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DAILY NEWSPAPER ANALYSIS



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1. IPCC Timeline Deadlock and the 2028 UN Climate Summit

GS-III · Prelims + Mains · IPCC assessment report timeline dispute · The Hindu

Syllabus — Conservation, environmental pollution and degradation, environmental impact assessment

Prelims — Environment and Ecology – international bodies and climate agreements



Original newspaper excerpt supplied with this issue

WHY IN NEWS

The IPCC's October 2026 plenary in Addis Ababa has brought the timing of its Seventh Assessment Report (AR7) into focus. The supplied newspaper report describes a prolonged disagreement over when the three Working Group reports should be approved. The policy milestone is the second Global Stocktake under the Paris Agreement, due to conclude in 2028; timely scientific input must be balanced with rigorous review and inclusive participation.

The Deadlock and What Triggered It

- **IPCC member states** have spent nearly three years unable to agree on a publication schedule for the next set of assessment reports, an impasse described as **unprecedented in the organisation's history**.
- The October plenary is an important opportunity to settle the schedule. Reports published after the 2028 Global Stocktake could have less influence on that process, but would retain value for later national and international climate decisions.
- The scheduling dispute concerns scientific readiness, review time, participation and policy relevance. A timetable disagreement is not itself an IPCC scientific finding that warming above 1.5°C is irreversible; overshoot risks and possible temperature decline depend on emissions pathways and the climate response.
- Some scientists cite structural obstacles: insufficient time to incorporate **new research** and the burden of unpaid IPCC work alongside regular jobs, especially for researchers in **less-resourced countries**.

The Two Camps and Their Positions

- The newspaper account identifies India, Kenya, Saudi Arabia, Russia and China among countries seeking more time, with an emphasis on meaningful participation by scientists from developing countries.
- According to the newspaper report, the Working Group co-chairs proposed approval of all three reports by September 2028. Whether that allows sufficient use in the Global Stocktake is part of the dispute.
- The same account describes calls to move the second and third Working Group reports to 2029 rather than compress their preparation and review. These are negotiating positions, not an agreed final timetable.
- On 7 January 2026, the United States ordered withdrawal from the IPCC and other international bodies. The loss of a major contributor's participation and funding adds pressure to the assessment process; it is separate from the US withdrawal from the Paris Agreement.

What the Reports Cover and Why the Timing Matters

- The three AR7 Working Group reports cover: I, the physical science basis; II, impacts, adaptation and vulnerability; and III, mitigation of climate change. A Synthesis Report integrates their findings.
- The assessments inform mitigation ambition, adaptation and climate finance. The second Global Stocktake assesses collective progress under the Paris Agreement and is scheduled to conclude in 2028.
- If the latest reports miss the relevant stocktake stages, negotiators will have less new consolidated evidence available. Existing IPCC assessments and other scientific inputs will still inform decisions.
- The landmark **Paris Agreement of 2015**, whose progress the summit is meant to review, relies heavily on IPCC findings to define ambition levels.

The Equity and Representation Fault Line

- India's representative at the IPCC stated it was **'short-sighted'** to judge the body's value solely by its contribution to the 2028 talks.
- Developing countries argue their **perspectives are under-represented** in IPCC reports because they have fewer researchers and less funding to publish peer-reviewed work.
- Issues of **'equity and inclusivity'** in who shapes the scientific consensus are, according to India's delegate, 'simply ducked' in the current debate over deadlines.
- This fault line reflects a tension within climate multilateralism between rapid policy-relevant assessment and the time, finance and research capacity needed for inclusive participation.

HIGH-YIELD FACTS

- **IPCC member count** — 195 member states
- **Plenary venue** — Addis Ababa, Ethiopia
- **US withdrawal order** — Issued on 7 January 2026 and included the IPCC; do not date it to January 2025.
- **Paris Agreement chronology** — Adopted on 12 December 2015; opened for signature on 22 April 2016; entered into force on 4 November 2016.
- **IPCC founding** — Established in 1988 under UNEP and WMO
- **Key policy milestone** — The second Global Stocktake under the Paris Agreement concludes in 2028.
- **French co-chair statement** — Robert Vautard noted that report timelines are typically approved 'in a matter of minutes'
- **India's IPCC scientist** — Thiagarajan Jayaraman represents India at the IPCC and raised the equity argument publicly

VALUE ADDITION

REPORTS, BODIES AND INSTRUMENTS

- **IPCC assessment cycle** — AR6 Synthesis Report completed in 2023; AR7 is the ongoing seventh assessment cycle.
- Paris Agreement, 2015 – UNFCCC

EXAMPLES FOR THE ANSWER

- Keep announcement and legal effect separate: the first US Paris withdrawal was announced in June 2017, formally notified in November 2019 and took effect on 4 November 2020. The US rejoined in February 2021; a further withdrawal took effect on 27 January 2026. The January 2026 IPCC withdrawal order is a different institutional action. This chronology illustrates the vulnerability of multilateral climate cooperation to changes in national policy.

