

# The health effects of climate change: experiences of young people in Bangladesh, Guatemala, and Nigeria

Population Council & Women Deliver

## Background

Climate change is affecting the health and well-being of adolescents and young people (AYP) around the world. This happens through direct exposure pathways but mainly indirectly, by influencing economic and food insecurity, access to health services, and exacerbating harmful gender norms and social inequalities. According to a recent [meta-analysis of 130 studies](#), climate change disproportionately harms the health of women and girls. This includes, for example,

- Adverse effects to sexual and reproductive health and rights (SRHR), including child marriage, risk of gender-based violence or challenges with menstrual hygiene
- Climate-related food insecurity and poor nutrition
- Rising infectious disease risks, especially water-borne diseases
- Mental health impacts related to uncertainty about the future

Younger generations are disproportionately threatened by climate change. There are [intergenerational inequities](#) in exposure to climate extremes; a child born in 2020 will face an up to sevenfold increase in extreme climate events compared to one born in 1960. These events will have cascading harms and impacts on the life trajectories of the next generation. This includes impacting their health, their economic prospects, and well-being, disproportionately for AYP who face additional gender-related harms. At the same time, young people are not only victims of climate change, they can and do also [contribute to climate action](#). The best way to understand how young people are experiencing, perceiving, and acting on climate change is to ask them directly.

## Methods

The Population Council and Women Deliver conducted participatory, AYP co-led focus group discussions in three countries (Bangladesh, Guatemala, and Nigeria). Women Deliver Young Leaders based in each country teamed up with Population Council researchers to talk to AYP (ages 12–25 years with variation across the three countries) about how climate change is affecting their lives across a range of topics from health to education to ways that young people are taking action. Each country added a focus group to talk to marginalized sub-groups, for example trans AYP in Bangladesh and indigenous AYP in Guatemala. A total of 196 adolescents and young people were interviewed across the settings. Focus groups discussed a range of topics regarding how climate change is affecting their lives and futures.

## **Preliminary Findings**

### **Broad health impacts**

Respondents discussed a range of health impacts of climate change, including malnutrition, increased risk of infectious disease, sexual and reproductive health issues, and water, sanitation, and hygiene (WASH) challenges. In Bangladesh, respondents reported increases in waterborne diseases and conditions related to rising salinity. In Nigeria, young people perceived climatic conditions were increasing mortality, including for infant mortality, specifically mentioning cholera, meningitis, and other infectious diseases. In Guatemala, respondents mentioned concerns regarding malnutrition and diseases related to the expansion of palm oil plantations.

### **Nutrition and disease**

In Bangladesh, young people noticed increases in water-borne disease, fever and cough and linked these with climate change including the increase in food insecurity and insufficient supply of clean drinking water. They discussed malnutrition risks as crops fail and food crises increase. This was echoed in Guatemala, where children face widespread malnutrition that is perceived to be intensifying due to the combination of climate change and expansion into monoculture. In Nigeria, respondents mentioned lack of dietary diversity and food becoming spoiled/contaminated with heat waves leading to foodborne illness. In Guatemala and Nigeria, respondents discussed an increasing reliance on chemical fertilizers that their communities linked with cancers.

*“The food crisis will be worse in twenty years as it is now. Now the amount of water is less than it may decrease further. The crop production will be halved after twenty years. Then it is natural to worry about whether or not I can meet my necessities.”*

*—Adolescent boy, Dumuria, Khulna (Bangladesh)*

### **Risks to SRHR for adolescent and young girls**

#### ***Child marriage***

In all three countries, the influence of climate change on age at marriage was discussed. In Bangladesh, respondents reported that child marriage was a response to extreme weather events, partly for financial protection but also to protect young girls from predatory behaviors of men. They also reported that men were marrying for dowry (cash) for instant money during climate shock; and often they move to look for work, leaving their young brides behind. In Guatemala this is a less formal process, but young girls may move in with their boyfriends in other locations to escape the lack of water and electricity in their communities, and to help their families financially. In Nigeria, the age patterns for marriage are perceived to be shifting with men marrying later to try to earn enough income to marry, and women marrying earlier related to migration and financial support.

