

# Alarming Impacts of Climate Change in Pakistan – Evidence and Call for Action from ASER 2023

## Introduction:

Climate change is no longer a distant threat; it is a harsh reality for millions of Pakistanis. According to the Global Climate Risk Index Pakistan ranks as the 5th most vulnerable country to the impacts of climate change<sup>1</sup>; a country endowed with 7253 glaciers<sup>2</sup>, the mighty river Indus a rich and long coastline of 1046 kilometres and fertile plains enriched by the elaborate network of rivers and canals. The recently released Annual Status of Education Report (ASER) 2023 collected data from 106974 households (rural/urban) and 7865 schools on climate change and its impact on homes and schools, students and communities reveals alarming trends. A significant portion of the population (over 70% nationally) lacks basic knowledge about climate change, leaving them vulnerable to its devastating consequences affecting learning thereby exacerbating learning losses (Aslam M. 2023)<sup>3</sup>. This policy brief analyses key findings from the ASER 2023 report, shared in the [ASER thematic report card on Climate Change](#) highlighting the urgency for climate action and planning in Pakistan.

## Witnessing the Impact of Climate Change:

As we write this, the words of a student from Chitral, Pakistan, resonate deeply: “Thank God we are safe; it was very scary to see our neighbourhood girls’ school get demolished so fast in my village due to rains, floods that glacier melt; our school was built in that very pathway and within moments we saw its collapse. That was my school since my nursery days to grade 8; now we have shifted twice from place to place as we rebuild it. We are learning about climate change, catching up on learning and healing together from the terrible trauma” (Chitral April 2023- Schools2030)

Schools are being destroyed, education is disrupted, and mental health is suffering. This brief calls for a collective effort from policymakers, educators, and communities to address this crisis and build a more resilient future for Pakistan's children.

## Political Promises and the Path Forward:

It's encouraging to see climate change addressed in the manifestos of political parties in Pakistan. The PPP's "Green New Deal: Climate Change and Environmental Sustainability" chapter and references in the Social Protection chapter demonstrate a focus on this critical issue. The PML-N manifesto

<sup>1</sup> [https://unhabitat.org/sites/default/files/2023/06/4.\\_pakistan\\_country\\_report\\_2023\\_b5\\_final\\_compressed.pdf](https://unhabitat.org/sites/default/files/2023/06/4._pakistan_country_report_2023_b5_final_compressed.pdf)

<sup>2</sup> [https://en.wikipedia.org/wiki/List\\_of\\_glaciers\\_in\\_Pakistan#:~:text=The%20following%20is%20a%20list,Gilgit%20Baltistan%20and%20Khyber%20Pakhtunkhwa.](https://en.wikipedia.org/wiki/List_of_glaciers_in_Pakistan#:~:text=The%20following%20is%20a%20list,Gilgit%20Baltistan%20and%20Khyber%20Pakhtunkhwa.)

<sup>3</sup> Monazza Aslam & Rawal S. “The Climate Crisis: Education is Critical for Building Resilience to Vulnerabilities” - ASER Notes 2023 (pp. 13-17)

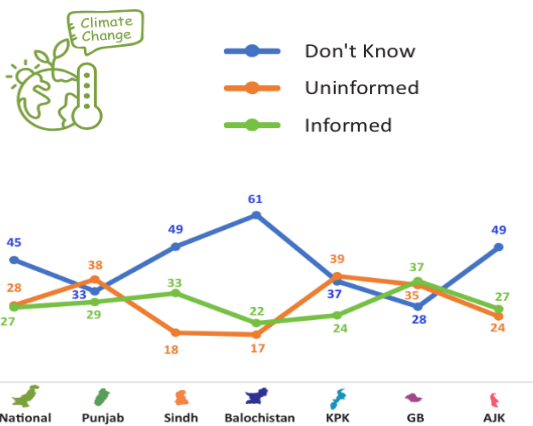
integrates climate change into its education chapter with a dedicated section on building a climate-resilient education system. Similarly, PTI's "Climate Change: A Silent Killer" chapter outlines strategies for mitigating climate change effects.