• The equity argument — that developing-country researchers are structurally under-represented in global scientific consensus documents — is analogous to debates over authorship and citation bias in the IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services), and can be used to illustrate North-South divides in global environmental governance.

Source checks: IPCC AR7 · Paris Agreement · US withdrawal memorandum

2. Trained Caregiver Workforce for India's Ageing Population

GS-II · Prelims + Mains · Elderly care workforce formalisation · The Hindu

Syllabus — Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources

Prelims — General Science and Current Affairs – social welfare schemes, demographic trends



PUBLIC ISSUES

Why does India need a trained workforce for elderly care?

Original newspaper excerpt supplied with this issue

WHY IN NEWS

Union Budget 2026-27 proposed NSQF-aligned programmes for multi-skilled caregivers and training 1.5 lakh caregivers in the coming year. NITI Aayog's August 2026 report, Reimagining Care: Strategies for Empowering Caregivers in Viksit Bharat@2047, outlines a broader care ecosystem. Together, they have renewed attention to unpaid care, professional skills and support for families. Existing caregiver training predates this Budget, so it should not be described as the first national recognition of care work.

The Demographic Pressure Behind the Urgency

• India's **60-plus population** stood at approximately 149 million in 2022 and is projected to reach 347 million by 2050, forming roughly **20.8% of total population**.

• NITI Aayog cites the International Alliance of Carer Organisations' estimate that about 10% of India's population are family caregivers. The article's roughly 146 million figure is a population-based approximation, not a count from a caregiver census, and it does not establish that every caregiver is untrained or unpaid.

• The **planned 1.5 lakh formally trained caregivers** under Budget 2026-27 are described by the authors as 'a drop in the ocean' relative to present and projected need.

• Age-related conditions — Alzheimer's, Parkinson's, hip fractures, low sodium crises — demand caregivers who understand **geriatric mental health, behavioural management and physical care protocols**, not just mobility assistance.

The Hidden Gender Burden of Informal Care

• NSO's Time Use Survey 2019 found that female participants spent 299 minutes a day on unpaid domestic services, compared with 97 minutes for male participants. Unpaid caregiving was a separate category: 134 minutes for females and 76 for males. These are averages per participant aged six and above, not averages for all women and men.

- As families become smaller and younger members migrate for work, unpaid care can fall disproportionately on women. Family members often learn without formal support, which can intensify caregiver stress.
- A **formal training programme** covering age-related event detection, continuous monitoring, emergency care and psychological support — ideally shared by at least two family members — would distribute this burden more equitably across genders.
- Framing caregiving as **skilled economic activity** rather than welfare work is the article's central argument for why gender parity requires formal recognition of the role.

Two Existing Structures That Can Be Scaled

- Kudumbashree's K4 Care programme uses Kerala's self-help group network to train care executives. Its official April 2025 update states that the programme began in January 2024 and had trained 765 people. The supplied article's later figure of 838 is a reported snapshot rather than an independently verified current total.
- NHSRC provides an ASHA training module on elderly care within comprehensive primary health care. The article says granular completion data are unavailable. ASHAs work within the National Health Mission; NHSRC supplies technical support rather than serving as their employer.
- K4 Care provides a State-level model, while the ASHA network already operates nationally. Their elderly-care training and supervision can be strengthened, including qualified trainers-of-trainers, instead of building a wholly new delivery network.
- The **National Caregiver Council (NCC)** envisaged in the NITI Aayog report could act as an apex body to set benchmarks, standardise curricula, update training modules and manage a **national caregiver portal** listing certified caregivers.

What a National Caregiver Ecosystem Requires

- Validation, support and upskilling of existing informal caregivers are essential. The article's example of 'Sreeni' shows how family members acquire complex monitoring routines through experience; formal training should build on that experience within safe clinical boundaries.
- A national curriculum must incorporate **geriatric mental health, behavioural management and emotional support** alongside physical care, reflecting the multi-dimensional nature of elderly decline.
- **Budget 2026-27's announcement** aligns training to the National Skills Qualifications Framework, providing formal credentials that could translate informal expertise into recognised, remunerated professional identity.
- India's established global reputation in **healthcare nursing** is cited as proof that formalising care roles can generate both domestic dignity and international economic value — the care economy is described as 'an economic strategy waiting to be unlocked'.
- Operationalising the Budget announcement at ground level — not the announcement itself — is where the article locates the **decisive test of success**.

