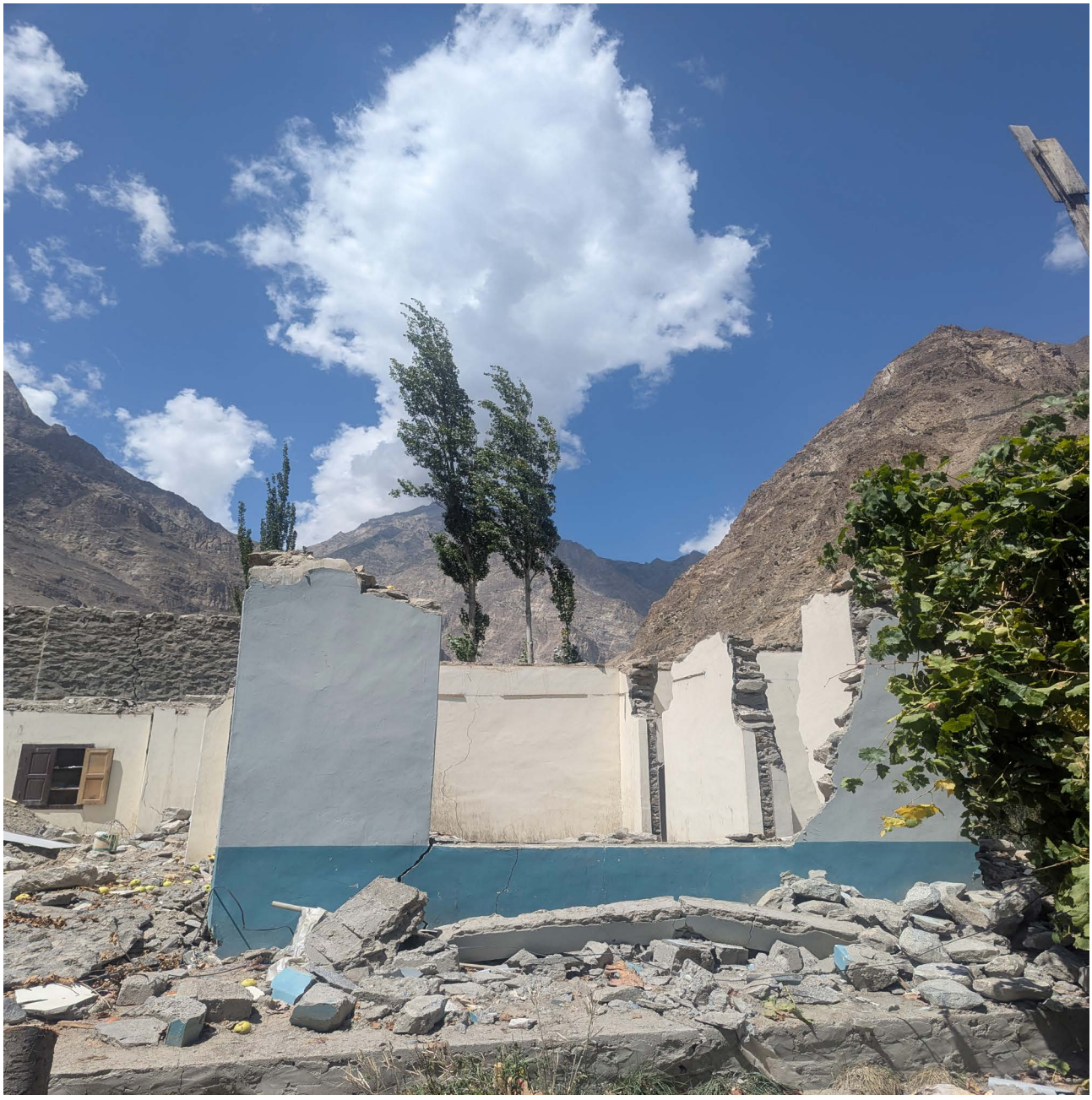
KADO

Gilgit-Baltistan Floods & GLOFs

REPORT 2025



Contents

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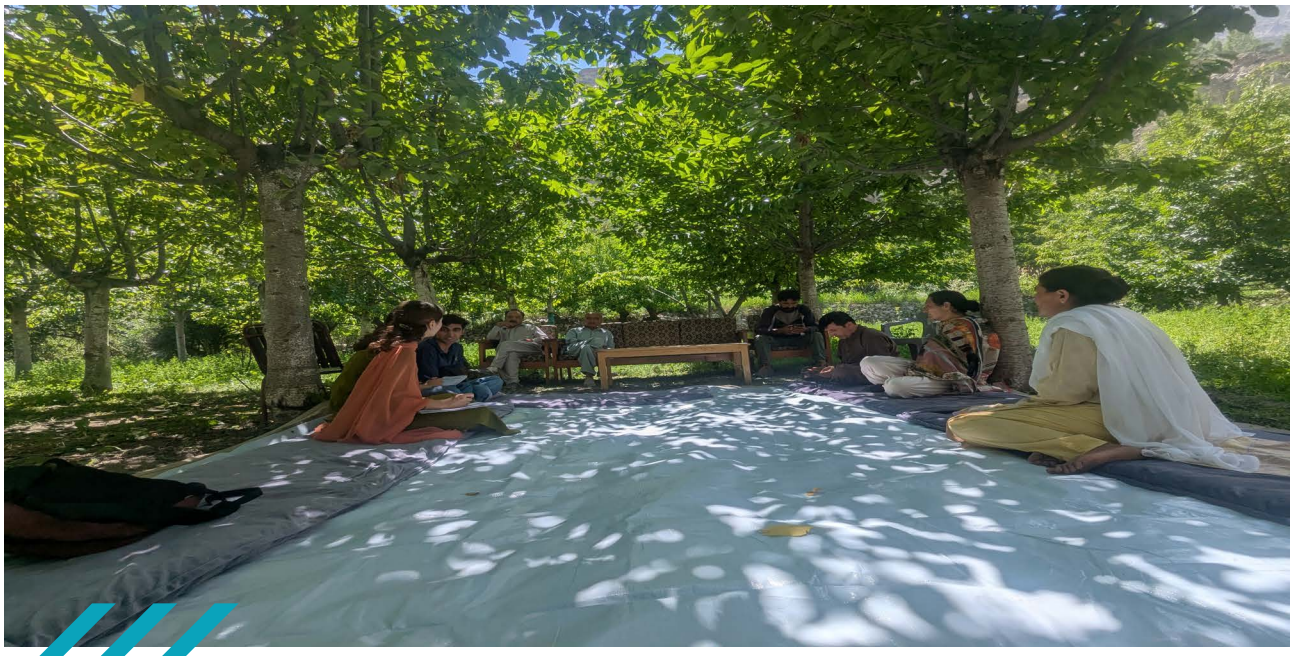


Executive Summary

As of August 20, 2025, floods and glacial lake outburst floods (GLOFs) caused 72+ confirmed deaths, 130+ injuries, and left dozens missing across Gilgit-Baltistan (GB). Over 500 homes were destroyed and 674 damaged, while dozens of bridges and at least 22 km of roads were swept away. The GB government estimates losses exceeding Rs 20 billion and has requested Rs 7 billion in urgent federal assistance (APP, Aug 11, Express Tribune, Aug 10). This year, record-high