

'A colonial mindset thought technology could control nature — that caused climate change'

Sunil Amrith is professor of history at Yale University. Speaking to Srijana Mitra Das at *Times Evoke*, he explains the 'colonial mindset' towards nature, why this persisted after colonialism, the inequalities reflected in climate change — and why respecting local environmental knowledge is vital for South Asia now:

You've stated that water management in India was shaped by a 'colonial mindset' — did this endure after colonialism? And what should an ideal mindset now be?

■ This reminds me of Ramaswamy Iyer, the well-known water policy expert who underwent a change of heart, from being a supporter of large dams in the 1980s to an eloquent critic a decade later. Iyer lamented the enduring effects of a colonial 'Promethean' view that had an iron confidence in the ability of technology to control nature — he saw this view as repeating itself after India's independence.

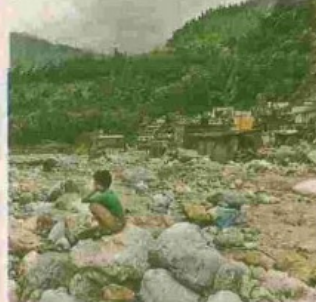
There are key features of this view — the first was confidence that British expertise was superior to local knowledge. There was faith that technology could rein in nature. Industrial technologies that harnessed the once-unimaginable energy of fossil fuels encouraged this sense of mastery, and a corresponding faith in growth without limits.

It is important to consider why this 'Promethean' view was so attractive — at the time of India's independence, life expectancy at birth hovered around 35 years. Famine was a recent memory. Large dams seemed to offer a way out of the fear of scarcity — a material freedom to guarantee political freedom. We can now see that this approach had deleterious effects, socially and ecologically, but it is important to understand the decisions taken in the 1940s and 1950s in terms of the available options at the time.

Possibly the most characteristic feature of the colonial view, adopted by national governments and international agencies after colonialism, was a one-size-fits-all approach — the ideal approach now should emphasise equity, protect biodiversity and recognise the importance of local ecologies. It should also respect the voices of communities most directly affected by infrastructural schemes.



WHEN THE TIDE TURNS: Large dams built in India in the 1950s (above) were once seen as the salvation for developing nations. With climate change now impacting regions like Uttarakhand (below) with glacial melt and landslides, these need a new perspective



How do we balance climate change with the need to provide basic resources like electricity to millions of people?

■ Inequality is baked into the story of climate change — those who contributed most to the problem are the most insulated from its effects. Historian Elizabeth Chatterjee emphasises that we should not lose sight of the quest for development and freedom — epitomised by access to electricity — when we discuss energy use in South Asia.

The dilemma is clear when we also think about air pollution and climate change. India's struggle with air pollution is the result of the incomplete combustion of the cheapest, most polluting fuels — the

only fuels accessible to millions of people who live without electricity. To reduce these emissions demands a more equitable distribution of electricity — however, unless this is generated from renewable sources, this would in turn increase India's greenhouse gas emissions.

Will climate change-driven migration now grow from South Asia?

■ There is no question that climate change will force many people to uproot their families in search of safety — but it will be less a question of migration from South Asia than of migration within South Asia. We are living through a moment of hostility towards migration in the United States and Europe, and the spectre of millions of 'climate refugees' at their borders creates lurid fears. I think richer countries do have a responsibility to help in situations of climate change-driven migration. A very small number have taken some initiative, notably New Zealand in relation to the small island states of the Pacific. But the dominant response has been to build walls and strengthen borders.

In reality, the vast majority of people displaced by climate change will move within their own countries, above all, to large cities which are already under strain in terms of their infrastructure.

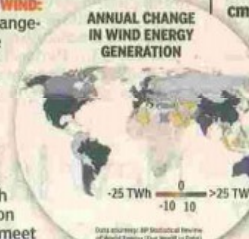
Is such environmental displacement new in human history?

■ The anthropogenic climate change we are experiencing now is unprecedented; in that sense, climate change-driven migration is new. But there are examples in history of how sudden climate-related disasters — droughts and floods — intensified mobility. Imperial Chinese attempts to control the Yellow River, as early as the 11th century, caused mass displacements of people. During the colossal drought of the late 1870s, when millions perished, migration from some districts of Tamil Nadu to Sri Lanka increased.