HIGH-YIELD FACTS

- **India's 60+ population 2022** — Approximately 149 million
- **India's 60+ population projection 2050** — 347 million, ~20.8% of total population
- **Family-caregiver estimate** — About 10% of the population, cited by NITI Aayog from the International Alliance of Carer Organisations; approximately 146 million is the article's calculation.
- **Budget 2026-27 target** — Training of 1.5 lakh caregivers aligned to National Skills Qualifications Framework
- **NITI Aayog report title** — 'Reimagining Care: Strategies for Empowering Caregivers in Viksit Bharat@2047', August 2026
- **K4 Care** — Started in January 2024 according to Kudumbashree's April 2025 update; 765 trained by that update. The article separately reports 838 at a later date.

- **Time Use Survey 2019** — Unpaid domestic work: female/male participants 299/97 minutes daily. Unpaid caregiving: 134/76 minutes; age six and above.
- **Proposed apex body** — National Caregiver Council (NCC), envisaged in NITI Aayog report

VALUE ADDITION

DATA YOU CAN QUOTE

- **60+ share by 2050** — 20.8% (347 million), from about 149 million in 2022. NITI Aayog's 2026 report gives the 2022 share as about 10.5%.
- **Family caregivers** — Approximately 10% of the population (IACO estimate cited by NITI Aayog, 2026); do not label the article's 146 million approximation a 2024 census count.

REPORTS, BODIES AND INSTRUMENTS

- NITI Aayog Report – 'Reimagining Care: Strategies for Empowering Caregivers in Viksit Bharat@2047' (August 2026)
- National Skills Qualifications Framework (NSQF) – Ministry of Skill Development and Entrepreneurship
- NHSRC Training Manual on Elderly Care – National Health Systems Resource Centre under Ministry of Health and Family Welfare

EXAMPLES FOR THE ANSWER

- Kudumbashree's self-help group network demonstrates how an existing State-level social infrastructure can be repurposed for formal skills certification without creating parallel institutions — a model applicable to other social-sector upskilling drives.
- India's export of trained nursing professionals to Gulf and Western countries illustrates how formalising a care role that was previously informal and domestic can generate both economic value and professional dignity — relevant when arguing for formalisation of any unpaid care economy segment.
- The ASHA worker model shows that community health workers trained through a national curriculum and deployed via a primary-health platform can reach scale, but also that completion data gaps limit accountability — a caution applicable to any new national caregiving cadre.

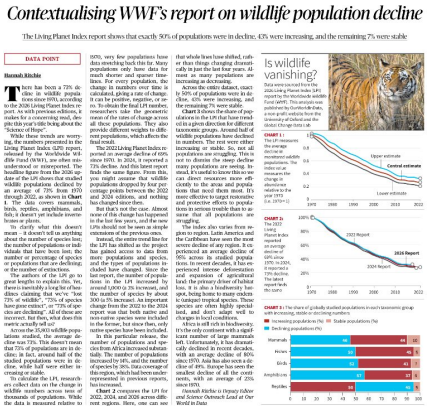
Source checks: NITI Aayog care report · Budget care-skilling announcement · NSO Time Use Survey 2019

3. Living Planet Index 2026: Contextualising the 73% Decline Headline

GS-III · Prelims + Mains · Living Planet Index methodology · The Hindu

Syllabus — Conservation, environmental pollution and degradation, environmental impact assessment

Prelims — Environment and Ecology — biodiversity indices and conservation



Contextualising WWF's report on wildlife population decline

The Living Planet Index report shows that exactly 50% of populations were in decline, 43% were increasing, and the remaining 7% were stable

DATA POINT

Hannah Ritchie

There has been a 73% decline in wildlife populations, according to the 2026 Living Planet Index report. As with previous editions, it has a concerning end, despite this year's title being about the "Science of Hope".

While these trends are worrying, the numbers presented in the Living Planet Index (LPI) report, which tracks 35,803 wildlife populations (5,790 species), are often misunderstood or misreported. The headline figure from the 2026 update of the LPI shows that studied wildlife populations declined by an average of 73% from 1970 to 2022. What does this actually mean?

The data covers mammals, birds, reptiles, amphibians, and fish; it doesn't yet include invertebrates or plants.

To clarify what this doesn't mean – it doesn't tell us anything about the number of species lost, the number of populations or individuals that have been lost, the number or percentage of species or populations that are declining, or the number of extinctions.

The authors of the LPI go to great lengths to explain this, yet there is rarely a day that I don't see claims claiming that we've "lost 73% of wildlife", "73% of species have gone extinct", or "73% of species are declining". All of these are incorrect, but then, what does this metric actually tell us?

