



Climate Change and Impact on Children's Education

For Prelims: [United Nations Educational, Scientific and Cultural Organization \(UNESCO\)](#), [Floods](#), [Droughts](#), [Heat Waves](#), [El Nino](#),

For Mains: Significance of Government Policies & Interventions to Mitigate Climate Change.

Source: HT

Why in News?

Recently, a new report by the Global Education Monitoring Report of the [United Nations Educational, Scientific and Cultural Organization \(UNESCO\)](#) has highlighted the **long-term impact of climate shocks** experienced in early childhood.

How does Climate Change Impact Children and Their Education?

▪ Vulnerability of Children:

- The report says that young children are particularly vulnerable to physical hazards like [floods](#), [droughts](#), and [heat waves](#) which can negatively impact **physical abilities, cognitive abilities, emotional well-being, and educational opportunities**.
- Most **low and middle-income** countries experience annual school closures due to climate-related events, increasing learning loss and dropout rates.

▪ Impact on Cognitive Abilities of Children:

- In **Ecuador**, children exposed to severe [El Nino](#) floods in utero were shorter and performed worse on cognitive tests later in life.
- In **India**, rainfall shocks during early life negatively impacted vocabulary at age 5 and mathematics and non-cognitive skills at age 15.
- Analysis of disasters affecting over 140,000 children in seven Asian countries showed a negative correlation with school enrollment for boys and mathematics performance for girls by age 13-14.

▪ School Closures and Infrastructure Damage:

- Climate-related stressors cause frequent school closures, with 75% of extreme weather events in the past 20 years resulting in such disruptions.
- **Natural disasters**, including floods and cyclones, have led to deaths and significant damage to educational infrastructure.
 - **For instance, Jakarta** floods in 2013 disrupted access to schools; Cyclone Idai destroyed 3,400 classrooms in Mozambique in 2019; **Tropical Cyclone Gita** damaged 72% of schools in Tonga in 2018.
- **Floods in Ethiopia, India, and Vietnam** caused reductions in educational attainment among youth.

▪ Impact of Heat and Environmental Variability:

- **Heat Effects:** Higher-than-average temperatures during prenatal and early life are linked to fewer years of schooling.
 - Studies show reduced high school graduation and college entrance rates in China

due to heat.

- In **Maharashtra**, India, drought led to a 4.1% reduction in mathematics scores and a 2.7% reduction in reading scores.
- In **Pakistan**, children in flooded districts were 4% less likely to attend school compared to those in non-flooded areas.

What are the Recommendations of the Report?

- **Need for Adaptation:** The report emphasises the need for comprehensive [climate adaptation strategies](#), including improved school infrastructure, curriculum reforms, and community engagement.
- **Curriculum Integration:** The report underscores the need for incorporating [climate change](#) education into school curricula to provide both climate science knowledge and skills in **resilience, adaptation, and sustainable development**.
- **Proactive Measures:** To mitigate climate impacts on education, proactive measures are recommended, including **strengthening school infrastructure, training educators for psychological and academic support, and promoting community resilience through awareness and adaptation initiatives**.
- **Investing in Education:** There is a call for increased investment in educational systems to enhance their resilience to **climate-related disruptions, ensuring continuity of education despite environmental challenges**.

What Measures Have Been Taken to Mitigate the Impact of Climate Change?

- **Global Level:**
 - **Paris Agreement:** Aims to limit global warming to below 2°C with national climate targets and \$100 billion annual climate finance support.
 - **UNFCCC:** Facilitates global climate negotiations and progress assessments through COP meetings and the Global Stocktake.
 - **Sustainable Development Goals (SDGs):** Incorporates climate action into broader development goals (**Goal-13**).
 - **Global Initiatives:** Includes partnerships and funding for climate action and clean technologies.
- **Steps Taken in India to Mitigate Climate Change**
 - **LiFE Initiative:** The idea of [LiFE](#) was introduced by India during the [26th United Nations Climate Change Conference of the Parties \(COP26\)](#) in Glasgow in 2021 to promote an environmentally conscious lifestyle that focuses on 'mindful and deliberate utilisation' instead of 'mindless and wasteful consumption'.
 - **National Action Plan on Climate Change (NAPCC):** Features missions on solar energy, energy efficiency, and sustainable habitats.
 - **Renewable Energy:** Targets include 500 GW of **solar power** and 60 GW of **wind energy** by 2030.
 - **Electric Mobility:** Promotes [electric vehicles](#) to cut transportation emissions.
 - **Adaptation and Resilience:** State-specific action plans and disaster management enhancements.
 - **Afforestation: Green India Mission** and large-scale tree planting initiatives.
 - **International Cooperation:** Commitment to the Paris Agreement and participation in global climate finance.

Drishti Mains Question:

Q. Discuss the multifaceted impacts of climate change on schooling in developing countries. Examine how extreme weather events, rising temperatures, and environmental degradation disrupt educational access, quality, and outcomes.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Mains:

Q. 'Climate change' is a global problem. How will India be affected by climate change? How Himalayan and coastal states of India will be affected by climate change? **(2017)**

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