However, the key question remains: Can these promises be translated into concrete action?

The ASER 2023 data provides a compelling case for prioritizing climate change adaptation in education. By implementing the policy recommendations outlined in this brief, Pakistan can ensure its education system is equipped to handle future climate challenges.

**The nationwide ASER 2023 data reveals the following trends:**

- **Low Awareness:** The national survey reveals a significant knowledge gap regarding climate change; over 72% of respondents said that they are "uninformed." This highlights the need for nationwide awareness campaigns to educate the public about climate change impacts and adaptation strategies. Schools, students, teachers, parents/communities are key target groups integrating Climate Change in curricula, pedagogy and teacher training.

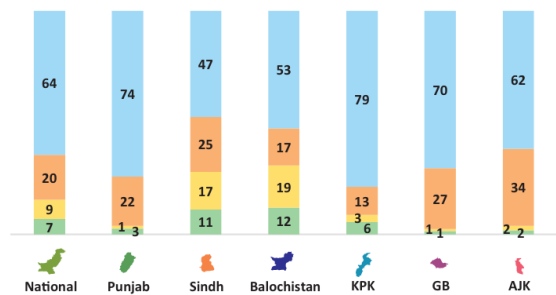


**Figure 1: How well informed do you feel you are about climate change.**

- **Education Disruption:** Many households reported disruptions in children's education due to natural disasters. This is particularly concerning in areas like Kashmir, where 34% of households reported schooling being extremely affected. 43% and 36% in Sindh and Balochistan being extremely and moderately affected by natural disasters. Education and learning losses compound when schools are closed or dysfunctional and it is vital to build resilience from climate shocks.

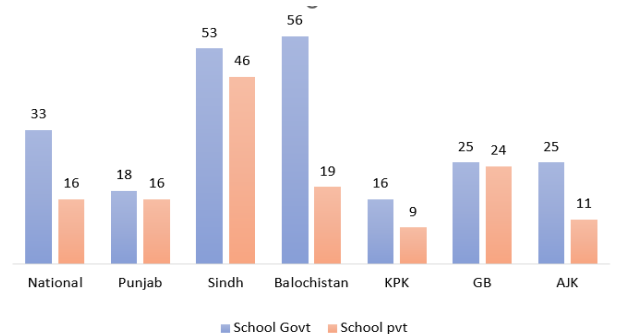


■ Somewhat affected  
■ Moderately Affected  
■ Extremely affected  
■ Not at all



**Figure 2: Was your children's schooling affected due to natural disaster last year?**

- **Damaged Schools:** The ASER 2023 data reveals widespread damage to schools, with government schools being more affected (33%) than private schools (15%) in most provinces. (Sindh govt. 53% / Balochistan govt. 56%) The damage disrupts education and necessitates urgent reconstruction efforts that incorporate climate-resilient building practices. Resources for reconstruction are hard to mobilize especially in resource strapped countries.



**Figure 3: Schools damaged by natural disaster**

- **Uneven Reconstruction/Rehabilitation Assistance:** The ASER data reveal an uneven distribution of assistance for damaged schools. While some provinces like Gilgit-Baltistan and Khyber Pakhtunkhwa show a relatively high

percentage of schools receiving aid, others like Sindh have lower rates; a more equitable approach to ensure all affected schools receive proper support.

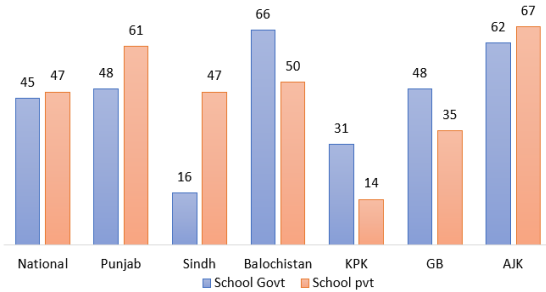


Figure 4: Assistance received by schools

- Increased Disasters:** A substantial percentage of households (ranging from 12% in Khyber Pakhtunkhwa to 38% in Balochistan) reported being significantly impacted by natural disasters in the past year. This aligns with the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report, which emphasizes the increased frequency and intensity of extreme weather events due to climate change.