Across the 35,803 wildlife populations in the LPI, the average decline was 73%. This doesn't mean that 73% of populations are in decline; in fact, around half of the studied populations were in decline, while half were either increasing or stable.

To calculate the LPI, researchers collect data on the change in wildlife numbers across tens of thousands of populations. While the data is measured relative to 1970, very few populations have data stretching back this far. Many populations only have data for much shorter and sparser timelines. For every population, the change in numbers over time is calculated, giving a rate of change.

These rates of change are then averaged. To obtain the final LPI number, researchers take the geometric mean of the rates of change across all these populations. They also provide different weights to different populations, which affects the final result.

The 2022 Living Planet Index reported a 69% average decline since 1970. In 2024, it reported a 73% decline. And this latest report finds the same figure. From this, you might assume that wildlife populations dropped by four per centage points between the 2022 and 2024 reports, but nothing has changed since then.

But that's not the case. Almost none of this change has happened in the last few years, and the new LPIs should not be seen as simple extensions of the previous ones.

The most significant change for the LPI has shifted as the project has gained access to data from more populations and species, and the types of populations included have changed. Since the last report, the number of populations in the LPI has increased by around 6,000 to 35,803, and the number of species by about 300 to 5,790. An important change from the 2022 to the 2024 report was that both native and non-native species were included in the former, but since then, only native species have been included.

The LPI's coverage of Africa is also now 73%. This doesn't mean that 73% of populations are in decline; in fact, around half of the studied populations were in decline, while half were either increasing or stable.

To calculate the LPI, researchers collect data on the change in wildlife numbers across tens of thousands of populations. While the data is measured relative to that whole lines base shifted, rather than things changing dramatically in just the last four years. Almost as many populations are increasing as decreasing.

Across the entire dataset, exactly 50% of populations were in decline, 43% were increasing, and the remaining 7% were stable.

Chart 1 shows the share of populations in the LPI that have trended in a given direction for different taxonomic groups. Around half of wildlife populations have declined in numbers. The rest were either increasing or stable. So, not all wildlife populations are in decline, nor do we dismiss the steep decline many populations are seeing. Instead, it's useful to know this so we can direct resources more efficiently to the areas and populations that need them most. It's also important to celebrate success and protective efforts to populations in serious trouble than to assume that all populations are struggling.

The Index also varies from region to region. Latin America and the Caribbean has seen the most severe decline of any region. It experienced an average decline of 95% across its studied populations. In recent decades, it has experienced intense deforestation and expansion of agricultural land, which destroys wildlife habitats. It is also a biodiversity hotspot, being home to many endemic (unique) tropical species. These species are often highly specialised, and don't adapt well to changes to local conditions.

Africa is still rich in biodiversity. It's the only continent with a significant share of its land remaining wild. Unfortunately, it has dramatically declined in recent decades, with an average decline of 86% since 1970. Asia has also seen a decline of 49%. Europe has seen the smallest decline of all the continents, with an average of 25% since 1970.

Hannah Ritchie is Deputy Editor and Science Outreach Lead at Our World in Data

Is wildlife vanishing?

Data were sourced from the 2026 Living Planet Index (LPI) report by the Worldwide wildlife Fund (WWF). This analysis was published by Our World in Data, a research and data publication at the University of Oxford's Global Change Data Lab.

CHART 1 | Measurements The average decline in monitored wildlife populations. The LPI measures the change in abundance relative to the year 1970 (i.e. 1970=1)

Upper estimate
Central estimate
Lower estimate

CHART 2 | The 2022 Living Planet Index reported declines of 69% since 1970. In 2024, it reported a 73% decline. The latest report finds the same figure.

2022 Report
2024 Report

CHART 3 | The share of globally studied populations in each taxonomic group with increasing, stable or declining numbers

Increasing populations (%) Stable populations (%) Declining populations (%)

Mammals 30 44 26
Birds 32 45 23
Reptiles 23 41 36
Amphibians 17 17 66
Fish 18 43 39

Original newspaper excerpt supplied with this issue

WHY IN NEWS

WWF's Living Planet Report 2026 reports a 73% fall in the global Living Planet Index between 1970 and 2022. The index is compiled by ZSL and uses monitored vertebrate populations. The headline matches the 2024 edition, but the datasets and end years differ. The key examination issue is how to interpret an index of proportional population change without confusing it with animal losses, extinction or the percentage of populations declining.