But, for migration to be a viable option, there must exist networks that make it possible, including family networks or networks of labour recruitment and finance. We should also think of those who can't migrate, due to disability or sheer poverty.

BLOWING IN THE WIND:

With climate change-related extreme weather events likely to impact vulnerable ecological zones, wind energy could provide a safer alternative, with research done on how this could meet more energy needs



What happens to non-human species now facing climate change?

■ Where they can, other species migrate too — many are moving poleward, to higher elevations or deeper into warming seas, but many find their avenues of escape blocked by human settlements and infrastructure. An alarming recent study refers to our being in the midst of a 'universal redistribution of life on earth' — for me, the real question is, how could this possibly not be the biggest of all stories? Why do we pay this much less attention than we pay to celebrities on social media? Have we numbed ourselves, or been numbed by the manipulations of big tech, into such a state of distraction that we simply look away from how imperiled our planet has become?

THE NEW ABNORMAL

● Extreme weather events can impact 75% of India's districts — with a spike in such events since 2005, these districts are experiencing changing microclimate, causing losses of livelihoods, property and lives

● Surveys find a shift occurring in the pattern of extreme climate events, with flood-prone areas becoming drought-prone and vice-versa in over 40% districts

● In 2020, floods in Assam affected more than 60,000 people while Hyderabad recorded rainfall of 29.8 cms in 24 hours — Cyclone

Amphan, which impacted the coastal districts of West Bengal, displaced over 4.9 million people

● Between 1970 and 2004, three extreme flood events occurred annually on average — after 2005, the yearly average rose to 11.

Similarly, the annual average for districts affected by floods was 19 — after 2005, it increased to 55. The yearly average number of districts affected by cyclones has tripled since 2005 — cyclone frequency has doubled

● Six of the ten extreme weather events globally in 2020 took place in Asia, with floods in India and China causing damages of over \$40 billion. Climate change could cause over 62 million people to be displaced in South Asia by 2050

Research: BBC, The Guardian, CNN

Stock

New Indian Express 13-February-2021

No disagreement, claims ministry of environment

EXPRESS NEWS SERVICE

@ New Delhi

RESPONDING to a news item headlined 'Ministry vs ministry over future of 6 hydel projects' published on February 9, the ministry of environment and forests clarified that there was "no disagreement as the news report tries to portray between (the) Ministry of Environment, Forest and Climate Change and (the) Ministry of Jal Shakti."

The clarification further said that an affidavit based on the "agreed position" between the

two ministries had been "approved by the secretary, MoEF&CC on January 19, 2021" and this would be filed in the Supreme Court at the next date of hearing in July.



This newspaper stands by the story as it was based on the separate and contradictory affidavits filed to date by the two ministries since 2016. These affidavits are available in public domain.

Moreover, as the ministry of environment and forests has stated, an affidavit on the "agreed position" will be filed in the court only in July.

Deccan Herald 13-February-2021

U'khand disaster: 350-metre-long lake formed upstream Rishiganga

SAGAR KULKARNI

RAINI VILLAGE (UTTARAKHAND), DHNS

A 350 metre-long lake has formed upstream of river Rishiganga near here, the Uttarakhand Police said after a team of the State Disaster Relief Force (SDRF) trekked to the site on Friday.

"As per preliminary information, a lake formation has been noticed near Raini village, but it has been discharging water. It appears that the lake is 350 meters long," the state police said. It said that more details of the lake would be shared after the SDRF team returns from the site.

A team of mountaineers and disaster relief personnel had off on a trek to make an assessment of the formation of a lake at the place where the avalanche crashed into



Aerial view shows washed away Tapovan hydel power project plant after Sunday's glacier burst, in Chamoli district of Uttarakhand, on Friday. PTI

river Rishiganga on Sunday, leaving behind a trail of death and destruction. A geologist with Hemavati Nandan Bahuguna University, Naresh Rana, had shared a video claiming that a lake had formed eight km from Raini village

and cautioned that it could lead to flash floods, though not of the magnitude of the disaster that struck on Sunday.

NDRF personnel tried to fly drone over the area but were not successful as the device malfunctioned and

crashed a little distance away from here.

