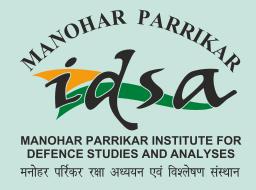
Non Traditional Security Digest

Impacts of Floods in Punjab, Uttarakhand, Himachal Pradesh and Jammu & Kashmir

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INTRODUCTION

The monsoon season of 2025 has been exceptionally intense in northern India, particularly in the northwestern region such as Punjab, Uttarakhand, Himachal Pradesh and Jammu & Kashmir which have recorded significantly higher than average rainfall. Between June 1 and August 31, the region recorded approximately 614.2 mm of rainfall, which is about 27% more than the long-term average of 484.9 mm. In August, the rainfall reached up to 265 mm, marking the highest level since 2001.

Forecasts for September 2025 indicate that rainfall is likely to remain considerably above normal levels. According to the Indian Meteorological Department (IMD), the total precipitation for the month of September is projected to exceed 109% of the long-term average of 167.9 mm. Such conditions are expected to further intensify hydrometeorological risks in these regions.

These meteorological conditions have been influenced by an unusually large number of western disturbances, 14 in total, which have interacted with the monsoon trough. Such interactions have intensified

convective processes over the Himalayan region, resulting in episodes of extreme precipitation, including cloud bursts, flash floods, and landslides.

STATE LEVEL IMPACTS

PUNJAB

Punjab declares all 23 districts flood-hit: Crops damaged, 3.5 lakh people affected

The Punjab government Tuesday declared all 23 districts flood-hit and said the deluge has claimed 30 lives and impacted over 3.5 lakh people so far. Dam reservoirs continued to remain full to the brim while the rivers were flowing near danger mark, leading to alerts in several districts. Till the writing of this report the flood fury has spread to all 23 districts, up from earlier 12, and added that 1,400 villages have been declared as affected, impacting 3,54,626 people. As per initial assessments 1,48,590 hectares of standing crops have been damaged. Reports suggests that these are initial estimates which could significantly change in the future as it is difficult to analyze the exact extent of destruction to when the situation is still unfolding. The worst-hit areas include Gurdaspur, Mansa, Amritsar, Kapurthala, Ferozepur, Tarn Taran and Hoshiarpur. The Public Works, Water Resources and Power Departments

in the state have been instructed to start repairs of their infrastructure on a war-footing. Even as the situation in flood-ravaged Punjab is yet to be assessed by central teams, 30 deaths have been reported in the state.



Punjab's Ferozepur under sever impacts of Floods

As excessive water from the Sutlej has damaged standing crops in tens of thousands of acres and residents of dozens of villages are feeling the heat. The administration Ferozepur district carrying out round-the-clock rescue and relief operations in flood-affected areas following the rise in Sutlej river water levels. The main road leading to the Hussainiwala Retreat Ceremony site was damaged due to flooding but reports of repair work is also underway. People are being urged to shift to higher ground for safety.



Villagers strengtheing the embarkment of river in Ferozepur

As of 3 September 2025, the gauge and discharge readings at Harike and Hussainiwala headworks have confirmed water flow under High Flood norms, raising concerns in the flood-affected regions of At Harike Headworks, upstream gauge stood at 686.50 feet with a discharge of 3,35,030 cusecs, while downstream recorded 686.48 feet with 3,18,159 cusecs discharge. Similarly, at Hussainiwala Headworks, the upstream gauge was 646.50 feet with a discharge of while downstream 3,02,508 cusecs, recorded 646.15 feet with 3,01,918 cusecs discharge. As per norms, discharge above 3,00, 000 cusecs falls under the High Flood category, highlighting the critical situation at both barrages. Authorities have put nearby villages on high alert as rising water levels may worsen the ongoing flood crisis and hamper relief operations.

Hundreds of cattle heads, poultry birds perished in Punjab floods

Assessments as per Animal Husbandry Minister Punjab, suggests that 504 cattle heads, 73 sheep and goats and 160 pigs have perished across 14 districts -- Pathankot, Gurdaspur, Amritsar, Ferozepur, Fazilka, Kapurthala, Barnala, Bathinda, Hoshiarpur, Tarn Taran, Patiala, Jalandhar, Rupnagar and Moga.



People trying to save strangled livestock in floods

He has highlighted that around 18,304 poultry birds died in Gurdaspur, Rupnagar and Fazilka due to the collapse of poultry sheds. The stench of rotting animal carcasses hangs over many villages. Some news reports highlights that's in order to address these concerns, district administration in collaboration with social organizations, have so far arranged and distributed over 17,000 quintals of fodder.

