
Technical Note – Impact of the Climate Crisis on Reproductive Choice

Our Methodology

New analysis from the Evidence & Impact team at MSI Reproductive Choices has found that access to contraception is at risk of being disrupted for millions of women over the next decade, due to climate-related displacement.

Our impact estimates cover 26 climate-affected countries where MSI works: Afghanistan, Bangladesh, Bolivia, Burkina Faso, DRC, Ethiopia, Ghana, India, Kenya, Madagascar, Mali, Malawi, Myanmar, Nepal, Niger, Nigeria, Pakistan, PNG, Timor-Leste, Senegal, Sierra Leone, Tanzania, Uganda, Yemen, Zambia, and Zimbabwe.

Our methodology for calculating the impact estimates are as follows:

- We extracted the number of people who were newly internally displaced due to weather and climate-related disaster (Pop^{IDMC}) from the [Global Internal Displacement Database](#) (from the Internal Displacement Monitoring Center), covering the 26 countries listed above, pulling the annual figures between 2010 to 2020.
- The female population displaced was estimated as half of Pop^{IDMC} under the working assumption that the female population had an equal chance of being displaced due to weather-related disasters.
- The Percentage of Women of Reproductive Age (WRA^{PPP}) was extracted from DHS's [StatCompiler](#) for the 26 countries listed above. The most recent DHS data at the time of writing was applied to the data series for each country, to obtain the number of WRA displaced by weather-related disasters.
- Total demand for contraceptive methods (CPR+ Unmet need) was extracted from DHS's StatCompiler for each of the 26 countries. The most recent data was applied to the series for each country to obtain the number of women displaced with contraceptive demand.
- To project demand in the decade ahead, the mean annual average of WRA displaced with contraceptive demand was calculated across the available data for the 2010-2020 period to smooth variations, and then inflated by 30% for the next ten years based on [UN projections](#) for climate-related displacements.
- To estimate the impact of leaving contraceptive demand unmet in this group of displaced WRA, we calculated the contraceptive services required to meet all demand, using the method mix chosen by women served by MSI outreach teams in each country, and used the [Impact 2.5 tool](#) to estimate the unintended pregnancies, unsafe abortions and maternal deaths that would be averted by fully meeting demand.
- This methodology assumes no long-term displacements (only using the number of people newly displaced by weather-related disasters), and only includes the impact from the year in which displacements occur. This makes the impact estimates for meeting the demand for contraceptives among weather displaced women more conservative. It does not account for the proportion of WRA displaced by weather disaster already using a long-acting or permanent method (LAPM) of contraception, who would still be protected after displacement. However, in most countries, LAPM users are a small proportion of the percentage of women of reproductive age using a modern contraceptive method (modern method contraceptive prevalence rate or mCPR), meaning the focus on newly displaced persons is likely to outweigh the fact that the data does not account for displaced LAPM users.

For further details on the methodology, please contact Anisa Berdellima (anisa.berdellima@msichoices.org) and Luis Espinal (luis.espinal@msichoices.org)