Meanwhile, the body of Basharat Ahmed Zargar, the general manager of the Rishiganga hydroelectric project, was found as rescuers managed to reach the tunnel of the power plant on Friday.

Zargar, a resident of Srinagar in Jammu & Kashmir, had been working on the Rishiganga project for more than a year and was visiting the project site to oversee maintenance work at the project site when the disaster struck.

The death toll of Sunday's disaster touched 38 on Friday of which 11 have been identified. The rescuers have also recovered 18 body parts from different places in Chamoli district. DNA samples of all the dead bodies and body parts have been taken in a bid to establish their identity.

Deccan Chronicle 13-February-2021

Govt to speed up free water plan

DC CORRESPONDENT
HYDERABAD, FEB. 12

Chief Secretary Somesh Kumar on Friday directed officials to speed up implementation of the free drinking water supply scheme in Hyderabad that was promised by Chief Minister K. Chandrashekar Rao during the GHMC elections in December last.

The Telangana government issued orders for implementing the scheme in January. The

Chief secretary held a review meeting with Arvind Kumar, principal secretary, MA&UD, Dana Kishore, MD, Water Board, Lokesh Kumar, GHMC commissioner and N. Satyanarayana, CDMA, on Friday.

The Chief Secretary instructed Kishore to complete Aadhaar seeding with PTIN and CAN with beneficiaries to improve the water supply system, duly giving priority to uncovered and slum areas.

India has created formidable legislative and institutional bulwarks to protect its environment, but none manage to get in the way of potentially damaging projects

THE NEED FOR ECOLOGY FIRST, ECONOMY NEXT

K JAYAKUMAR



Former Kerala chief secretary & ex-VC,
Thuvanchath Ezhuhothachan Malayalam Varsity

THE Indian state has an ambivalent position in its relationship with the environment. The recent flash flood in the Rishi Ganga river in Chamoli district of Uttarakhand with its unprecedented intensity and virulence along with its human misery and ecological consequences has once again highlighted this fault. The economic growth model that thrives on compulsive consumerism and egregious global capitalism has admittedly no environmental sensitivity. Many countries have a well-articulated position vis-a-vis environmental concerns. For instance, the US does not have overt pretences about eco-sensitivity, though in Joe Biden's presidency they have rejoined the Paris climate agreement. On the other hand, Scandinavian countries and some European nations have a more sensitive and sensible environment policy. China is on the other extreme, with scant respect for environmental discipline.

The Indian state, however, has a record of sorts in its hypocrisy on environmental issues. Successive governments at the Centre and state levels oscillate between environmentally encouraging words and ecologically devastating action. Governments have been generous with the green agenda as well as legislation and institutional arrangements for environmental justice.

We have the forest laws, green tribunals, wetland protection authorities, coastal protection agencies, Environment Impact Assessment rules, pollution control boards, regulations on quarrying and several such safeguards. A cursory look at the legislative and institutional bulwarks the Indian state has created to protect its environment is indeed formidable. Besides, there are high-profile, high-spending programmes like Namami Ganga meant to clean the Ganges. The Centre and state governments have several initiatives to prevent conversion of wetlands and encroachment of forestland, to limit construction in fragile zones and a number of similar initiatives. However, several environment protection and reclamation projects, high-or low-profile, are essentially half-hearted attempts rather than concerted efforts prompted by conviction or commitment. Most of them are nothing more than photo ops for local leaders and enthusiasts.

This fault line and staggering trust deficit are amplified when it comes to governments' enthusiasm for mindless economic development. We have seen that none of the above safeguards really come in the way of promptly granting licenses for reckless quarrying of the forest lands of central India and Odisha. There are no qualms about clearing

hydroelectric projects and new dams in the fragile Himalayan valleys. Environmental sensitivity is completely sidestepped for ambitious state-sponsored as well as private sector projects with the blessing of the government. The widening of the road network connecting the Char Dham at phenomenal ecological costs and the massive Central Vista project are two such glaring instances. Governments in power decide on their pet projects and regulatory bodies mandated to critically and objectively examine and advise are often called upon (or intimidated) to say yes in chorus. The feeble voice of environment activists is drowned in the clamour of 'national interest' and the urgency of economic development. A typical instance is the Madhav Gadgil report that rightly highlighted the seminal value of the Western Ghats in conditioning the life, climate and sustainability of the regions lying to the west of

Ghats (South Canara and Kerala). The scientifically tenable report was quickly vilified as regressive and impractical. Even the subsequent watered-down version has not satisfied the pragmatists. The Himalayan ecology is far more fragile. There are several reports of experts warning against wayward intervention in the Himalayan ecosystem. Nonetheless, there is no dearth of dams, hydroelectric projects, construction and tourist circuits in that rarefied landscape.