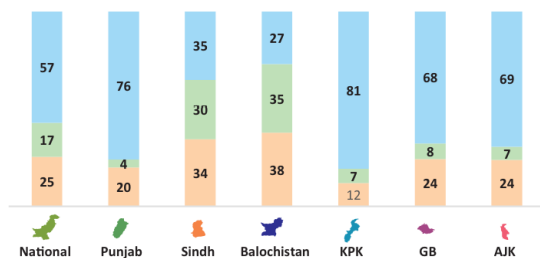


Figure 5: Has your family been impacted by a natural disaster/flooding within the last year?

- Psychological Impact:** Climate disasters have a significant mental health impact. A substantial number of families across provinces reported substantial or somewhat negative effects on their psychological/mental wellbeing. Addressing the mental health consequences of climate change is crucial for building individual and community resilience. Mental health is a major challenge of students, teachers and families.

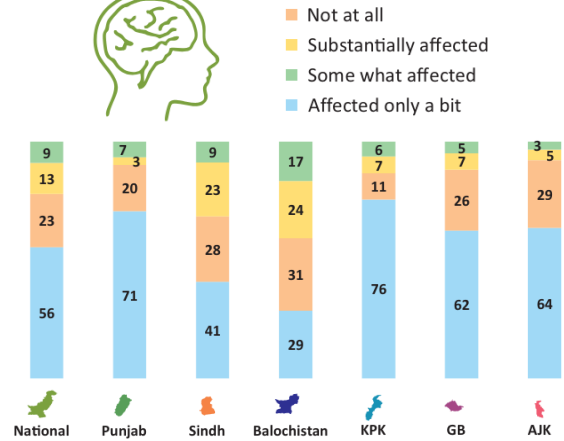


Figure 6: Has your psychological well-being been affected due to climate change?

- Economic Losses:** The financial burden of climate disasters is immense. A significant portion of households (ranging from 3% in Gilgit-Baltistan to 23% in Punjab) reported losing over half their earnings due to recurrent natural disasters. This economic hardship can push vulnerable populations further into poverty. Detailed description is given in the following graph.

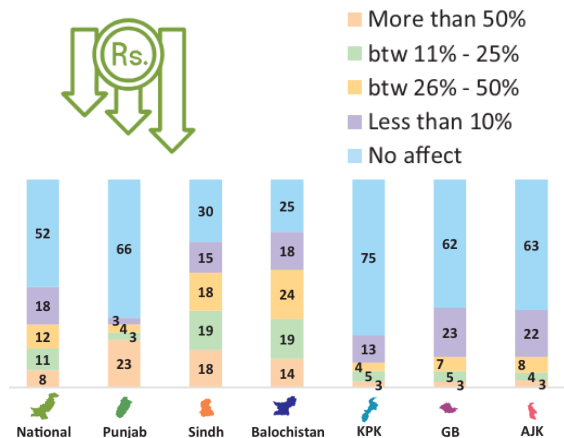


Figure 7: To what extent was your income negatively impacted by natural disasters?

## Policy Recommendations for Urgent Actions:

Impressive promises have been made by political parties (PML-N and PPP) in their party manifestos for climate change and education. The recommendations below are crafted to help the parties and decision makers in power in Pakistan

accelerate the implementation of manifesto promises<sup>4</sup> and principles on Climate Change and Education

