September 2024 Uttarakhand Disaster & Accident Analysis Initiative (UDAAI) Monthly Reports

Social Development for Communities (SDC) Foundation Dehradun, Uttarakhand

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About UDAAI Monthly Reports

Uttarakhand Disaster & Accident Analysis Initiative (UDAAI) is a monthly initiative by Dehradun-based environmental action and advocacy group, Social Development for Communities (SDC) Foundation. The goal of the UDAAI reports is to document disasters and accidents in Uttarakhand, leading to human and ecological casualties. UDAAI is based on media reports in respectable publications in English and Hindi newspapers, as well as news portals. UDAAI neither attempts nor claims to document all disasters and all accidents in Uttarakhand; its focus instead is to document major casualties and non-casualty events on a regular basis.

We strongly believe that with the perils of inclement climate and unabated disasters, the ecologically fragile and earthquake-prone state of Uttarakhand needs to take many more steps to increase its disaster preparedness. We therefore see UDAAI as a document that highlights attention towards the urgent need of a holistic disaster management and accident minimization policy framework in Uttarakhand.

It is our earnest hope that UDAAI will spur political leadership, policy makers, bureaucracy, research and academic institutions, businesses, civil society organisations, media and the citizenry at large to initiate inclusive, regular and action-oriented conversations on the subjects of resilience, mitigation and adaptation in Uttarakhand. With mainstreaming and a greater focus on the issue, there is likely to be an improvement in the process of planning of climate actions and disaster management in Uttarakhand.

September 2, 2024: 50 families asked to evacuate as fears of another landslide loom

Subhash Singh Kuma- in, 42, who owns a hotel and residence on the main Bhatwari road in Uttarkashi town, is among the 50 families who have received evacuation notices from the district administration following the recent landslide that hit Varunavat Parvat on Friday.

"I have been asked to evict and find alternative accommodation on my own until the monsoon season ends. My entire family's livelihood depends on our hotel. The administration has only assured us that they will cover the market rent," Kumain told TOI on Sunday.

Over 200 residents at the foothills of the Parvat were evacuated last Tuesday after boulders began to fall. The repeated rockfall from the mountain, which overlooks Uttarkashi town, has revived memories of a series of similar landslides in 2003 when over 3,000 people were evacuated, and around 100 buildings in the hill town were damaged.

Commenting on the issue, Vinod Kumar Suman, secretary of the disaster management department, had told TOI last week that a significant amount of debris and loose material remains atop Varunavat mountain, posing a risk to the residents at its base. A technical team led by Tehri Hydro Development Corporation has been tasked with exploring immediate measures to mitigate the situation.

Meanwhile, the number of affected houses in Pagnau village of Chamoli district, situated near Joshimath, which witnessed repeated subsidence, has risen to 60. Zaman Singh Rawat, the village pradhan, told TOI, "Out of 125 families in our village, 60 have been affected by the disaster. These families are living in temporary shelters provided by the administration."

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"I have been asked to evict and find alternative accommodation on my own until the monsoon season ends. My entire family's livelihood depends on our hotel. The administration has only assured us that they will cover the market rent. "Kumain told TOI on Sunday.

He added, "It is difficult to find a rental property at short notice that can accommodate my large family, which includes my three brothers and parents. Additionally, there is uncertainty regarding the duration of their displacement from our homes."

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were evacuated, and around 100 buildings in the hill town were damaged. Satbir Singh Chauhan, a resident of the affected Gufiyara area, expressed constant fear and worry among residents that heavy rain could trigger another landslide.

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has been tasked with exploring immediate measures to mitigate the situation. "The team will visit the Varunavat mountain soon, investigate the cause of the landslide and suggest immediate measures to be taken to stop such incidents in future," an official said.

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WARUNAVAT PARVAT LANDSLIDE

With the past of t

month, awaiting permanent rehabilitation as returning to our old-house is no longer safe." On Saturday, a district administration feam, including a geologist and tehsildar, visited the affected areas in Pagnau village to assess the situation and conduct a geological survey of the site selected for the rehabilitation of the displaced villagers.