What the 73% Figure Actually Measures

- The 2026 LPI uses 35,803 population trends across 5,790 vertebrate species: mammals, birds, reptiles, amphibians and fish. It measures change in abundance, not the number of species lost or the share of populations declining.
- Researchers estimate proportional changes in population abundance and aggregate them using geometric means, with weighting across species, regions and taxonomic groups. It is not a simple arithmetic average of animal counts.
- With 1970 set to 1, a 73% decline puts the global index at about 0.27 in 2022. This does not mean every population is now 27% of its former size, that 73% of all animals have disappeared, or that 73% of species are extinct.
- Across the full dataset, **exactly 50% of populations were in decline**, 43% were increasing, and 7% were stable — roughly equal numbers rising and falling.

Why the Number Shifted — and Why It Did Not

- The 2022 LPI reported a **69% average decline**; the 2024 and 2026 reports both report 73%, yet this does not mean wildlife dropped four percentage points between 2022 and 2024.
- New data and changes in population coverage lead to recalculation of the whole historical series. The 2022 edition included native and non-native species; the 2024 and 2026 editions use native species only.
- Compared with the 2024 edition, the 2026 dataset expands African coverage by about 14% in populations and 38% in species. This addresses under-representation and can alter the entire estimated trend, not just its final years.
- New LPI editions are **not simple extensions** of earlier ones; they are recalculations of the whole historical trend, so year-on-year headline comparisons across editions are methodologically misleading.

Regional and Taxonomic Variation Within the Index

- **Latin America and the Caribbean** recorded the steepest regional decline — 95% average decline across studied populations — driven by deforestation and agricultural expansion, and compounded by high endemism of specialised tropical species.
- Regional declines in the 2026 index are Africa 80%, Asia-Pacific 49%, North America 28%, and Europe and Central Asia 23%. Use the report's regional groupings: 'Asia' and 'Europe' alone are inaccurate labels. A smaller post-1970 decline does not imply little historical biodiversity loss.
- Among taxonomic groups, **amphibians** show the highest share of declining populations (57%), followed by reptiles (50%) and fishes (50%); mammals record 44% declining but also 46% increasing.
- The index does not yet cover **invertebrates or plants**, which represent the vast majority of Earth's species, limiting the scope of any whole-of-biodiversity inference.

Region	LPI decline 1970–2022
Latin America and Caribbean	95%
Africa	80%
Asia-Pacific	49%
North America	28%
Europe and Central Asia	23%

What the Data Should — and Should Not — Drive

- Half the monitored populations are declining and half are stable or increasing, but that does not cancel the severity of the aggregate decline. Conservation should combine the global warning with targeted analysis of vulnerable populations, habitats and drivers.
- The LPI is most valuable for **directing restorative and protective efforts** toward populations in serious trouble, rather than implying uniform global collapse.
- Steep declines in Latin America point directly to **habitat loss from agricultural land expansion** as the primary policy lever; the specialised nature of endemic tropical species makes them particularly vulnerable to local condition changes.
- Accurate reading of the LPI is a prerequisite for sound **biodiversity finance and conservation prioritisation** under frameworks such as the Kunming-Montreal Global Biodiversity Framework.

HIGH-YIELD FACTS

- **Report and index** — WWF publishes the Living Planet Report; ZSL compiles the Living Planet Index. WWF is World Wide Fund for Nature internationally and World Wildlife Fund in the US, not 'Worldwide Wildlife Fund'.
- **Coverage** — 35,803 population trends across 5,790 vertebrate species in the 2026 edition, covering 1970-2022.
- **Species groups covered** — Mammals, birds, reptiles, amphibians, and fish — invertebrates and plants not yet included
- **Baseline year** — 1970 (index value = 1 in 1970)
- **Share of populations declining** — 50% declining, 43% increasing, 7% stable across the full dataset
- **Latin America decline** — 95% average decline — the most severe of any region studied
- **Africa coverage change, 2024-2026** — Populations +14%; species +38%.
- **Methodology shift (2022–2024)** — Non-native species included in 2022 LPI; from 2024 only native species are included

VALUE ADDITION

DATA YOU CAN QUOTE

- **Amphibians — share of declining populations** — 57% of studied amphibian populations declining (2026 LPI)
- **Asia-Pacific** — 49% average decline in the regional LPI, 1970-2022 (2026 edition).
- **Europe and Central Asia** — 23% regional LPI decline, 1970-2022; substantial losses before 1970 are outside the index baseline.

REPORTS, BODIES AND INSTRUMENTS

- **Living Planet Report** — WWF's biennial publication, drawing on the Living Planet Index compiled by ZSL.
- Kunming-Montreal Global Biodiversity Framework — Convention on Biological Diversity (CBD), 2022

EXAMPLES FOR THE ANSWER

- A geometric mean summarises proportional changes and can conceal very different population trajectories. Pair the index with the distribution of trends, regional detail and other measures such as extinction-risk indicators. An equal number of rising and falling populations need not produce an unchanged weighted geometric index.
- Recalculation after adding population data changes the estimated historical LPI trend. This illustrates a general lesson familiar from statistical revisions: compare like-for-like methods and coverage before inferring a change over time from successive headline releases.