summer temperatures in Gilgit-Baltistan accelerated glacier melt, leading to heavy flooding in districts across the region. Chilas hit 48.5°C, the highest since July 17, 1997, when it was 47.7°C. In Bunji, the temperature reached 46.1°C, the highest since July 1971.

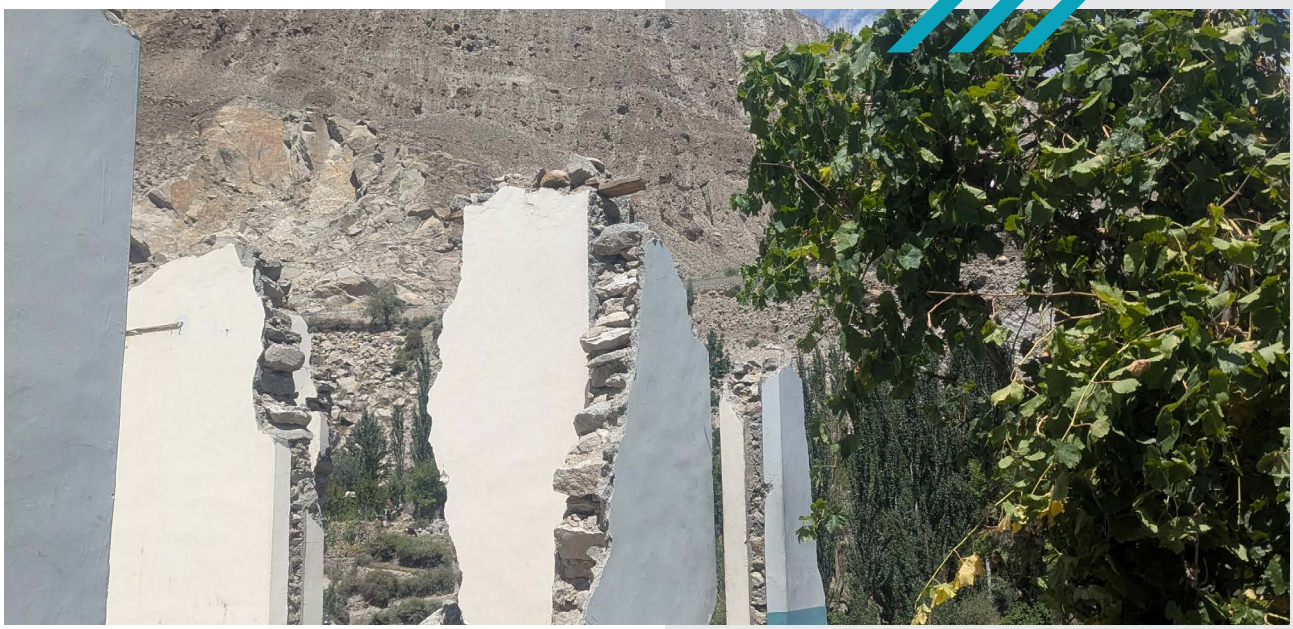
District-Level Impacts

Hunza

GLOFs from the Shispar Glacier and flooding from Juchar Nullah swept away homes, orchards, and sections of the Karakoram Highway (KKH), severing access to Central and Upper Hunza. This has created severe transportation bottlenecks, raising fears of food shortages and inflation, while tourism and cross-border trade with China remain paralyzed.