The spirited words of Jawaharlal Nehru while inaugurating the massive Bhakra Nangal dam in 1954, "Bhakra, the new temple of resurgent India, is the symbol of India's progress", are dated by the current understanding of dams and their deleterious impact. With his scientific temper, Nehru, were he alive today, would have been an ardent votary of environmental values and formulated a nuanced development paradigm for the country. Environmental science was almost non-existent in the 50s. It is but natural that in the nascent glow of national freedom, the country desired a giant push in the form of major dams. However, today, after so much information, awareness and scientific proof of the impending disaster and global warming, it is highly myopic and irresponsible that we still go after

reckless development like the rats and children behind the pied piper of Hamelin.

The responses to ecological disasters cannot only be localised. For instance, if warming of the Himalayan zone is the cause of the glacier break that led to the flash floods in Rishi Ganga (the causes have not so far been officially confirmed), the solution is not a quick fix in the Himalayan region. The whole country, nay, the whole world has to act in unison. The present tragedy is unfortunately not the last one the Himalayas would experience. The repeated warnings given by the mighty mountain have been callously ignored in our pursuit of more power; money and development. Unless every one of us starts chanting and practicing the alternative mantra 'less of everything', the avarice of consumerism will make us all vicariously liable for the ecocide waiting in store. We should rather enrich our lives with less consumption, extraction and demand on the environment. The lunge towards the \$5 trillion economy could perhaps wait. The present disaster should make the Indian state unambiguously proclaim, 'ecology first, economy next'. The tempting alternative, 'economy first, ecology next' is a sure prescription for catastrophe.

(k.jayakumar123@gmail.com)



AMIT SANDRE

The repeated warnings given by the mighty mountain, the Himalayas, have been callously ignored in our pursuit of more power, money and development

The Pioneer 13-February-2021

Lake formed by Chamoli debris a potential threat

From Page 1

A portion of the Nanda Devi glacier broke off in Uttarakhand's Chamoli district on Sunday, triggering an avalanche and a deluge in the Alaknanda river system that washed away hydroelectric stations and endangered lives of people living along the banks.

According to WIHG, a mass of rock weakened over a period of time due to freezing and thawing of snow must have led to the creation of a "weak zone" triggering its collapse which brought down sed-

iments. The avalanche was also accompanied by a thick pack of snow and ice that overlaid the rock surface, it stated.

This resulted in the formation of a temporary dam that eventually breached, causing the deadly floods in Chamoli district on Sunday.

The incident occurred adjacent to the Raunthi glacier. The area also has glaciers that feed the Rishi Ganga river, which ultimately joins the Dhaul Ganga.

The steep slopes of the mountains in the region further

increased the intensity of the crash. The stretch of the avalanche was about three kilometres with an average slope of 37 degrees, before reaching the "Raunthi Nala/Gadhera" floor at an altitude of about 3,600 metres.

Meanwhile, Chamoli District Magistrate Swati S Bhadauria said an eight-member team of the scientists of the Geological Survey of India has been formed to inspect the lake and submit its report to the district administration at the earliest.

The Statesman 13-February-2021

Bajaj Auto supports JanaJal

WOW: JanaJalWOW (Water on Wheels), an IoT-based proprietary technology solution three-wheeler developed by a Noida-based JanaJal to deliver safe drinking water to the doorsteps of households, has been approved by the Ministry of Jal Shakti as one of five technologies to deliver the \$50 billion drinking water scheme under the National Jal Jeevan Mission. JanaJal WOW has been recommended to all state governments and Union Territories to accelerate their respective 'Har Ghar Jal' targets, said the Press release.

