



# 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)**

PDF Reference URL: <https://www.drishtiias.com/printpdf/climate-change-and-impact-on-children-s-education>