TIMES OF IMDIA SEPT 2, 2024

September 8, 2024: 30 houses under threat as landslides hit Bageshwar village

Persistent landslides in Bageshwar's Namtichetabagar village in Gunthi Gadera area have put 30 homes at risk, including the ancestral residence of former Maharashtra governor and ex-chief minister of Uttarakhand, Bhagat Singh Koshyari. The landslides have caused significant damage in the area, diverting water flow towards residential areas and creating sizable cracks in houses, including Koshyari's, where the courtyard wall has begun to tilt precariously.

The village, which is home to approximately 2,000 residents across various small settlements, faces frequent challenges during the monsoon season. This year has been particularly difficult, with the destruction of water supply schemes and prolonged road closures. Several bridges, including the approaches to the Ramanga bridge, have also been deemed unsafe.

Narayan Singh Koshyari, former village head, expressed his concerns over the deteriorating situation, saying, "For several days roads in the village have been blocked due to landslides. The primary school, which has around 35 students, is also under threat. If the landslide continues, the entire area is at risk."

Local authorities have said that they are closely monitoring the situation, and a team of geologists is assessing the area to address the issue.

Kapkot sub-divisional magistrate, Anurag Arya, said, "The administration is actively evaluating the situation. The expert team has completed their inspection, and we are awaiting the report. Once we have the findings, appropriate action will be taken."

Confirming the same. Sunil Dutt, a district-based geologist who was sent to study the landslide area, said, "Our team has visited the site and due to continuous sliding, treating the area is a challenging task. For now, the houses are still standing, but the risk remains high."

30 houses under threat as landslides hit Bageshwar village

Geologists' Team Assessing Area, Ex-CM's Home Also Affected

Bageshwar: landslides in Bageshwar's Namtichetabagar village in Gunthi Gadera area have put 30 homes at risk, including the ancestral residence of former Maharashtra governor and ex-chief minister of Uttarakhand, Bhagat Singh Koshyari. The landslides have caused significant damage in the area, diverting water flow towards residential areas and creating sizable cracks in houses, including Koshyari's, where the courtyard wall has begun to tilt precariously.

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Another resident added, "We have informed the authorities multiple times. Effective measures should be implemented on an urgent basis to control the situation.'

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140 roads blocked across state

Dehradun: A landslide blocked the flow of traffic near Lata village on the Joshimath-Malari-Niti valley route on Friday morning. Till the evening hours, a team of Border Roads Organisation was engaged in removing the debris but rocks and boulders continued to fall, resulting in closure of the route for the second consecutive day. According to data from the State Emergency Operation, around 140 roads were blocked throughout the state. Kautilya Singh

NH 707A reopens after rockfall

Mussoorie: A landslide caused by heavy rain on Friday night blocked NH 707A (Nain bagh-Chamba) near Kaflani around 3am Saturday. The road was closed until the debris was cleared around 10am.

Junior engineer Lalit Chauhan, National Highways Authority of India (NHA!), said, "Two JCBs were deployed as debris had accumulated on the road. As we cleared it, more rocks kept falling, causing issues. Annol Jain

SGPT 8, 2024 TIMES OF INDIA

September 10, 2024: 500 landslide zones surfaced in Uttarakhand this monsoon

As the monsoon rains batter Uttarakhand, approximately 500 new landslide zones have been identified across the state, raising significant concerns. However, the Uttarakhand Landslide Mitigation and Management Center has taken proactive steps to address this issue based on the nature of these zones. Dr. Shantanu Sarkar, the Director of the Center, shared this information during a program held at the Wadia Institute of Himalayan Geology on the occasion of Himalaya Day.

Dr. Sarkar explained that most of the newly emerged landslide zones are situated in structurally weak areas. When heavy rain water penetrates the mountains during construction activities, it exacerbates the occurrence of landslides. He added that the Center is conducting ground studies and providing critical recommendations for landslide zone management. One such success is seen in the Baliyanala landslide zone, where stability has improved after treatment measures were implemented. Additionally, surveys are being carried out in the Dharchula region and the newly identified landslide zone in the Galogi power area near Mussoorie.