Diamer

Flash floods in Babusar Valley killed at least 9, left 10–12 missing, and destroyed over 500 homes, 27 bridges, and 22 vehicles. The disaster has displaced families, disrupted agriculture, and severely hurt the district's tourism economy.



Gilgit District

A mudslide in Danyor killed 7 volunteers working to restore a water channel, while flash floods in Haramosh killed a child and injured 8 others. With over 300 homes destroyed, the district highlights the vulnerability of communities relying on self-help in the absence of robust disaster-response mechanisms.

Ghizer:

Floods destroyed homes and shops in Kanchi and Silpi, while in Yasin Valley, a mosque, school, orchards, and key roads were damaged. The losses disrupted social life, education, and livelihoods, with orchards and farmland destruction threatening food security.

Astore

Cloudburst-linked flooding and landslides cut off vital road links. The district's dependence on limited connectivity and proximity to glacial streams heightens its vulnerability to recurrent disasters.

Nagar

Officially declared calamity-hit, Nagar remains highly exposed to outbursts from the Hoper Glacier. Even localized floods have damaged farmland and roads, while the steep terrain makes communities especially vulnerable.

Baltistan Division

(Skardu, Shigar, Ghanche, Kharmang)

Skardu and Shigar suffered widespread flood damage in multiple valleys. In Ghanche, over 50 homes were destroyed in Kondus Valley, while Kharmang reported one calamity-hit area with localized damage. The entire division is among the most climate-vulnerable, given its dense glacial network, fragile ecosystems, and recurrent flash floods.

Climate Drivers

The floods are being linked to climate extremes

Heatwaves

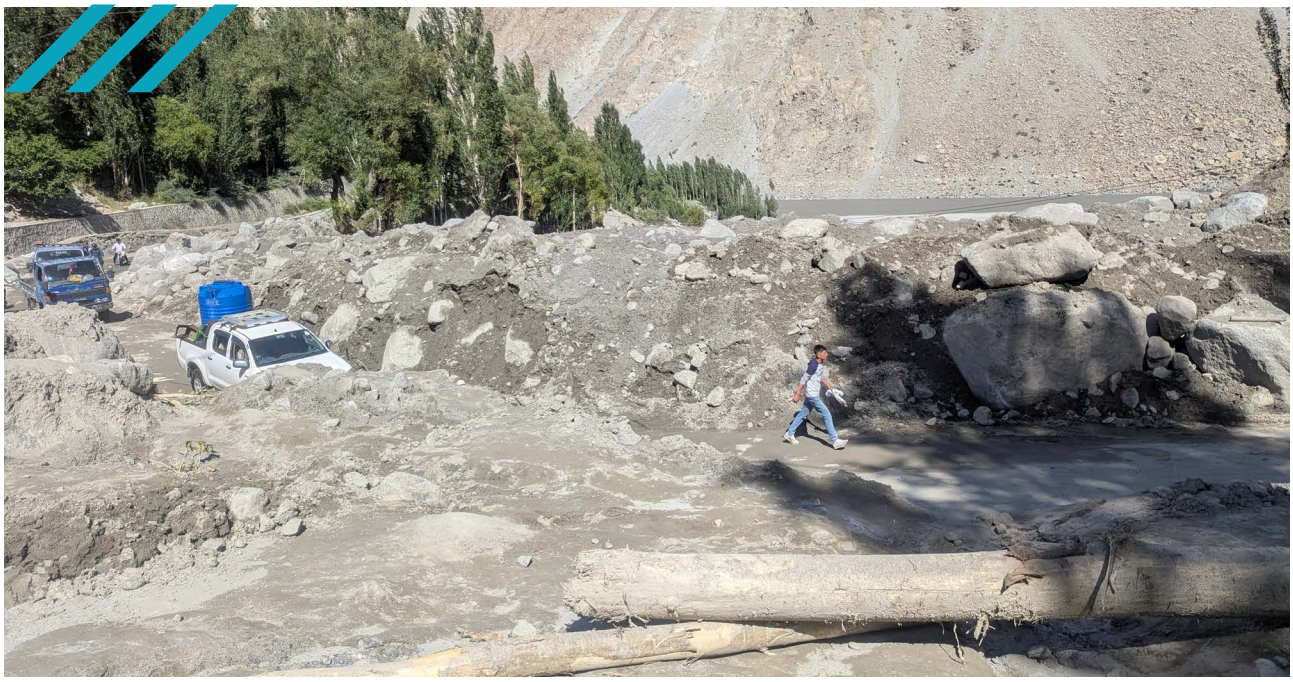
Chilas recorded 48.5°C in July 2025 — the hottest since 1997. Bunji saw 46.1°C, the highest since 1971.

