

Key considerations for research into how climate change affects sexual and reproductive health and rights



Climate change poses urgent threats to health, disproportionately to populations living in low-income and middle-income countries (LMICs).^{1,2} Yet a key aspect often overlooked is how climate change specifically affects sexual and reproductive health and rights (SRHR) both directly and indirectly.³⁻⁶

As identified by a UN call for action published in November, 2023, accelerating research in this realm is an urgent need.⁷ To advance knowledge, the UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction, Department of Sexual and Reproductive Health, and Karolinska Institutet conducted an online consultation on May 4, 2023, with the aim of identifying research priorities regarding how climate change impacts SRHR. This online consultation involved 55 professionals in academia, non-governmental, and intergovernmental organisations representing five of six WHO regions spanning LMICs (n=23) and high-income countries (n=32).

The consultation drew upon (1) a scoping review of existing research regarding how climate change impacts SRHR in LMICs (forthcoming publication), and (2) a key stakeholder mapping exercise that elicited information regarding professionals' experience with research at the intersection of climate change and SRHR yielding 132 survey responses across 23 institutions. A Delphi consensus building exercise is ongoing to determine future research priorities.

During the consultation, participants split into groups covering different SRHR domains to identify understudied areas related to climate change. However, given the breadth of existing knowledge gaps, a framework for research prioritisation was deemed necessary. The key considerations for future research include (1) the application of appropriate methods, (2) intersectional analysis, and (3) needs-responsive thematic areas (appendix p 1).

For the application of appropriate methods: investments in advancing research methods are needed to obtain higher quality data, including longitudinal studies, monitoring systems, and impact evaluations,

as well as quality improvement or quality assurance initiatives. Such work must employ strong quantitative and qualitative methods, with a focus on amplifying the voices of populations in LMICs. There is also a need to develop better SRHR indicators, apply more refined data analysis and econometric frameworks to explore the causal pathways between climate change events and SRHR, and conduct intervention studies on how to mitigate and address this impact.

The consultation group further suggests employing and developing cocreation methodologies to foster collaborative approaches with diverse stakeholders, especially historically marginalised populations, from the beginning to the end of the research process. This approach also includes investing in research capacity strengthening to ensure that the knowledge gained applies to the most pressing issues. Importantly, all research must maintain a human rights-based approach, and researchers should consider the benefits of incorporating strengths-based, life-course, and One Health approaches.⁸

Furthermore, the consultation group emphasised the necessity of establishing a universal classification system for climate change events to facilitate the consistent comparison of results across SRHR research. Until such a system is developed, we propose that researchers take the following measures: (1) explicitly identify how each climate event changes over time, and (2) distinguish between acute extreme weather events and a slower-moving hazard, as well as impact types (eg, indirect vs direct and temporary vs long term)

For the application of an intersectional analysis: an intersectional lens is needed for all SRHR areas, given the compounding vulnerabilities faced by populations disproportionately affected by climate change and their systemic underrepresentation in research.⁹ To conduct comprehensive research, consultation participants suggest incorporating questions related to sexual and gender diversity, disability, mental health, and investigating power dynamics and contextual factors. This approach includes considering how age, marital status, education level, social or ethnic group, economic resources, and migration or internal displacement

See Online for appendix

status, among others, might influence SRHR, as well as equitable representation in climate change or SRHR policymaking.

Additionally, research that is integrative across disciplines, sectors and forms of social inequity will help advance research at this intersection, including cooperation with government and development actors among environmental health, biology, medicine, public health, anthropology, demography, and agriculture. Such collaborations might also provide opportunities of collective action between the climate or environmental justice and reproductive justice movements.

For the application of needs-responsive thematic areas: research should respond to the needs of the communities it engages. Despite variability, some issues at the intersection of SRHR and climate change are pressing but understudied everywhere. Actors must also reflect on whether their research can result in actionable policies or specific changes in practice, or both, that improve outcomes in health and human rights.

We urge researchers and funding agencies to leverage our learnings and share perspectives to propel the field of SRHR and climate change forward. Advanced knowledge and sufficient investment, is required to build the capacity needed to guide future research so that it facilitates essential policy and practice changes that responds to pressing needs from climate change and in pursuit of achieving universal access to SRHR.¹⁰

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Consultation Group are listed in the appendix (p 2), as well as contributions of the members to this Comment, and relevant competing interests. We thank Vindar Fritzell for his valuable feedback, and Maria Persson and Neha Potlapalli for their critical support of the consultation event.

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