NGOs and Religious Organizations in Punjab are playing a vital role to respond to floods

In response to the 2025 floods in Punjab, NGOs and religious organizations are playing a vital role by distributing critical relief materials like drinking water, medicines, and cooked rations, providing shelter with tarpaulins, and supporting evacuation and rescue operations for vulnerable populations, especially in floodlike Fazilka ravaged districts and Gurdaspur. Organizations such as Radha Soami Satsang Beas (RSSB), Shiromani Gurdwara Parbandhak Committee, Jyoti Foundation, Global Sikhs, the Red Cross Society and many more in coordination with local authorities and village leaders, are supplying essentials such as food, fodder for livestock, and sanitary items, highlighting a strong community-driven response alongside government efforts.

Agriculture Minister of India Shivraj Chouhan visited floodaffected regions of Punjab

Union Agriculture and Farmers Welfare Minister Shivraj Singh Chouhan on 4 September 2025 visited flood-hit areas of Punjab. Mr. Chouhan interacted with farmers in the flood-affected villages in Amritsar, Gurdaspur, and Kapurthala districts. In a social media post, he said the crisis is immense, but the Central Government will leave no stone unturned to take Punjab out of it. Mr Chouhan, who was on a day-long visit to the flood-affected Punjab, yesterday, stressed on short, medium and long-term plans for the reconstruction of the flood-affected areas.

Appreciating the services being provided by the general public and social workers to the flood victims in this hour of crisis, he said he salutes the spirit of service of Punjabis. The Minister said that this spirit of unity and service gives us the strength to come out of even bigger than the present crisis. He has assured full support from the Centre to the state. Two central government teams that toured the state, are preparing to submit detailed reports on the extent of damage to the central government.

PM Modi to visit flood-hit Punjab's Gurdaspur on September 9

Prime Minister Narendra Modi is scheduled to visit Punjab on September 9 to meet people and farmers affected by one of the worst floods the state has faced in recent years and to oversee relief operations and rehabilitation efforts. During the visit, he is expected to review the damage caused by rising waters that submerged villages and destroyed crops across multiple districts.

Government sources said that the Centre is committed to ensuring that Punjab will not be left alone in this crisis. The Prime Minister's visit will focus on both immediate and long-term recovery measures, including silt removal from fields, disease prevention, and the safe disposal of dead animals once floodwaters recede. Reports highlights that's Relief and rehabilitation will be carried out through coordinated efforts between the Centre and the state government.

News sources suggests that the Prime Minister is likely to stress the urgent need to strengthen embankments along the Sutlej, Beas, Ravi, and Ghaggar rivers, which have weakened over the years due to illegal mining and lack of maintenance, during his visit. These efforts are expected to form part of a broader flood-control plan, building on measures implemented during while the Vajpayee-Badal era. incorporating PM Modi's new action initiatives for disaster preparedness and mitigation.

UTTARAKHAND

The mountainous terrain of Uttarakhand experienced extensive damage across multiple districts, especially in Uttarkashi. On August 5th, a flash flood, which was likely triggered by a cloudburst or glacial

disturbance, swept through the residential and commercial areas, destroying homes, shops, and local markets. The disaster also washed away at least dozen hotels, in addition to access roads and bridges.

In Chamoli and Uttarkashi districts, intense monsoon rainfall led to land subsidence and the development of widening cracks in buildings. In areas such as Band Market and Kunwar Colony under the Nanda Nagar panchayat, 64 residents were evacuated and relocated to relief camps, while several others sought temporary shelter with relatives due to the structural instability of their homes.

Infrastructure under the Border Roads Organisation (BRO) sustained severe damage, with overall losses estimated at nearly ₹100 crore. Among the most critical impacts were the destruction of a 600-metre road segment in Dharali, two bridges, and a culvert caused by flash floods. Key transport corridors. including the Joshimath-Malari and Gangotri-Dharasu routes, were heavily disrupted. Emergency repair expenses were projected at ₹60 crore, with urgent interventions required to restore connectivity during the ongoing monsoon season.



By early September, persistent rainfall had resulted in the closure of 314 roads across the state due to landslides and related blockages, with Chamoli district alone accounting for 57 of these disruptions. The affected network comprised 100 Public Works Department (PWD) roads, eight national highways, and eight state highways. Efforts were actively underway to restore connectivity and reopen these critical routes at the earliest possible time.