SNS

Navbharat Times 13-February-2021

ऋषिगंगा के मुहाने पर झील की जांच को भेजी गई टीम

■ विशेष संवाददाता, नई दिल्ली

उत्तराखंड में आपदा की जगह फिर झील बनने के दावों की राज्य की त्रिवेन्द्र सिंह रावत सरकार ने जांच के आदेश दिए हैं। वाडिया इंस्टिट्यूट, एनटीपीसी और IIRS जैसे संस्थानों और SDRF की टीम से सही स्थिति का पता लगाने को कहा गया है। गढ़वाल सेंट्रल यूनिवर्सिटी के डॉ. नरेश

राणा ने दावा किया था कि चमोली जिले में ऋषि गंगा के मुहाने पर झील बन गई है। इससे ऋषि गंगा की धारा में रुकावट आई है। इससे फिर आपदा के हालात बन सकते हैं। तपोवन टनल में फंसे लोग जस के तस हैं। रैणी गांव के पास डैम साइट में मलबे में दबे लोगों के परिजनों ने बचाव में दिलचस्पी न दिखाने का आरोप लगाते हुए हंगामा किया। ►► पेज 18

Haribhoomi 13-February-2021

उत्तराखंड आपदा का एनसीआर पर दिखा असर पिछले दो दिनों में गंगानहर में पानी और सिल्ट की मात्रा में हुई बढ़ोतरी

गाजियाबाद। उत्तराखंड के चमोली में आई आपदा का असर अब एनसीआर पर भी पड़ता हुआ दिखाई दे रहा है। गाजियाबाद के मुरादनगर गंग नहर में अचानक से पानी का स्तर बढ़ गया है। यहीं नहीं पानी में रेत यानी सिल्ट की मात्रा बढ़ गई है। माना जा रहा है कि इस वजह से उत्तराखंड से एनसीआर आने वाली गंगाजल की सप्लाई पर भी असर पड़ सकता है। प्रताप विहार गंगा जल परियोजना के अधिकारी का कहना है कि स्थिति अभी क्लियर नहीं है।



सप्लाई हो सकती है प्रभावित

गाजियाबाद की बात करें तो वैशाली, वसुंधरा, कौशांबी जैसे पॉश इलाकों में गंगाजल की सप्लाई होती है। दिवाली के आसपास उत्तराखंड में गंग नहर की सफाई के दौरान सप्लाई बंद हो जाती है। लेकिन ऐसा लग रहा है कि अगर पानी में सिल्ट की मात्रा बढ़ती है, तो दो से तीन दिनों के लिए गंगाजल की सप्लाई बंद हो सकती है।

Haribhoomi 13-February-2021

मिंटो हॉल में आयोजित वर्चुअल कार्यक्रम में प्रदेश में निर्मित जल संरचनाओं का लोकार्पण गांव, गरीब और किसान की बेहतरी के लिए 57 हजार जल संरचनाओं का 'जलाभिषेकम'

हरिभूमि न्यूज ॥ गोपाल

प्रदेश में निर्मित 57 हजार से अधिक जल संरचनाओं के लोकार्पण का वर्चुअल कार्यक्रम 'जलाभिषेकम' गुरुवार को मिंटो हॉल में आयोजित किया गया। केन्द्रीय रक्षा मंत्री राजनाथ सिंह और केन्द्रीय कृषि मंत्री नरेंद्र सिंह तोमर ने कार्यक्रम को दिल्ली से वर्चुअल मोड के जरिए संबोधित किया। मुख्यमंत्री शिवराज सिंह चौहान सहित प्रदेश सरकार के अनेक मंत्रीगण मिंटो हॉल के कार्यक्रम में उपस्थित रहे।

कार्यक्रम के मुख्य अतिथि के तौर पर केन्द्रीय रक्षा मंत्री राजनाथ सिंह ने कहा कि 'जलाभिषेकम' स्थानीय ही नहीं, राष्ट्रीय महत्व का कार्यक्रम है। हर खेत को पानी और हर हाथ को काम की मंशा को पूर्ण करते 'जलाभिषेकम' के कार्य गांव, गरीब और किसान की बेहतरी में सहायक सिद्ध होंगे। जल ही जीवन है और जगत के अस्तित्व का आधार है। किसानों की आय दोगुना करना प्रधानमंत्री नरेन्द्र मोदी का संकल्प है। मुख्यमंत्री शिवराज सिंह चौहान द्वारा जनभागीदारी से किए जा रहे जल संरक्षण कार्य इस लक्ष्य को प्राप्त करने तथा आत्मनिर्भर मंत्र के निर्माण में सहायक होंगे।