Source checks: WWF Living Planet Report 2026 · ZSL index findings · OWID methodology analysis

4. Himalayan Glacier Instability and Development Rethink

GS-III · Prelims + Mains · Himalayan glacier retreat and disaster risk · The Hindu

Syllabus — Conservation, environmental pollution and degradation, environmental impact assessment

Prelims — Geography — Indian Himalayan Region, glaciers, permafrost, GLOFs



Warming Himalayas demand a rethink on development

For decades, the fight for sustainable, climate-resilient, hazard-averse development in the Indian Himalayan Region (IHR) has gone unheeded, and the region is witnessing frequent and severe climate-induced disasters.

The catastrophic Nepal floods of August 26 are a warning that the 'global natural commons', stretching from the Hindu Kush and Karakoram to the Himalayas, are in an existential crisis. The Intergovernmental Panel on Climate Change (IPCC) and the World Meteorological Organization (WMO) have warned that warming in the high mountains of Asia is occurring at 0.2°C per decade, nearly twice the global average, "leading to glacier retreat, decreasing in turn the stability of mountain slopes and the integrity of infrastructure, threatening water security, livelihoods, ecosystems, and increasing disaster risk."

Reports released on March 21, 2026, by the International Centre for Integrated Mountain Development (ICIMOD) found that ice-loss rates across the Hindu Kush Himalaya (HKH) have doubled since 2000. "We are trying to navigate a rapidly changing future with an incomplete map," said one of the authors of the report. Warming is not uniform across this 3,500-kilometre range. According to the *Journal of Earth System Science*, the western Himalaya is warming consistently faster than the central and eastern stretches, with night-time minimum and winter temperatures rising at the most extreme rates.

Nepal is paying the price for a crisis it did not create. As it produces roughly 0.1% of global greenhouse gas emissions, it is right to demand compensation for loss and damage.

Rising temperatures, effect on glaciers

Rising atmospheric temperatures shift the balance between winter snow accumulation and summer melt, causing glaciers to retreat and thin steadily. Ice that once had a thermal profile of -6°C to -20°C now has temperatures closer to -2°C, making it far more susceptible to melting.

Meltwater pools atop glaciers in supraglacial lakes and carves vertical shafts called moulins, plunging hundreds of metres through the ice to the bedrock, where it forms a pressurised liquid layer between the rock and ice. This layer lubricates the glacier, allowing it to slide downslope faster, while the resulting subglacial (between the glacier and bedrock) and englacial (within the glacier) water channels generate mechanical forces intense enough to fracture the ice.

In high-altitude environments such as the Himalayas, permafrost – ground or rock that remains at or below 0°C – acts as geological cement, holding steep rock walls together by filling fractures, joints and pores with solid ice. As temperatures rise, permafrost melts into water, triggering rock avalanches, landslides and debris flows that threaten downstream valleys.

In Nepal, a shaking equivalent to a magnitude 5.2 seismic event was recorded by the United States Geological Survey (USGS) on August 26, when a 600-metre-wide section of ice and rock broke away from the northern flank of Langtang Himal at an elevation of 5,600 m and fell 1.2 km into the valley below. Researchers from the British Antarctic Survey recorded unusually high ground temperatures two days before the collapse, using sensors located 10 km from the site.

This mass of ice and rock landed in the Lhende Khola, a tributary of the Bhote Koshi river, damming it. When the dam broke, it unleashed a flash flood of concrete-like mud and debris – "an inland tsunami" travelling 170 km down the Bhote Koshi Valley into central Nepal. This was no isolated event. Such collapses can happen anywhere in these mountains and warming makes them more likely.

What can be done

There is no technology to prevent such collapses. The only real option is to mitigate their impact on downstream communities, which requires regional cooperation and a shared system for real-time data exchange. High-altitude satellite and drone surveillance is urgently needed to detect early signs of cliff fracturing, permafrost thaw and glacial instability. Real-time acoustic and hydrological sensors along glacier-fed rivers could detect sudden subsurface movements or flash surges and alert downstream communities immediately. Glacial lakes need continuous monitoring and, where feasible, engineered drainage.

River flood zoning must account for valley slope. Steeper slopes concentrate damage vertically, requiring infrastructure to be located much higher above the riverbed, while gentler slopes spread destruction horizontally, demanding an entirely different zoning approach.