Heavy Monsoon

Rainfall was 10–15% higher than average, compounding glacier melt and triggering multiple GLOFs across Hunza, Skardu, and Ghizer.

Regional Outlook

The cumulative impact of these events underscores Gilgit-Baltistan's high vulnerability to climate change, with glacial melt, flash floods, and landslides now recurring threats. The widespread destruction of homes, farmland, irrigation systems, and critical infrastructure has disrupted livelihoods, trade, and food security. Without urgent investments in climate-resilient infrastructure, early warning systems, and emergency response mechanisms, the region will remain highly exposed to recurring humanitarian crises.

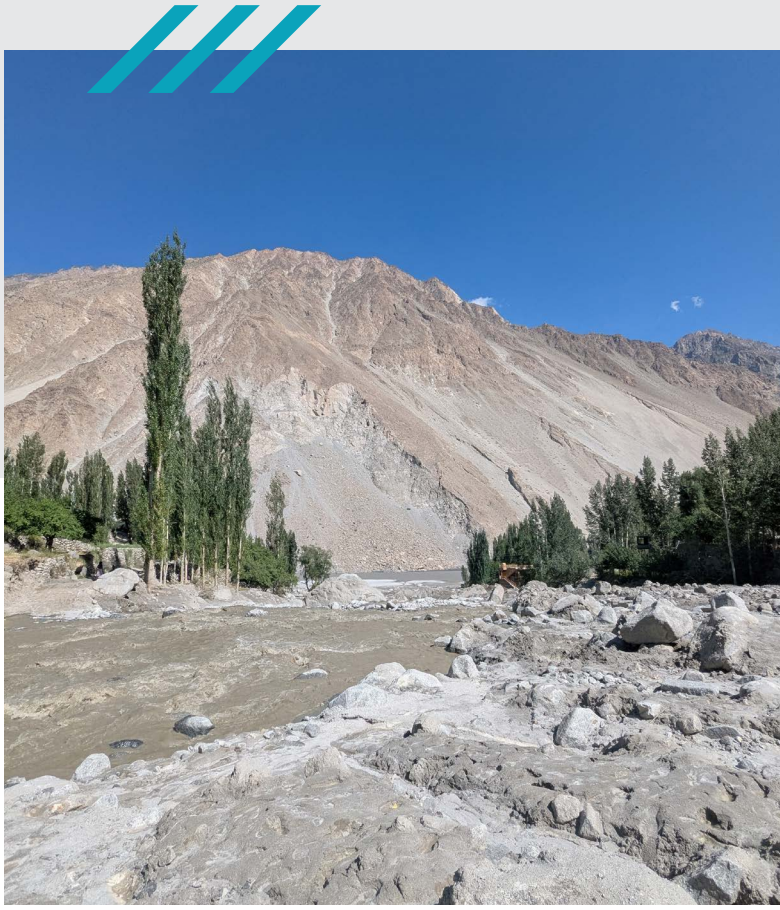


Introduction

Gilgit-Baltistan, home to some of the world's largest glaciers outside the polar regions, is increasingly at the frontline of the global climate crisis. In recent years, rising temperatures, erratic monsoon patterns, and accelerated glacial melt have dramatically increased the frequency and intensity of natural disasters across the region.

The summer of 2025 has proven to be one of the most devastating in recent memory, marked by widespread flash floods, glacial lake outburst floods (GLOFs), and landslides that have left deep humanitarian and economic scars.

This report documents the extent of losses up to 20 August 2025, highlighting the district-wise impacts, human casualties, damage to infrastructure, and disruption to livelihoods. It further underscores the structural vulnerabilities that amplify the risks, particularly the dependence on fragile road networks, the exposure of farmlands and orchards to flooding, and the lack of resilient infrastructure to withstand recurrent disasters. Here is a district wise situational analysis.