वर्चुअल मोड से कार्यक्रम में दिल्ली से शामिल हुए केंद्रीय रक्षा मंत्री राजनाथ सिंह व कृषि मंत्री नरेंद्र सिंह तोमर

खास बातें

- रक्षा मंत्री ने कहा - यह राष्ट्रीय महत्व का कार्यक्रम
- सीएम ने कहा ढाई लाख हेक्टेयर भूमि पर होगी सिंचाई

ऐतिहासिक तालाबों का होगा जीर्णोद्धार: सीएम



मुख्यमंत्री ने कहा कि हमारी संस्कृति ही जल संस्कृति है। उन्होंने रहींम, तुलसीदास का संदर्भ देते हुए कहा कि बुंदेलखंड में महाराज छत्रसाल द्वारा व्यापक स्तर पर तालाबों का निर्माण कराया गया। बुंदेलखंड में निर्मित चंदेलकालीन ऐतिहासिक तालाबों को चिन्हित कर उनके जीर्णोद्धार का कार्य आरंभ किया जा रहा है। प्रदेश में नदियों के पुनर्जीवन का कार्य भी चल रहा है।

इन मंत्रियों की रही उपस्थिति

कार्यक्रम में पंचायत एवं ग्रामीण विकास मंत्री महेन्द्र सिंह सिसोदिया, लोक निर्माण, कुटीर एवं ग्रामोद्योग मंत्री गोपाल भार्गव, लोक स्वास्थ्य एवं यांत्रिकी राज्यमंत्री बृजेन्द्र सिंह यादव तथा नगरीय विकास एवं आवास राज्यमंत्री ओपीएस मदीरिया आदि उपस्थित थे। इस दौरान मुख्यमंत्री ने स्थानीय जनप्रतिनिधियों से वर्चुअल आधार पर बात भी की।

जलवायु परिवर्तन के कारण बूढ़-बूढ़ पानी रोकना जरूरी: तोमर

केन्द्रीय कृषि मंत्री, ग्रामीण विकास व पंचायत राज मंत्री नरेन्द्र सिंह तोमर ने कहा कि मृदा प्रबंधन और कई योजनाओं में देश में प्रथम है। मुख्यमंत्री चौहान की गांव, गरीब और किसान के प्रति संवेदनशीलता के परिणाम स्वरूप ही यह उपलब्धि संभव हो पाई है। प्रदेश में आवास उपलब्ध कराने, सड़क निर्माण के साथ कोविड में भी अच्छा कार्य हुआ। जलवायु परिवर्तन के कारण बदलते मौसम चक्र को देखते हुए बूढ़-बूढ़ पानी को रोकना जरूरी है।

कोरोना काल में 57 हजार 653 जल संरचनाएं बनीं

सीएम चौहान ने कहा कि प्रदेश में कोरोना काल में 57 हजार 653 जल संरचनाओं का निर्माण हुआ। इनमें से 53 हजार 517 मनरेगा में और 04 हजार 136 वाटरशेड क्षेत्रों में बनीं, जिन पर 02 हजार करोड़ से अधिक की राशि व्यय की गई। इसमें 17 हजार 604 व्यक्तिगत खेत-तालाब हैं, 02 हजार 365 सामुदायिक खेत-तालाब, 05 हजार 119 तालाब, 1972 परकोलेशन टैंक, 05 हजार 773 स्टॉप डैम-चैक डैम, 19 हजार 08 कपिलधारा कूप और 05 हजार 288 सामुदायिक कूप हैं। अभियान में 864 बावड़ियों का जीर्णोद्धार भी किया गया है।



Punjab Kesari 13-February-2021

ऋषिगंगा के ऊपर बन गई हिम नदी

नई दिल्ली, (पंजाब केसरी): नई दिल्ली उत्तराखंड के चमोली में ग्लेशियर फटने के बाद मलबा जमा होने के कारण ऋषिगंगा नदी की अपस्ट्रीम (ऊपरी धारा) में बहाव रुक गया है। बहाव थमने के चलते नदी के पानी ने झील की शक्ल ले ली है। लगातार पानी के बढ़ते दबाव के कारण अगर झील टूटी तो पहाड़ों से पानी काफी रफ्तार से नीचे आएगा, जो निचले इलाकों में बाढ़ जैसे हालात पैदा कर सकता है। अगर ऐसा हुआ तो राहत कार्य भी प्रभावित होगा।