*“There are some girls who in the summer become girlfriends of young men from other villages. When their village is flooded, they move with these boys, sometimes they just run away. The girls do that to help their families.”*

*—Adolescent girl, Seraxqen Community, Chisec (Guatemala)*

## *Menstrual hygiene*

Respondents talked about how climate was affecting menstrual hygiene. During certain climate events, there was a lack of clean water and lack of privacy. This was perceived as increasing urinary tract infections and menstrual hygiene issues. In Guatemala, flooding affects availability of commodities including menstrual hygiene products making them unavailable. In Nigeria, respondents reported extreme heat exacerbated menstrual hygiene challenges. In Bangladesh, some reported using contraception to stop their menstrual cycles and avoid these challenges.

## *Gender-based violence (GBV)*

In all three countries, respondents described increasing GBV. In countries where people went to shelters during cyclones or floods, this created a lack of privacy and safety concerns, with reported sexual harassment. In Bangladesh and Nigeria, GBV was attributed to shifting gender norms, with women taking on more work outside the home and sometimes in traditionally male jobs. This was creating tension and conflict at home, as women earned more and wanted to be involved in household decision-making, and respondents saw the shift from traditional gender roles and status as sometimes resulting in power struggles and violence. In Guatemala, respondents discussed how palm oil plantations brought in men from outside the community to work, exposing girls to GBV and harassment. Respondents in Guatemala also discussed how girls moved away into new families, leaving behind their communities, and that this disconnection increased their vulnerability to violence from their partners.

## **Mental health**

In all three countries young respondents reported feeling anxious and uncertain about the future due to climate change. In Bangladesh, young people are worried that climate change will worsen their economic prospects resulting in only low-paid manual labor that reinforces a perceived generational poverty trap. In Guatemala, respondents reported feeling hopeless, as their Indigenous communities have been historically abandoned by the State and formal structures, with climate change another challenge they will have to endure alone. Young people in rural Guatemala also reported the stress and anxiety every rainy season, as they are cut off from services and resources. In Nigeria, young people expressed concerns that they would have to migrate to find opportunities.

*“We are always under a threat. We worried about high tides, floods, cyclones. I am always in a state of worry that the storm is coming and the water is getting inside my home, there is such a thought like that. There is tension, it means when the dam will break, when the water will come, the water will go to the house, how will we live, such thoughts happen!”*

*—Adolescent girl, Shaymngar, Satkhira (Bangladesh)*

## **Policy Implications**

In all three countries young people perceive a negative link between climate change and health in their community, from infectious disease to malnutrition to SRHR. This includes menstrual hygiene challenges, with girls reporting limited access to products, clean water, and private bathrooms. In Nigeria, girls reported wanting to have fewer children and smaller families to ensure they can

adequately provide for them given economic hardships. Comprehensive sexuality education (CSE) and other approaches to reduce GBV, foster gender equality, and shared decision-making are key to ensure climate change does not exacerbate harmful gender norms. In all three countries, young people reported feeling anxious and hopeless in the face of climate change.

## Looking Ahead

Future research is necessary to understand the lived experiences of young people and how climate change is affecting their physical and mental health, especially sexual and reproductive health. In developing health programs and policies, governments and other stakeholders need to integrate a climate and youth lens, ensuring that the programs adjust for the disruption and uncertainty caused by climate events. Climate policies and programs also need a health and youth lens and should be gender-responsive. If health and climate policy are developed in separate silos, without inclusion of AYP, they will not be responsive or able to address young people's needs.



### CLIMATE ACTION

In all three countries young people reported they were taking local action against climate change, planting trees, and cleaning up waste in their community. They discussed a lack of financial and structural support for youth-led organizations or actions, and disappointment with local government efforts. In Nigeria, young people mentioned the potential to harness social media, while in Guatemala they discussed embracing Mayan ancestral solutions to combat climate change, and in Bangladesh young people were starting and joining climate groups but needed funds and support to make them sustainable. Though understanding of *climate change* as a concept was mixed, all participants could see the harms to their local community and voiced a desire to take action.

**Acknowledgements:** Illustrations by Karin Watson Ferrer. In-country research was co-led by Women Deliver Young Leaders (YL) and Population Council (PC) researchers in: Bangladesh—Sohanur Rahman (YL) and Sigma Ainul, Irfan Hossain (PC); Guatemala—Alejandra Teleguario (YL) and Brian Medina Carranza (PC); and Nigeria—Damilola Babatunde (YL), Toyin Akomolafe, Eno-Obong Etetin Etim (PC).

**Recommended citation:** Population Council and Women Deliver. 2023. "The health effects of climate change: experiences of young people in Bangladesh, Guatemala, and Nigeria," Policy Brief No. 2. New York: Population Council and Women Deliver. <https://doi.org/10.31899/sbsr2023.1048>.