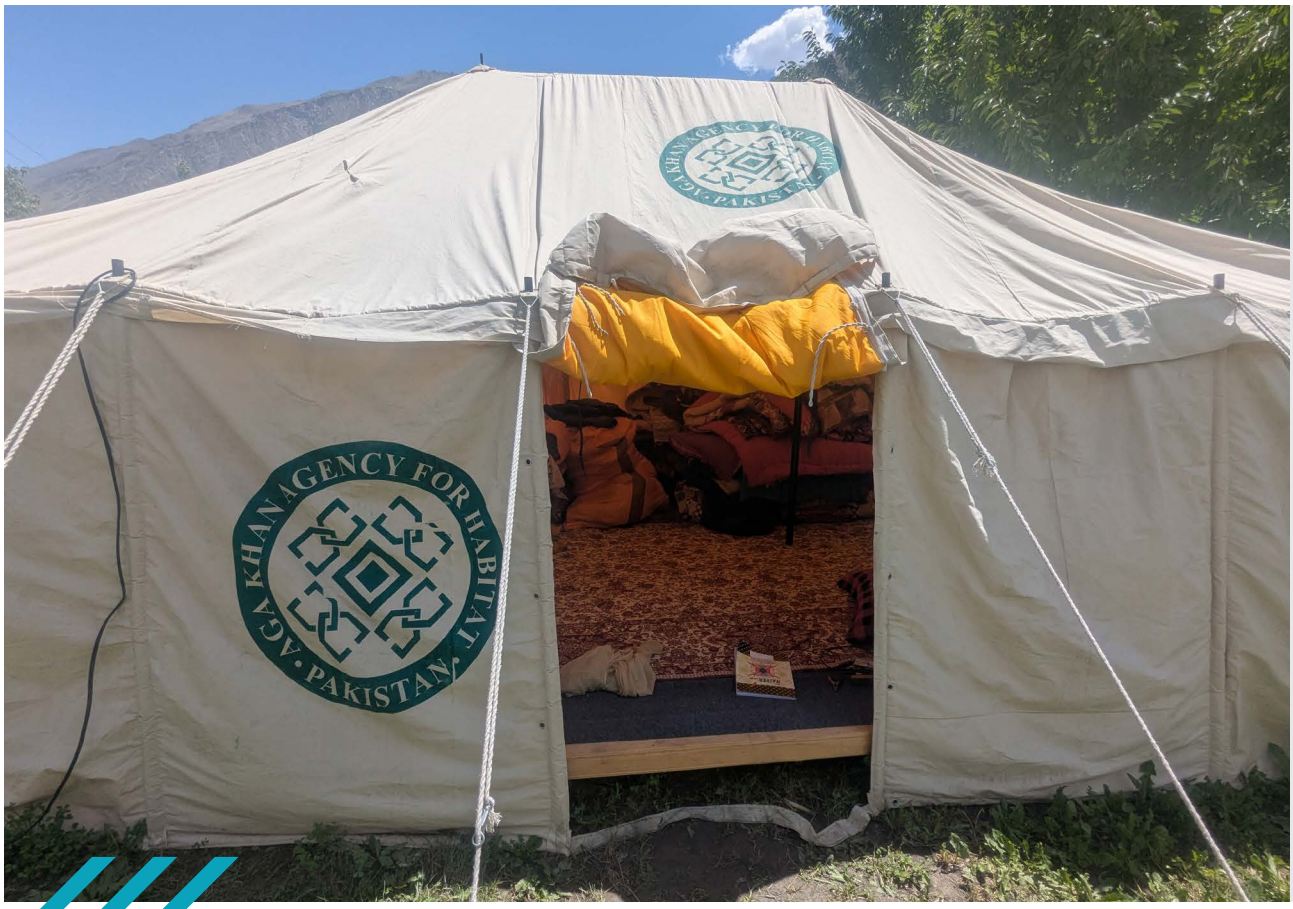


Hunza

On Aug 9–11, a GLOF from the Shispar Glacier triggered flash floods in Hassanabad, damaging the Karakoram Highway (KKH) and destroying parts of the Hassanabad bridge. Homes and orchards were washed away. 10 houses and a community center were destroyed, 7 partially damaged, part of 15 deaths across GB (Dawn, Aug 11, The Nation, Aug 12).

On Aug 13–14, a flood from Juchar Nullah in Gulmit (Gojal) blocked KKH, stranding thousands. Over 50 workers narrowly escaped as floodwaters swept through, destroying orchards, irrigation channels, electricity, and telecom lines. A restaurant was swept away beside orchards and fruit trees (The News, Aug 14, Minute Mirror, Aug 14).

The Karakoram Highway (KKH), Hunza's main road link, was swept away at two points in Hassanabad and near Gulmit (Juchar Nullah), blocking access to Central and Upper Hunza, cutting thousands off from Gilgit and supply routes..



