* 2016; **20**: 45-58.
7. Thurston AM, Stöckl H, Ranganathan M. Natural hazards, disasters and violence against women and girls: a global mixed-methods systematic review. *BMJ global health* 2021; **6**(4): e004377.
8. van Daalen KR, Kallesøe SS, Davey F, et al. Extreme events and gender-based violence: a mixed-methods systematic review. *The Lancet Planetary Health* 2022; **6**(6): e504-e23.
9. UNICEF. Violence Against Girls, Boys and Women in Southern Africa: A Statistical Profile. New York: UNICEF, 2023.
10. Sawyer SM, Azzopardi PS, Wickremarathne D, Patton GC. The age of adolescence. *The lancet child & adolescent health* 2018; **2**(3): 223-8.
11. Epstein A, Bendavid E, Nash D, Charlebois ED, Weiser SD. Drought and intimate partner violence towards women in 19 countries in sub-Saharan Africa during 2011-2018: A population-based study. *PLoS Medicine* 2020; **17**(3): e1003064.
12. Wang P, Chu L, Ban J, Sullivan TP, Chen K. The nexus of drought, extreme heat, and intimate partner violence in low-and middle-income countries. *ISEE Conference Abstracts*; 2024; 2024.
13. Pope DH, McMullen H, Baschieri A, et al. What is the current evidence for the relationship between the climate and environmental crises and child marriage? A scoping review. *Global public health* 2023; **18**(1): 2095655.
14. Treibich C, Bell E, Blanc E, Lépine A. From a drought to HIV: An analysis of the effect of droughts on transactional sex and sexually transmitted infections in Malawi. *SSM - Population Health* 2022; **19**: 101221.
15. Low AJ, Frederix K, McCracken S, et al. Association between severe drought and HIV prevention and care behaviors in Lesotho: A population-based survey 2016-2017. *PLoS medicine* 2019; **16**(1): e1002727.
16. Fund UNP. Zimbabwe sexual and reproductive health national profile, 2024. Harare, 2024.
17. CARE A. Water, sanitation & hygiene annual project impact report: Zimbabwe. Canberra, Australia, 2020.
18. Chigusiwa L, Kembo G, Kairiza T. Drought and social conflict in rural Zimbabwe: Does the burden fall on women and girls? *Review of Development Economics* 2023; **27**(1): 178-97.
19. UNFPA U. Mozambique: country profile 2022. New York, NY, USA, 2022.
20. International C. Hope dries up? Women and girls coping with drought and climate change in Mozambique. Maputo, Mozambique, 2016.
21. Hatcher AM, Page S, Aletta van Eck L, et al. Systematic review of food insecurity and violence against women and girls: mixed methods findings from low-and middle-income settings. *PLOS global public health* 2022; **2**(9): e0000479.
22. Save The Children. Child protection needs assessment Somalia, 2021.
23. (ZNPHI) UZDMAUDPPDFPMoHMZNPHI. Rapid qualitative assessment of drought-related community perceptions and behaviors in Zambia, 2024.
24. Hyland M, Russ J. Water as destiny-The long-term impacts of drought in sub-Saharan Africa. *World Development* 2019; **115**: 30-45.