Hydropower policy needs to be rethought, with a firm ban on construction above a defined elevation. The Avay Shukla Committee (*Court on Its Own Motion vs State of Himachal Pradesh and Others*) and the Ravi Chopra Committee both recommended restricting major hydropower projects or subjecting construction activities above 2,200 metres to detailed expert review.

The proposed Chenab-Beas river-linking project – an 8.7-km tunnel through the steep slopes of the Pir Panjal Range in Lahaul and Spiti district, near Koksar village in Himachal Pradesh, at an elevation of 3,140 metres (10,300 feet) – needs serious rethinking. The rationale for diverting more water from the western rivers of the Indus system may appear logical on paper, but the project is located in a fragile Himalayan ecosystem, and its likely environmental impacts make it eminently avoidable.

Every development activity in the IHR must be evaluated in light of the changing geological realities of the Himalayas. There should be a moratorium on all development projects until each is rigorously reassessed for its environmental impact, hazard-averseness and climate resilience.

Archana Vaidya
An advocate and the founder of the Forum for Environment Legal Policy Research (FELPR)

The 'cement' is melting – retreating glaciers and thawing permafrost are heightening disaster risks in the Indian Himalayan Region

Original newspaper excerpt supplied with this issue

WHY IN NEWS

An ice-rock avalanche from Langtang Lirung on 26 August 2026 developed into a devastating flood along the Lhende, Bhote Koshi and Trishuli river corridor across the Nepal-China border. ICIMOD describes a cascading mass-movement event, not a conventional glacial lake outburst flood. Its March 2026 glacier reports also document accelerating HKH ice loss, renewing debate on monitoring and risk-sensitive Himalayan infrastructure.

How Warming Destabilises Himalayan Glaciers

- Permafrost is ground, including soil or rock, that stays at or below 0°C for at least two consecutive years. Ice in fractures can bind rock; thawing may weaken slopes and contribute to landslides or rock-ice avalanches. Permafrost is not necessarily permanent and the ground is said to thaw, not melt.

- As glacier ice warms toward its melting point, meltwater and changes at ice-rock interfaces can increase instability. Temperatures differ by site, depth and season; the article's -6°C to -20°C versus -2°C comparison should not be treated as a measured range for all Himalayan glaciers.
- **Moulins** (vertical shafts carved by meltwater) allow water to reach the bedrock, forming a pressurised liquid layer that lubricates the glacier and accelerates downslope sliding.
- Subglacial and englacial water channels generate mechanical forces intense enough to fracture ice, compounding surface melt with internal structural collapse.
- Warming varies across the Himalayan region and by elevation, season and time of day. Local winter and minimum-temperature trends can be especially important for snow, ice and permafrost; regional averages should not be used as a substitute for site-specific observations.

The Langtang Himal Collapse: What Happened

- On 26 August, a large rock-and-ice mass detached from the north face of Langtang Lirung and fell about 1.2 km into the Lhende Khola valley. The resulting cascade entrained rock, sediment, ice and river water.
- ICIMOD's synthesis reports a USGS surface-wave magnitude of 5.2 associated with the mass movement. The seismic signal records the collapse; it is not evidence that a magnitude-5.2 tectonic earthquake caused the flood.
- BAS glaciologist Hamish Pritchard reported that sensors about 10 km away had recorded their highest ground temperature in two years shortly before the event. This supports investigation of warm conditions; it was not a validated operational warning or proof of the event's cause.
- Some analyses suggest that debris briefly dammed the Lhende Khola before water was released into the Bhote Koshi-Trishuli system. Such a phase would be a debris-dam outburst, distinct from the sudden drainage of a pre-existing glacial lake. Downstream distance estimates depend on which impact is measured.
- ICIMOD's March 2026 reports describe HKH ice-loss rates as having doubled since 2000. This establishes a worsening cryospheric context, but does not by itself prove how much climate change caused this particular collapse or quantify the frequency of such rare events.

Monitoring and Early-Warning Gaps

- **High-altitude satellite and drone surveillance** is identified as urgently needed to detect cliff fracturing, permafrost thaw and glacial instability before collapse.
- **Real-time acoustic and hydrological sensors** along glacier-fed rivers can detect sudden subsurface movements or flash surges and alert downstream communities.
- **Glacial lakes** require continuous monitoring and, where feasible, engineered drainage to prevent glacial lake outburst floods (GLOFs).
- Early warning is a **transboundary problem** — the Bhote Koshi disaster crossed Nepal and threatened communities further downstream — requiring regional data-sharing frameworks.