त्रासदी के बाद आई सैटेलाइट इमेज और ग्राउंड जीरो से आ रही एक्सपर्ट की रिपोर्ट्स में ऐसी आशंका जताई गई है।

ग्लेशियर जिस जगह पर टूटा है, वह हिमालय का काफी ऊपरी हिस्सा है। उसे रॉंटी पीक के नाम से जाना जाता है। रॉंटी पीक से ग्लेशियर टूटने के बाद वह सीधे ऋषिगंगा नदी

रेस्क्यू ऑपरेशन जारी, 38 शव बरामद

उत्तराखंड के चमोली जिले में आपदाग्रस्त क्षेत्र से शुक्रवार को दो और शव बरामद होने के साथ मरने वालों की संख्या 38 तक पहुंच गयी जबकि गाद और मलबे से भरी तपोवन सुरंग में फंसे 25—35 लोगों के जीवित होने की क्षीण होती जा रही संभावनाओं के बीच उन्हें ढूंढने के लिए छठे दिन भी बचाव अभियान जारी रहा। चमोली जिला प्रशासन के अधिकारियों ने यहां बताया कि एक शव रैणी में आपदा में पूरी तरह से तबाह हो गए ऋषिगंगा पनबिजली परियोजना के मलबे से बरामद हुआ जबकि दूसरा शव मैटांगा से मिला। इसके अलावा, 166 अन्य लोग अभी लापता हैं।

उत्तराखंड के पुलिस महानिदेशक अशोक कुमार ने देहरादून में कहा कि सुरंग में गाद और मलबे को साफ करने तथा छोटी सुरंग तक पहुंचने के लिए ड्रिलिंग कार्य साथ-साथ चल रहा है। ऐसा माना जा रहा है कि छोटी सुरंग में लोग फंसे हो सकते हैं। कुमार ने बताया, "आपदा आए छह दिन हो चुका है लेकिन हमने अभी उम्मीद नहीं छोड़ी है और हम ज्यादा से ज्यादा जिंदगियां बचाने के लिए सभी मुमकिन प्रयास करेंगे।" इस बीच, तपोवन में अधिकारियों ने कहा कि 114 मीटर तक गाद और मलबा साफ किया जा चुका है और सिल्ट फ्लशिंग टनल (एसएफटी) तक पहुंचने के लिए ड्रिलिंग कार्य किया जा रहा है जहां लोगों के फंसे होने की संभावना जताई जा रही है।

में नहीं गिरा। बल्कि, ग्लेशियर भारी मलबे के साथ, जिस धारा में बहा उसे रॉंटी स्ट्रीम कहते हैं। रॉंटी स्ट्रीम थोड़ा नीचे आकर दूसरी तरफ से आ रही ऋषिगंगा में मिल जाती है। रॉंटी स्ट्रीम से आए तेज बहाव और मलबे के कारण ऋषिगंगा में भी बाढ़ आ गई। यह बाढ़ इतनी भयानक थी कि ऋषिगंगा पर बने दो पावर

प्रोजेक्ट तबाह हो गए। जलस्तर कम होने के बाद तस्वीरों में साफ नजर आ रहा है कि ग्लेशियर टूटने के बाद रॉंटी स्ट्रीम और ऋषिगंगा के संगम पर भारी मलबा और गाद जमा है। जिससे वहां, एक अस्थायी बांध जैसा बन गया है और ऋषिगंगा का बहाव लगभग ठप हो गया है।

नीचे पहाड़ पर जो पानी आता

दिख रहा है, वह रॉंटी स्ट्रीम से आ रहा है। वाडिया इंस्टिट्यूट ऑफ हिमालयन जियोलॉजी, देहरादून के निदेशक कलाचंद सैन इस बारे में कहते हैं, 'मौके पर पहुंची टीम और एरियल फोटोग्राफ से लग रहा है कि ऋषिगंगा और रॉंटी स्ट्रीम के मिलने की जगह पर एक झील जैसी संरचना बन गई है।