Further, Dr. Sarkar revealed that a comprehensive survey of various cities across the state will soon be conducted to assess the capacity of the land in these landslide zones and offer appropriate mitigation strategies. A key focus will be on Naina Peak in Nainital, with this survey set to begin in October, after the rainy season subsides. The primary causes of landslide zones in urban areas are uncontrolled construction and flaws in drainage systems, which will be examined during the study.



DAINIK JAGNAH SCOT 10) 2024

September 11, 2024: 20 deaths in two months on Kedarnath Yatra route

In the past two months, 20 travellers and locals have lost their lives due to landslides and heavy rainfall along the Kedarnath Yatra route, while another 20 remain missing. The highway and walking track from Sonprayag to Kedarnath are extremely vulnerable to landslides, posing a constant threat to both life and property at every step.

On July 21, at around 4 a.m., three pilgrims lost their lives when a landslide hit the Gaurikund-Kedarnath walking track at Chirbasa. During the incident, five others sustained injuries from falling boulders. Later, on the evening of July 31, thousands of pilgrims were stranded between Bhimbali and Lincholi due to heavy rains. Rescue teams from the SDRF, NDRF, DDRF, Police, and Home Guard managed to rescue more than 13,000 individuals, while seven bodies were recovered from the debris. Six of the victims have been identified.

Following the rains, 23 people were reported missing by their families, and there has been no trace of 20 of them to date. On September 9, another five pilgrims lost their lives in a landslide just one kilometre ahead of Sonprayag.



20 लापता, चीरबासा, लिनचोली व सोनप्रयाग में हो चुका भूस्खलन

सद्रप्रयाग। दो माह में केदारनाथ यात्रा मार्ग पर भूस्खलन व अतिवृद्धि से 20 यात्रियों व स्थानीय की मौत हो चुकी है, जबकि 20 लापता चल रहे हैं। सोनप्रयाग से केदारनाथ तक हाईवे और पैदल मार्ग भूस्खलन की दृष्टि से और संवेदनशील है और यहां पग-पग पर जानमाल की क्षति का खतरा बना है। गौरीकुंड-केदारनाथ पैदल मार्ग पर

बीते 21 जुलाई को तड़के चार बजे चीरबासा में भूस्खलन की चपेट में आने से तीन बादियों की मौत हो गई थी। इस दौरान बोल्डर गिरने से पांच यात्री घायल भी हो गए थे। बीते 31 जुलाई की देर शाम को भीमबली से लिनचोली के बीच अतिकृष्टि से हजारों यात्री फंस गए थे। एसडीआरएफ, एनडीआरएफ, डांडीआरएफ, पुलिस, होमगार्ड द्वारा 13 हजार से अधिक लोगों का रेस्क्यू किया गया। मुलबे से सात शव भी बरामद



गौरीकुंड हाईये पर यात्रियों को सुरक्षित निकालते जवान। न्ह्रांत : पुलस विभाग

किए गए थे, जिनमें से छह की शिनाखत हो चुकी है। अतिवृष्टि के बाद 23 लोगों के लापता होने की गुमशुदगी की रिपोर्ट भी उनके परिजनों ने दर्ज कराई थी, जिसमें 20 का अभी तक कोई सुराग नहीं मिल पाया है। वहीं 9 सितंबर को सोनप्रयाग के एक किमी आगे भूस्खलन से 5 यात्रियों की मौत हो गई। संवाद

13 लोगों का पता नहीं चला
2 अगस्त 2023 की रात्रि को रुद्रध्यागगौरीकुंड हाईबे पर गौरीकुंड डाट पुल के
सभीप पहाड़ी से भारी भूस्खलन से तीन
कच्ची दुकानें मलबे में बहकर मंद्राकिनी
नदी में समा गई थीं। इन दुकानों में रुफ 23
लोग भी हादसे का शिकार हो गए थे,
जिसमें 10 के शख तो मिल गए थे, पर 13
का आज तक पता नहीं लग पाया है।

AMAR UTALA SCPT 11, 2024

September 11, 2024: Five pilgrims killed, three injured after being buried under debris due to landslide

Five pilgrims tragically lost their lives after being buried under debris from a massive landslide that occurred one kilometre ahead of Sonprayag. Three others sustained injuries and have been admitted to the district hospital. The incident happened late Monday evening on the Rudraprayag-Gaurikund National Highway, where eight pilgrims returning from Kedarnath were caught in the landslide.