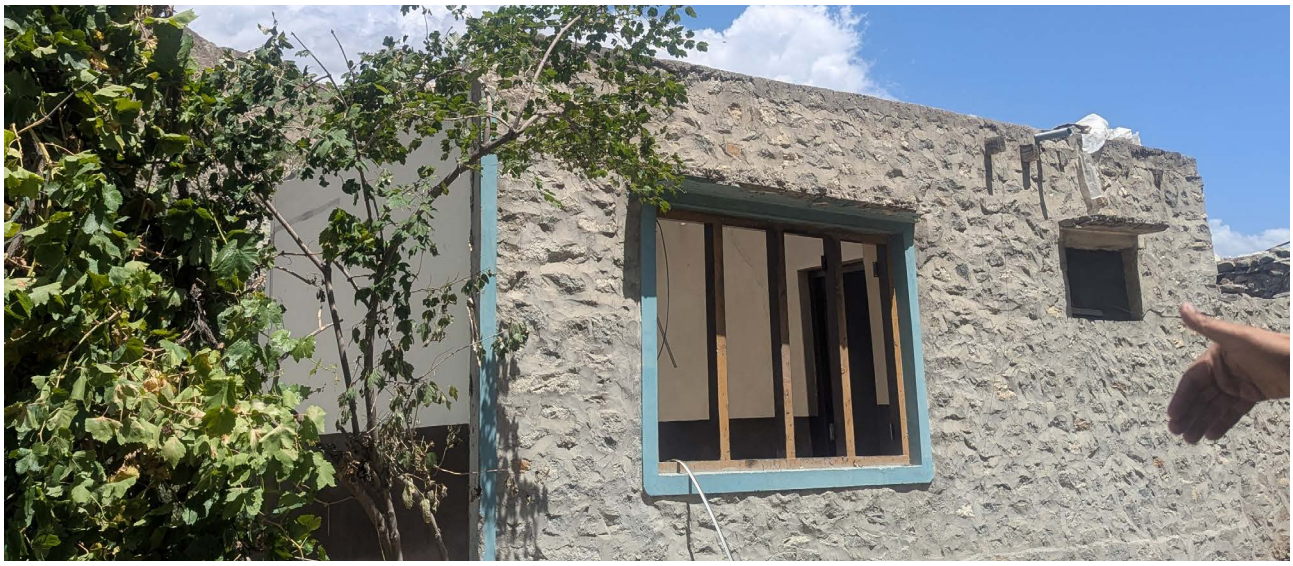
Diamer

On July 19–21, cloudbursts and flash floods in Babusar Valley killed at least 9 people reported dead and left 10–12 missing, many of them tourists (Pakistan Today, July 21, Dunya News, July 21).

Over 500 homes were destroyed, along with 12 km of roads, 27 bridges, and 22 vehicles. More than 300 stranded tourists were later rescued by the Pakistan Army (Pakistan Today, July 21, APP, July 22).

The floods in Diamer have left deep scars on the district's social and economic fabric. Entire communities have been displaced, with families forced into temporary shelters after losing their homes and sources of livelihood. The collapse of bridges and road links has isolated several valleys, making it difficult for relief teams to reach the worst-hit areas. With agriculture land buried under debris and local businesses disrupted, the disaster has threatened food security and economic stability in a region already vulnerable to poverty and seasonal hardships.

Tourism, one of Diamer's main economic drivers due to its proximity to Babusar Pass, has also suffered a severe blow. The tragic deaths of tourists, combined with road blockages and destroyed infrastructure, have shaken public confidence in the valley as a safe travel destination. This not only affects short-term visitor inflows but also undermines the district's long-term tourism potential. The trauma of loss, coupled with the uncertainty of rehabilitation and recovery, continues to weigh heavily on both residents and the local economy.



Gilgit District

On Aug 11, a mudslide in Danyor killed 7 volunteers and injured 3 more as they were repairing a water channel damaged by earlier floods (VOA/AP, Aug 11). In Haramosh Valley, 1 child was killed and 8 others injured during flash floods (Dawn, Aug 12). According to GB authorities, 318 homes were destroyed and 674 partially damaged in the district (APP, Aug 13).

The incident underscores a broader reality confronting Gilgit-Baltistan: repeated natural disasters, intensified by climate change, are overwhelming existing systems. Water, crucial for survival and livelihoods, was being restored through volunteer effort rather than formal mechanisms. The mudslide in Danyor therefore serves as both a somber tribute to community courage and a stark warning: there is an urgent need for proactive public infrastructure support, improved disaster-response protocols, and better protection for frontline volunteers.

Ghizer

In Kanchi and Silpi (near Gahkuch), 3 homes were destroyed and 5 partially damaged; a bakery, shops, and livestock shelters were also washed away (Dawn, Aug 13). In Yasin Valley, a mosque, a school, several homes, and orchards were damaged by flash floods, along with key link roads (The News, Aug 13).

The floods caused severe disruptions to community life, leaving families without safe shelter and destroying small businesses that supported local livelihoods. Damage to schools, mosques, and roads has undermined access to education, religious life, and essential services, while the loss of orchards and farmland threatens long-term food security. Livestock shelters being swept away has further deepened economic hardship, particularly for households dependent on farming and animal husbandry. Together, these impacts have not only displaced families but also weakened the social and economic fabric of the affected valleys.

Astore

At least 1 death was confirmed in Babusar-linked flooding in July, with several road links cut off due to landslides (The News, July 22). Seasonal cloudbursts and the overflow of glacial streams often trigger flash floods that sweep away homes, farmland, and critical infrastructure, isolating entire communities for days.

The district's reliance on a limited number of road links for access to food, fuel, and medical supplies makes it especially vulnerable, as even a single landslide can cut off thousands of residents. With climate change accelerating glacial melt and intensifying rainfall patterns, Astore's exposure to recurrent flooding poses a growing risk to both human lives and long-term development in the region.

Nagar

Nagar was officially included in GB's list of calamity-hit areas (1 affected zone) (Express Tribune, Aug 10).
Localized flooding damaged farmland and road connectivity; experts warn Nagar remains vulnerable due to Hoper Glacier and adjacent catchments (Dawn, Aug 11).

