

The Sun Rises for **Her:**

Exploring Intersections Between Climate Change and Adolescents



No one is more affected by the changing climate than children and adolescents.

A child born today could be living in a world with an average temperature that is 4°C warmer by their 71st birthday.¹ A warmer world means more disease, drought, early death from natural disasters, displacement and major health and livelihood problems. As youth, across the globe and particularly in India, this next generation faces growing risks from climate-related threats like less nutritious crops and spreading diarrheal disease. As these children grow up, they will encounter air pollution exacerbated by burning fossil fuels and might be compelled to migrate due to extreme weather, adversely impacting their safety, education, and well-being. When they enter the workforce, they may struggle to earn a livelihood as rising

temperatures make it more difficult to work in agriculture and informal economies.

When gender is added to considerations of age – that is, when specifically focusing on adolescent girls – there is an added layer of vulnerability and impact through which climate change intersects. Prevalent structural hierarchies and societal norms that place girls at a disadvantage, contribute to exacerbating the impacts of climate change on them. But climate vulnerability and its consequences not only reflect existing inequalities faced by adolescent girls; they also reinforce socially constructed relations of power, norms, and practices that ultimately push them deeper into the vicious cycle of intergenerational poverty, vulnerability, and marginalization, and constrain progress towards a more inclusive and equitable future for this important group.

The disproportionate impact of climate change on adolescents spans a few key areas:

- 1. Education
- 2. Health
- 3. Water and Sanitation
- 4. Child Marriage & Trafficking



Education

- In the most direct way, climate-related disasters can interrupt children's and adolescents' education by damaging or even destroying schools and relevant infrastructure.ⁱⁱ As a result of the floods that ravaged Kerala in 2018, over 650 schools were damaged in the state. The floods of 2017 damaged over 7000 schools across the country.
- In periods of crisis, girls in India are often the first to drop out of school to augment household income, look after their younger siblings or help alleviate extra domestic burdens like fetching water, that are typically shouldered by women in households under climate-related stress. Leaving school makes girls less likely to be informed about climate change and further increases their vulnerability.ⁱⁱⁱ
- Research has shown a lower academic performance and a reduction in educational attainment among children who have experienced climate shocks.^{iv}

"In North Eastern States, especially in Nagaland, school attendance of adolescent girls and young girls is drastically reduced because of a lack of support systems for them. Girls have to sacrifice their education for younger siblings and go back to the fields. Climate change is only speeding up this phenomenon."^v

- Nuneseno Chase, Director, YouthNet



Health

- Disruption to health services due to climate disasters increases unplanned pregnancies and sexual and reproductive health problems. When health facilities and supply chains are compromised, there is a direct and immediate negative impact on access to and quality of SRH services, such as post-exposure prophylaxis for HIV, HIV treatment, emergency contraception, and safe abortion services.^{vi}
- With children and adolescents' bodies and immune systems still in a developing stage, they are found to be more susceptible to disease and pollution. For example, they are prone to worsening asthma arising from the rising air pollution. They are also particularly susceptible to infectious diseases such as dengue that rising temperatures and changing rainfall patterns leave in their wake.^{vii}
- With climate change exposing pre-existing psychological vulnerabilities, young people with depression and anxiety are said to be at a disproportionately increased risk for worsening symptoms in the face of the changing climate.^{viii}

"There is severe gender injustice caused by climate change – during a drought for instance, women and girls have to travel long distances to fetch water contributing to health problems such as arthritis, uterus prolapse, as well as anemia, malnutrition and mental health issues – this burden falls disproportionately on younger girls or older women in the household."^{ix}

- Dr. Prakash Tyagi, Executive Director, GRAVIS



Water and Sanitation

- With climate change driving increasing water scarcity and drought, gender disparities and injustice deepen, particularly in arid and semi-arid regions of India, where women and girls bear the burden of fetching water for their families and spend significant amounts of time hauling water daily from distant sources. In desert regions like Thar, women and girls often have to walk 10-15 kilometers a day to reach a central source of water, which can result in a time-loss of 5-6 hours a day. Research also shows that when girls travel farther distances to secure food and water, they are at increased risk of exposure to sexual abuse, physical abuse, and harm.^x
- Water scarcity through climate change and the resulting increase in the costs of water can lead to inequitable access for women and girls who would be disproportionately deprived of opportunities to collect the amount of safe water needed for overall hygiene and menstrual hygiene management.
- Heavy rainfall and flooding can damage water sources and sanitation facilities, carry runoff and waste into streams and lakes, and contaminate the water supply, further adding to the health burden, exacerbating the challenge for girls to access clean and safe sanitation infrastructure, and ultimately threatening their enrolment and retention in school.