- **Climate-Resilient Design and Infrastructure:** Invest in building and retrofitting schools with climate-resilient materials and designs to ensure they can withstand extreme weather events. Alter school design in emergency/disaster prone areas with kitchen and store as schools are officially used for shelters as first protection spaces during disasters; without appropriate facilities school furniture and infrastructure is badly damaged and destroyed by families taking temporary refuge.
- **Nationwide Climate Change Education:** Launch comprehensive public awareness campaigns to educate citizens about climate change, its impacts, mitigation and adaptation strategies. It must engage schools, colleges, students and faculty, urgently integrating Climate Change in curriculum/textbooks, active holistic life skills, innovative pedagogy, and initial and continuous teachers' professional development
- **A regular Annual Budget and Provision in School Councils/SMC funds:** The budget for Climate Change/ Emergencies will support awareness, curriculum integration, training, innovations, accelerated learning for learning losses and minor/major rehabilitation.
- **Disaster Risk Reduction Programs:** Develop and implement national and provincial disaster risk reduction programs that prioritize early warning systems, evacuation planning, school drills and community preparedness training.
- **Mental Health Support:** Integrate sustainable mental health services into disaster response plans and invest in long-term mental health support programs for schools, students, teachers and communities impacted and vulnerable to climate shocks.
- **Social Safety Nets:** Strengthen and expand existing social safety nets to provide financial assistance to communities and individuals disproportionately

affected by climate change disasters/emergencies; households can be profoundly affected needing income stabilization. ASER 2023 reveals trends in improvement of Social Safety nets national coverage from 2019 (3%) to 2023 (12%)

- **Equitable Distribution of Resources:** Ensure an equitable and increased allocation and distribution of resources for post-disaster reconstruction and climate adaptation efforts, focusing first on the most vulnerable schools, disaster prone schools.
- **Open Portal on Climate Change by the Ministry of Education/School Education Departments/ Curriculum/ Training directorates:** The "Open-Source Portal" is critical for schools/ colleges and public on climate change awareness, learning materials, training modules and resource mobilisation. This can be shared concurrently by CSOs & Universities. Climate change mitigation and learning resources have been proliferating over the years; sadly, as Afia Salam an expert and activist on climate change remarks "these are not reflected in our curriculum, textbooks, pedagogy and school/community-based preparedness in Pakistan". The materials are available under multiple platforms of the Ministry of Climate Change, School Education Dept. South Punjab, WWF, AKU-IED, Idara-e-Taleem-o-Aagahi (ITA), UNESCO, IBE Council, UNICEF, RewirEd Summit 2023; Teachers for the Planet and many more.

## Conclusion:

The ASER 2023 data presents a compelling case for immediate action on climate change in Pakistan. By implementing the proposed policy recommendations, Pakistan can build a more resilient future, safeguard its citizens' wellbeing, offset learning losses and ensure strong capabilities for sustainable development in the face of climate change crises.

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<sup>4</sup> PML-N Manifesto ([give link](#)) PPP Manifesto ([Give Link](#))

## Resources / References:

RewirED Summits- COP 27/28

<https://rewiredsummit.org/wp-content/uploads/2024/04/rewired-highlights-report-2023-digital.pdf>

Innovations & CC <https://rewiredsummit.org/innovation-in-education/>

<https://rewiredsummit.org/agenda-day-2/>

**Teachers for the Planet 2023:** <https://teachersfortheplanet.org/>

**ITA Publications: Mahol Sahelian Trilogy** “Pahaar Sa Kam, Sabz Bagh aur Naiyya Paar”

<https://itapublications.pakistanlearningfestival.com/product/mahol-sahelian-aur-pahaar-sa-kaam/>

<https://schools2030.org/wp-content/uploads/2022/09/Roundtable-16-participant-inputs.pdf>

<https://www.youtube.com/watch?v=kUflrGZBb8k>

UNESCO: <https://www.unesco.org/en/climate-change/education>

<https://www.unesco.org/en/sustainable-development/education/greening-future?hub=761>

<https://www.unesco.org/en/sustainable-development/education/cop28>

AKU-IED: <https://www.aku.edu/iedpk/educational-resources/Pages/environment.aspx>

WWF: The Green School Program Pakistan:

[https://www.wfpak.org/take\\_action/environmental\\_education/green\\_school\\_programme\\_/#:~:text=The%20Green%20School%20Programme%20is,for%20reducing%20their%20ecological%20footprint.](https://www.wfpak.org/take_action/environmental_education/green_school_programme_/#:~:text=The%20Green%20School%20Programme%20is,for%20reducing%20their%20ecological%20footprint.)