Nagar's vulnerability to flooding is closely tied to the presence of the Hoper Glacier, which feeds multiple streams and rivers running through the district. Rapid melting or sudden outbursts from this glacier can unleash destructive floods that inundate villages, wash away farmland, and sever road links. The steep terrain amplifies the impact, as floodwaters gain momentum quickly and leave little time for evacuation or protective measures. With most communities dependent on fragile road networks and agriculture along riverbanks, any disturbance from the Hoper Glacier poses an immediate threat to both livelihoods and connectivity in the district.

Baltistan Division (Skardu, Shigar, Ghanche, Kharmang)

In Skardu and Shigar, 4 areas each were declared calamity-hit. Flash floods damaged homes, farmland, irrigation channels, and link roads, including Qaimabad Tisar and Garam Chashma valleys (APP, Aug 11).

In Ghanche (Kondus Valley), over 50 homes were destroyed by landslides and flash floods (Dawn, Aug 12).
In Kharmang, 1 calamity-hit area was listed, with localized infrastructure damage (Express Tribune, Aug 10).

Baltistan Division is acutely exposed to the impacts of climate change, with its high-altitude terrain, fragile ecosystems, and dense network of glaciers making it one of the most vulnerable regions in Gilgit-Baltistan. Frequent flash floods, glacial lake outbursts, and landslides regularly damage homes, farmland, and critical infrastructure, while shifting weather patterns intensify the risks.

Districts like Skardu and Shigar face repeated flooding of valleys and irrigation systems, Ghanche is prone to destructive landslides in remote settlements, and Kharmang struggles with localized but disruptive infrastructure losses. As climate change accelerates glacial melt and increases the intensity of cloudbursts, Baltistan's communities remain on the frontline of recurring disasters, with their livelihoods, food security, and connectivity under constant threat.

Regional Overview

Casualties & Injuries: At least 72 deaths, 130 injured, and dozens missing, including tourists. Economic Losses: Estimated Rs 20 billion, with Rs 7 billion requested in immediate federal relief(APP,Aug11).

Climate Drivers: According to climate experts, extreme heatwaves (48.5°C) accelerated glacial melt, while monsoon rainfall was 10–15% heavier than average, triggering multiple GLOFs (The Guardian, Aug 10).

S.No	Category	Details
1	Human Casualties	45 deaths and 42 injured across GB (GBDMA / Dawn)
2	District Breakdown of Human Causalities	Diamer: 19 dead · Ghizer: 12 dead · Gilgit: 10 dead · Kharmang: 2 dead · Astore: 1 dead · Shigar: 1 dead (GBDMA / Dawn)
3	Housing Damage	993 houses damaged, including 674 partially damaged (GBDMA / Dawn)
4	Bridges	87 bridges washed away or destroyed (GBDMA / Dawn)
5	Road Disruptions	Major blockages in Shamshal & Chaporsan (Hunza), Baltistan Highway (Ustak), Ghizer–Chitral Road, and Hassanabad Road (Hunza) (GBDMA / Dawn)
6	Monetary Losses	Estimated Rs 20 billion in damages across Gilgit-Baltistan

(Pakistan Today, Dunya News)

Conclusion

The floods of 2025 have reaffirmed the urgency of addressing Gilgit-Baltistan's growing climate vulnerability. With hundreds of homes destroyed, dozens of lives lost, and billions of rupees in damage, the disaster has paralyzed livelihoods, food supply chains, and essential infrastructure. Districts such as Hunza, Diamer, Gilgit, Ghizer, and the wider Baltistan Division remain especially fragile due to their proximity to glaciers, steep mountainous terrain, and reliance on single transport corridors such as the Karakoram Highway.

The scale and distribution of losses demonstrate that climate-induced disasters are no longer isolated events but a systemic threat to the region's stability and development. As climate change accelerates, Gilgit-Baltistan faces the dual challenge of recurring humanitarian crises and long-term economic setbacks unless urgent and sustained interventions are implemented.

Way Forward

The scale of destruction witnessed across Gilgit-Baltistan during the 2025 floods and GLOFs is a stark reminder that climate-induced disasters are no longer sporadic shocks but recurring crises with escalating impacts. While immediate relief efforts have provided temporary respite, the long-term resilience of communities depends on strategic, forward-looking measures. The lessons from this year's disaster underscore the urgent need to shift from a reactive approach to a proactive framework that prioritizes preparedness, resilience, and adaptation.
The following recommendations outline a comprehensive pathway to strengthen Gilgit-Baltistan's capacity to withstand future disasters. They emphasize investments in infrastructure, institutional capacity, community empowerment, and sustainable development practices tailored to the region's unique ecological and social vulnerabilities. Only through such a multidimensional strategy can the cycle of loss and recovery be broken, paving the way for safer, more resilient mountain communities.

1. Strengthen Early Warning Systems

Expand real-time monitoring of glaciers, rivers, and rainfall with community-level early warning dissemination.