Human Toll: Casualties, Missing,& Displacement

The human impact of the disaster in Uttarakhand was significant. The state government sought ₹5,702 crore in disaster relief from the central authorities to address the loss of 79 lives, 115 injuries, and 90 persons reported missing between April and August 2025. The floods further resulted in the death of approximately 3,953 livestock,

while thousands of residential commercial structures were either severely damaged or completely destroyed. In Dharali, a month after the calamity, 63 individuals remained missing, with displaced residents continuing to reside in tents or temporary shelters and depending on community kitchens for sustenance. Approximately 25 families were rendered homeless, and debris measuring 15-20 feet in depth persisted on the ground well after the floodwaters had receded.

Local Rescue and Response Operations

Following the flash flood in Dharali, rescue operations were initiated without delay. In the initial phase, 190 individuals were evacuated by state and central response agencies, with later figures indicating a total of 409 people rescued. The combined efforts of the Indian Army, National Disaster Response Force (NDRF), State Disaster Response Force (SDRF), and state administration involved the mobilization of nearly 230 personnel, supported specialized teams utilizing heavy machinery, drones, and ziplines to access remote and obstructed areas. The Indian Air Force supplemented these efforts by deploying Chinook and Mi-17V5 helicopters, along with AN-32 and C-295 aircraft, to transport

personnel, relief supplies, and stranded civilians. By 8 August, more than 226 individuals had been evacuated, while nearly 20 tonnes of relief material were delivered. Communication networks were reestablished using satellite and radio systems, and a temporary footbridge was constructed across the Bhagirathi River to restore connectivity between Dharali and Mukhawa. According to a ReliefWeb situation report, approximately 500–600 personnel, including Army, NDRF, and SDRF teams, were engaged in rescue operations, directly assisting around 150 people.

HIMACHAL PRADESH

Himachal Pradesh experienced one of the most destructive monsoon seasons in its recorded history. By 7 September 2025, official figures reported 366 fatalities, with 41 individuals still missing. Recovery operations were severely constrained by large-scale infrastructure collapse, as more than 800 roads remained obstructed and extensive damage to electricity and water supply systems left significant portions of the state without essential services.

Chief Minister Sukhvinder Singh Sukhu designated Himachal Pradesh as a disaster-affected state under the Disaster Management Act, reporting damages surpassing ₹3,056 crore since 20 June. The

most severely impacted districts included Chamba, Kullu, Lahaul and Spiti, Mandi, Shimla, Kangra, and Hamirpur.

In Mandi district, the scale of destruction was particularly severe. According to the central assessment mission, the Thunag subdivision alone accounted for losses of approximately ₹708 crore, including ₹302 crore in damages to public works, ₹190 crore to water infrastructure, and ₹34 crore to supply systems. Additionally, power extensive damage to residential commercial with properties, along significant livestock losses, was recorded.



Casualties and Specific Threats

Monsoon-related fatalities in Himachal Pradesh arose from a range of causes, including rain-induced landslides, flash floods, cloudbursts, drowning, fatal falls, and road accidents. Of the total casualties, 203 were weather-induced, while 163 resulted from road accidents. District-level

data indicated that Mandi reported the highest number of rain-related deaths, i.e. 37, followed by Kangra (31), Kullu (25), Chamba (21), Shimla (21), and other regions. In total, monsoon activity triggered 135 landslides, 95 flash floods, and 45 cloudbursts, with the districts of Lahaul and Spiti, Mandi, and Kullu being the most severely affected.

In early August, official reports estimated 276 fatalities, comprising 143 deaths from weather-induced events and 133 from road accidents. These figures were accompanied by substantial livestock losses and extensive damage to infrastructure, particularly in the districts of Mandi, Kangra, and Kullu.

Rescue and Evacuation Efforts

Large-scale humanitarian operations were undertaken during the Manimahesh Yatra. Over a two-day period, the NDRF rescued 1,459 pilgrims stranded between Chamba and Bharmour, despite hazardous conditions caused by landslides and narrow mountain pathways. The Indian Air Force (IAF) supported these efforts by deploying helicopters to evacuate nearly 350 pilgrims from Bharmaur to Chamba, while extended air operations airlifted an additional 1,166 pilgrims through Chinook sorties. Chief Minister Sukhvinder Singh Sukhu directed intensified rescue measures, which included

the restoration of road, power, and water networks, evacuation operations in Kullu and Shimla, and the airlifting of heavy machinery to inaccessible regions such as Banjar and Anni. By early September, approximately 10,000 of the 15,000 stranded Manimahesh pilgrims had been rescued, with key highway links restored and essential supplies delivered by air.