NDRF and SDRF personnel quickly initiated a rescue operation, managing to save three individuals and recover one body initially. On Tuesday, the rescue team found four additional bodies at the same location.

Nandan Singh Rajwar, District Disaster Management Incharge reported that on July 31, a 150-metre stretch of the highway near Sonprayag was destroyed by a landslide triggered by heavy rainfall. Since then, landslides have disrupted foot traffic daily, posing a continuous threat to life and property.

Despite warnings issued about the forecast of heavy rain between Sonprayag and Kedarnath on Monday evening, many passengers chose to proceed. In the last two months, 20 people have died along the Kedarnath Yatra route. Additional District Magistrate Shyam Singh Rana has urged security personnel to remain vigilant between Sonprayag and Kedarnath, instructing that, in the event of rain, passengers should stop at designated safe locations.



AMAR UJALA SGOT 11, 2014

September 14, 2024: Five dead, 324 routes closed

A total of 324 roads across the state are currently shut down because of debris, with the highest number—57 routes—closed in Pauri district.

In Kumaon, five people lost their lives in separate incidents caused by the severe weather. The number of closed roads includes 56 in Nainital, 50 in Chamoli, 42 in Pithoragarh, 39 in Champawat, and 17 each in Almora, Tehri, and Rudraprayag. Dehradun reported 13 closures, Bageshwar 9 while Uttarkashi had five road closures.

According to Disaster Management Secretary Vinod Kumar Suman, continuous rainfall in many districts is hampering efforts to reopen the roads. Although some roads had been cleared, they were subsequently closed again due to landslides. Deepak Yadav, head of PWD, noted that such a large number of road closures has not been seen before, and efforts are ongoing to restore access.



September 22, 2024: 15m-long stretch of Gaurikund-Kedar route washed away

A 15-metre stretch of the Gaurikund-Kedarnath trek route in the Jungle Chatti area was washed away due to rains in the early hours of Saturday.

The yatra to Kedarnath through the trek route was subsequently halted for a few hours as National Disaster Response Force (NDRF), State Disaster Response Force (SDRF) and district teams were dispatched to the spot. Around 2,500 pilgrims were stopped at Bhairav temple and were later allowed to move to Sonprayag, in the presence of NDRF and SDRF teams, officials said.

Subsequently, the security and district teams started the work for an alternate route and the task was completed during the day, they added.

DM Rudraprayag, Saurabh Gaharwar said "The alternative route is ready and pilgrims are being moved through this route. Our teams are working on repairing the damaged stretch and we're confident of completing it soon." He added the yatra for Kedarnath had resumed after a "brief halt".

Notably, incessant rainfall and a subsequent landslide on July 31 had caused major damage at 29 locations along the Gaurikund Kedarnath route. Around 400 labourers were involved in the repair work as 16 small portions got washed away. Jungle Chatti was also affected, and the route was opened only after weeks of strengthening work on the damaged stretch.

The portion of the route which caved in on Saturday was near this affected part, which had earlier seen major damages. The yatra via heli-services, however, continued through the day.

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A total of 190 people have died during the Char Dham Yatra so far, primarily due to health issues, according to data shared by the Uttarakhand State Disaster Management Authority (USDMA) on Saturday morning.

Secretary of health department Dr Rajesh Kumar, said, "This year, we have included deaths due to natural calamities in our casualty list. Death audits have been completed for most cases, and as of today, 200 people have died: 102 in Kedarnath, 50 in Badrinath, 33 in Yamunotri, and 15 in Gangotri."

However, data collected from district administrative teams suggests at least 215 deaths: 102 in Kedarnath, 64 in Badrinath, and 50 in Yamunotri and Gangotri. Most of the deaths have been linked to pulmonary and cardiac issues.