2. Invest in Climate-Resilient Infrastructure

Prioritize flood-resistant bridges, all-weather road links, protective embankments, and reinforced housing designs.

3. Enhance Community Preparedness

Support training for local volunteers, disaster response teams, and village-level contingency planning.

4. Ensure Food and Supply Security

Establish strategic reserves of essential commodities and consider alternative transport corridors and airlifting mechanisms for emergencies.

5. Protect Livelihoods and Ecosystems

Introduce climate-smart agriculture, orchard rehabilitation programs, and support for displaced families through livelihood grants.

6. Federal–Provincial Coordination

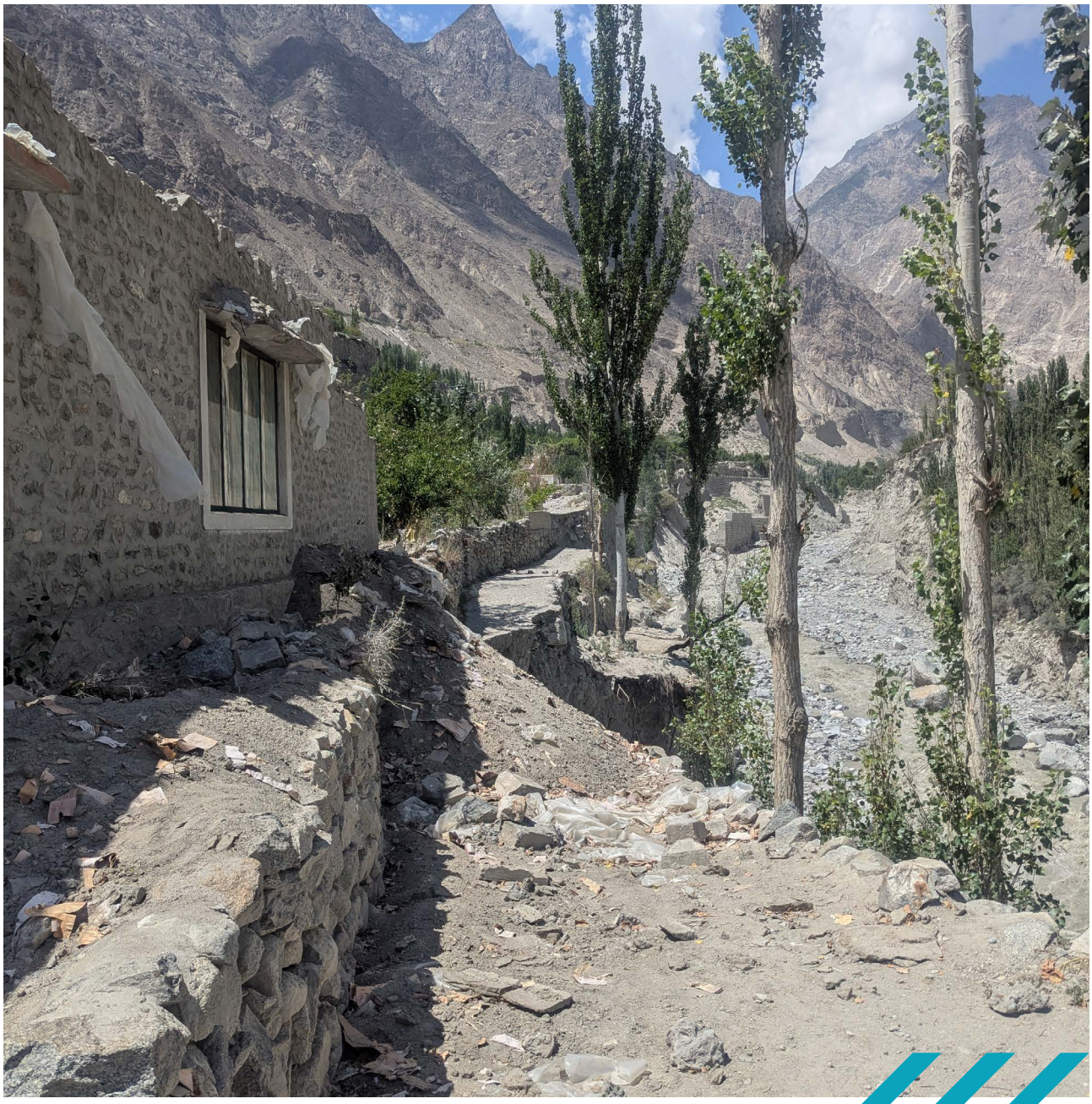
Secure timely federal support for reconstruction and ensure GBDMA's institutional capacity is strengthened with resources and autonomy.

7. Strengthen Regional and Local Civil Society Organizations

Empower community-based organizations and local NGOs to play a more active role in disaster preparedness, relief delivery, and long-term recovery. Civil society networks already rooted in local communities can provide rapid responses, bridge gaps in state services, and ensure that vulnerable groups receive timely and equitable assistance.

8. Long-Term Climate Adaptation

Integrate glacial risk management and flood preparedness into GB's development policies, while advocating for global climate finance to support vulnerable mountain communities.



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