“The challenges for women intensify during crises and temporary relocation caused by cyclones or floods. It is especially difficult for women and adolescent girls to take care of sanitation in these circumstances because of inadequate number of toilets.”^{xi}

- Anamitra Anurag Danda, Senior Visiting Fellow, Observer Research Foundation



Child Marriage & Trafficking

- Girls are at risk of being married off early in an attempt by households to manage the financial burdens and/or female safety concerns borne by the environmental hardships and aftermath of weather-related disasters. Such circumstances put into play the early onset of key life transitions, including early pregnancy, that function to direct girls into a vicious cycle of intergenerational poverty, vulnerability, and marginalization.^{xii}
- Events such as coastal erosion, sea-level rise and glacial retreat result in gradual migration. As these events occur, families in affected areas commonly face increased debt and poverty as they migrate. Out of desperation, they may take any opportunity available to make money, putting them at a high risk of interacting with a trafficker.^{xiii}
- Often in the aftermath of sudden climate disasters such as flooding, landslides, or tsunamis, rapid displacement occurs, allowing traffickers to easily exploit desperate families, including adolescents. At the same time, displaced individuals looking to relocate to a far-off location may seek the help of human smugglers involved in crime rings.^{xiv}

There is some evidence around the linkage between climate change and termination of schooling for adolescent girls, which may have extreme second-order consequences such as increase in child marriages. There is a dire need to explore this further through research, and encourage inclusion of gender sensitive measures within climate change action.^{xv}

- Nandita Bhan, Research Scientist, Center on Gender Equity and Health at University of California San Diego



Adolescents as Change Agents in Climate Action

While adolescents remain disproportionately vulnerable to the impacts of climate change, climate action cannot be successful or sustainable if it does not involve them in driving the solutions. As future decision-makers that must live with the impacts of climate change and lead action for years to come, adolescents' active participation provides intergenerational viewpoints, which are fundamental to sustainable development. Engaging them in climate change adaptation is however not only a matter of intergenerational justice and equity, but also brings great benefits stemming from their skills, energy, perspectives, and innovations that will drive and shape climate adaptation action in the decades to come.

Internationally, the role of adolescents in the climate movement has now become more prominent with many of them being frontrunners in the fight against climate change. In 2018, teenagers across the world coordinated marches across the world to protests against climate change. This teenager-led movement used the power of social media and advocacy to raise awareness and call for immediate action towards climate change. In November 2016, a group of 21 young people between the ages of 9 and 20 sued

the US government for failing to take adequate and appropriate action towards climate change and protecting public resources. India has seen similar action by young climate activists.^{xvi} In March 2017, Ridhima Pandey, a 9-year-old girl from Uttarakhand, filed a court case against the Indian government, arguing that India, the third-largest emitter in the world, has failed to take ambitious action to fight climate change.

However, despite the successes at the international level, the role of adolescents in India's climate movement still remains muted. TV channels and newspapers do not talk enough about how young girls are leading the fight against the climate crisis, few programs include or focus on them for adaptation, and funding by local philanthropists towards climate change and adolescents is extremely limited. Without making young people's voices heard and involving them as a key part of the decision-making processes, climate action will not be effective or sustainable, and there is much that we can do to enable this engagement.

Recommendations



Embed climate change adaptation into education curricula

to close gaps in awareness and knowledge, and enable stronger connection to the issue.



Adopt a strong and intentional focus on adolescents

when designing climate adaptation programs.



Support and advocate

for the development and implementation of inclusive climate change laws and policies that are responsive to the needs of adolescents.



Drive greater funding

to initiatives or programs that are designed for and with adolescents.



Build capacity of young people

to leverage their voice and engage meaningfully in the discourse around climate change



Strengthen research and data

around the intersections between climate change and adolescents



Climate change impacts everyone but the future belongs to young people.

It is not surprising to witness the angst that many young people experience when they contemplate the world they will inherit. Greta Thunberg was far from the first young person to speak up in an effort to hold the powerful accountable for their inaction on climate change, and she definitely won't be the last. Youth across the world and increasingly in India see themselves on the generational frontline of climate change – more of them need to be educated of the impacts of climate change, be provided with platforms to voice their collective concerns, and be supported to partner with communities and governments to secure a safer, healthier and happier future for themselves and for India at large.

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