JAMMU & KASHMIR

Floodwaters entered several urban pockets in three districts of Jammu and Kashmir on 4 September 2025 as the Jhelum breached an embankment, forcing the authorities to evacuate around 9,000 people. Hundreds of civilians moved to safer locations in the Lasjan, Soiteng, Nowgam, Vyethpora, Padshahi Golpora, Bagh, and Mehjoornagar areas of Pulwama, Budgam, and Srinagar. Officials said the Jhelum, which was flowing above the danger mark, breached at Shalina in Budgam of central Kashmir. Floodwaters entered hundreds of houses in Zoonipora and adjacent pockets of Seerbagh, Summerbugh, and Lasjan.

It further needs to be highlighted that one landslide hit the Rattle hydroelectric project site in Drabshalla in the early hours on 4 Septemper. Five persons were injured after they were trapped under the debris. Three people who were seriously injured were

shifted to the Government Medical College, Doda, for specialised treatment. The 850 MW Rattle run-of-river scheme is located on the Chenab at Drabshalla village in Kishtwar.



Union Home Minister and Minister of Cooperation Shri Amit Shah visited Jammu

Shri Amit Shah, visited Jammu on 1 September and inspected the rain, flood, and landslide affected areas of Jammu division and took stock of the damages caused by the natural calamity. The Union Home Minister also met the flood-affected people in Mangu Chak village of Jammu. After the visit, Union Home Minister chaired a high-level meeting to review the latest situation. The Lieutenant Governor of Jammu & Kashmir, Shri Manoj Sinha, Chief Minister Shri Omar Abdullah, senior officers of the Central and UT Government attended the meeting. Union Home Minister expressed grief over

the loss of lives in the recent incidents. He said that a critical analysis of all Early Warning Apps (EWAs), their accuracy, and their reach to the grassroots level is necessary. He emphasized that improving our systems through critical analysis is the only way to move toward a zero-casualty approach. He highlighted the need for a critical review of the GLOF Early Warning System. Shri Amit Shah said that private property of people has been damaged and assistance under SDRF for damaged houses is being assessed and will be disbursed in shortest possible time. Union Home Minister appreciated the efforts of all the agencies and said that the UT Government carried out the successful rescue operation very quickly and efficiently. More than 5000 people have been evacuated to safer places as a precaution. 17 teams of the NDRF and 23 Army columns, helicopters from Indian Air Force, UTDRF, J&K Police and Central Armed Police Forces (CAPFs) personnel are still engaged in the entire operation and helping people.

Landslide on the routes to Vaishno Devi

On 26 August 2025, extremely intense late monsoon rainfall struck parts of Jammu and Kashmir in northern India, triggering extensive flooding and landslides. Unfortunately, a significant landslide

occurred on the route to the Vaishno Devi shrine. Initial reports suggested that in this landslide 34 people lost their lives and around 20 were injured.

Another landslide struck the pilgrimage track leading to the Mata Vaishno Devi shrine during the first week of September, however no casualties or injuries were reported in the second incident. The pilgrimage to the holy shrine of Mata Vaishno Devi continues remain to suspended due to adverse weather conditions. Officials have informed that restoration work is underway on priority to clear the debris and ensure the safety of routes. They have however highlighted that the yatra will only be resumed once weather conditions improve and the tracks are declared safe for passage.

Extreme Rains Cut off Healthcare Access and creates news health challenges in all four flood impacted states

Health experts warn these floods are not isolated disasters but part of a worsening cycle of extreme weather events that India remains ill-prepared to handle. From Kashmir to Punjab to Himachal, disrupted medical care, contaminated water, and surges in mosquito-borne disease are exposing how fragile India's public health

safety nets are in the face of weather extremes driven by climate change. Unless resilience is built into the health system, each new flood risks compounding existing crises — from mental health to infectious disease.

As per Epidemiologist, Dr. Shailesh "stagnant and contaminated water becomes the primary source of infections in floodaffected areas." He warned that diseases like cholera, diarrhoea, typhoid, hepatitis A and gastroenteritis are "very common after floods," while stagnant pools also fuel malaria, dengue and chikungunya outbreaks. This year, Punjab is already seeing a surge in dengue cases since 2023, in 2023 11,000 infections were reported by mid-november. Flooding this year has drastically worsened mosquito breeding conditions.

Non-Traditional Security Centre

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