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TIMES OF INDIA SEPT 22, 2014

September 27, 2024: Study: 289 sq km of Doon valley in 'high to very high hazard landslide zone'

A key study on the landslide hazard zonation mapping of Dehradun shows that nearly 16.6% (approx 289.8 sq km) of the Doon valley (1741.6 sq km). including some popular tourist spots, falls under "high to very high hazard zone of landslides".

The peer-reviewed study by researchers from Amity University and Wildlife Institute of India (WII), published by Springer recently, says, "Increasing population and uncontrolled tourism in the valley is contributing to occurrence of landslides by placing additional pressure on vulnerable landscapes and altering natural terrain."

It adds, "Landslides are more likely to occur near and above the 'main boundary thrust'. The Doon valley rivers' upper segments are more susceptible to landslides than their lower segments. "It is largely due to the area's inherent geology and factors like slope, soil type, elevation etc, but external factors are also adding to the area's susceptibility to landslides", the study points out.

Tourist places such as Maldevta, Bhatta Falls, Kimadi, Surkanda Devi Temple, Digu Waterfalls, George Everest Peak, Dhanaulti, Jharipani, Mussoorie and Bhadraj temple are under the 16.6% ambit according to Ashish Mani, the lead author of the study titled 'Landslide hazard zonation mapping of Doon Valley using multi criteria analysis method based on remote sensing and GIS techniques'. Expressing concern, Mani, who is a PhD scholar with Amity University and senior researcher at WII said: "Rising tourists influx and increasing population cause soil erosion, deforestation and waste accumulation. Also, disturbances from infrastructure development destabilise slopes, while poor water management and overdevelopment lead to increased runoff and added weight on vulnerable areas, heightening the risks."

The study points out that "the centre of Dehradun is under anthropogenic pressure impacting the rivers of the valley". Referring to the built-up area (158.2 sq km) of Doon, the study says, "Valley's centre has an anthropogenic load which affects biodiversity and health of the rivers like Rispana, Bindal, Suswa, Song and Asan."

As per the authors, around 69% (1205.4 sq km) of the total landscape of Dehradun Is forested, which is helping in keeping slopes intact. However, factors like barren land (402.3 sq km) and presence of maximum loamy skeletal soil type (768.8 sq km) are a concern as such areas are susceptible to landslides.

Study: 289sqkm of Doon valley in 'high' to very high hazard landslide zone'

Shivani.Azad @timesofindia.com

Dehradun: A key study on the 'landslide hazard zonation' mapping of Dehradun shows that nearly 16.6% (approx 289.8 sq km) of the Doon valley (1741.6 sq km), including some popular tourist spots, falls under "high to very high hazard zone of landslides".

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Popular spots like Maldevta, Bhatta falls and Bhadraj temple (in pic) are at risk

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► Continued on P 3

'7cr visitors in state, floating population straining resources'

Ittarakhand's population
-currently estimated at a
little over 1 crore - surges to
almost 8 crore during peak
tourist and pilgrim seasons,
as per town planning experts.
This influx puts a strain on
the state's ecology and depleting resources. It is estimated
that Kanwar yatra alone
brings nearly 4 crore pilgrims to the state and Char
Dham yatra have drawn over
37 lakh pilgrims this year P2

'Increasing population, uncontrolled tourism in valley contributing factors'

▶ Continued from P1

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GEORGE EVEREST ESTATE

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TIMES OF INDIA SEPT 27, 2014

About Social Development for Communities (SDC) Foundation

SDC Foundation is a Dehradun-based environmental action and advocacy group engaged in communication, citizen engagement and capacity building in the Himalayan state of Uttarakhand. The foundation works in partnership with institutions of Government of India, Government of Uttarakhand and other stakeholders such as research & academic institutions, community groups, civil society, media partners, NGOs, businesses & trade bodies, schools & colleges in the state.

Climate and environment conservation, waste management, sustainable urbanisation and a basket of sustainable development issues are key focus areas of the foundation.

Anoop Nautiyal

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PS: Errors or omissions in UDAAI documentation, if any, are purely unintentional. In case any errors or key omissions are detected or any fresh updates are available for events that are already documented, SDC Foundation may kindly be notified at email id contactsdcuk@gmail.com. We shall make the necessary corrections in subsequent versions of the monthly reports of UDAAI.