What the Article Demands of Policy

- **River flood zoning** must distinguish between steep slopes (where damage concentrates vertically, requiring infrastructure far above the riverbed) and gentle slopes (where destruction spreads horizontally), demanding different zoning approaches for each.
- The article advocates restrictions on high-altitude hydropower and invokes the Avay Shukla and Ravi Chopra committee discussions. The cited 2,200-m threshold is a recommendation for scrutiny in a specific context, not an established blanket statutory ban across the Himalaya.
- The article cites a proposed Chenab-Beas link, described as an 8.7-km tunnel near 3,140 m through the Pir Panjal, as a project that should be reconsidered in a fragile mountain setting. These are the article's project particulars and policy argument, not evidence of an approved or operating scheme.

- A **moratorium on all development projects** in the Indian Himalayan Region is urged until each is rigorously reassessed for environmental impact, hazard-averseness and climate resilience.
- The article invokes Nepal's very small contribution to global emissions, citing roughly 0.1%, to argue for loss-and-damage support. A precise emissions share requires a year, gas coverage and dataset; it should not be memorised as an unchanging entitlement formula.

HIGH-YIELD FACTS

- **Himalayan warming** — Rates vary by region and reference period. The article's 0.3°C-per-decade figure needs that context before quotation.
- **HKH ice-loss doubling** — Ice-loss rates across Hindu Kush Himalaya have doubled since 2000 (ICIMOD, March 2026)
- **ICIMOD report date** — Released March 21, 2026
- **Collapse site** — North face of Langtang Lirung; a rock-ice avalanche developed into a downstream debris flood.
- **Seismic distinction** — The reported USGS Ms 5.2 signal was generated by mass movement, not a confirmed causative tectonic earthquake.
- **Affected river corridor** — Lhende Khola, Bhote Koshi and Trishuli; avoid treating a single reported run-out distance as a settled measurement.
- **Hydropower appraisal** — Distinguish expert recommendations, project-specific conditions and binding law; a cited 2,200-m threshold is not a universal legal rule.
- **Chenab-Beas proposal** — The article cites an 8.7-km tunnel at about 3,140 m as an example for precautionary infrastructure appraisal.

VALUE ADDITION

DATA YOU CAN QUOTE

- **Warming comparison** — State the source, geographical area and time period whenever quoting a mountain warming rate or comparing it with the global average.
- **Ice-loss rate change since 2000** — Doubled across Hindu Kush Himalaya

REPORTS, BODIES AND INSTRUMENTS

- **ICIMOD, March 2026** — Changing Dynamics of Glaciers in the Hindu Kush Himalaya Region from 1990 to 2020; HKH Glacier Outlook 2026.
- IPCC Assessment Reports — High Mountain chapter
- **Avay Shukla Committee** — Recommendations concerning hydropower development in Himachal Pradesh, cited in the article.
- **Ravi Chopra Committee** — Expert appraisal of hydropower and environmental impacts in Uttarakhand, cited in the article.

EXAMPLES FOR THE ANSWER

- The 7 February 2021 Chamoli disaster in Uttarakhand began as a rock-ice avalanche near Ronti peak and developed into a debris-laden flood in the Rishiganga-Dhauliganga system. ICIMOD explicitly rules out a GLOF because no significant glacial lake initiated it. It is a strong example for multi-hazard monitoring and risk-sensitive infrastructure planning.
- COP27 in 2022 agreed to establish new funding arrangements and a fund for loss and damage; COP28 operationalised the fund in 2023. This was an institutional financing decision, not a guarantee that a specific disaster had already received compensation. It is relevant to climate justice and support for vulnerable developing countries.

Source checks: ICIMOD disaster analysis · Permafrost definition · Chamoli analysis

Prelims Pointers

ECONOMY

Consumer Price Index (CPI) – Retail Inflation [Prelims - Economy]

- India's combined CPI inflation was 5.54% year-on-year in September 2026 (provisional), up from 4.83% in August (final), on the 2024=100 base.
- **Definition Consumer Price Index (CPI)** measures changes in retail prices of a basket of goods and services consumed by households.
- Inflation target The notified target for April 2026-March 2031 is 4%, with a 2%-6% tolerance band. A monthly reading does not mechanically determine the MPC's interest-rate decision.
- Food inflation Combined CFPI inflation was 7.74% in September, versus 5.97% in August. The broader food-and-beverages division was 7.36%; CFPI and that division are different measures.
- Other divisions Transport inflation was 5.01%; personal care, social protection and miscellaneous goods and services was 13.75%. These are year-on-year September 2026 rates; the latter should not be described as the lowest-inflation division.
- Policy link CPI is the inflation-targeting reference; the MPC also assesses forecasts, growth, supply shocks and other information when setting policy.

The Hindu; source checks: MoSPI September CPI release · Inflation-target notification

DEFENCE & SECURITY

INS Mangrol (P82) – Mahe-class ASW-SWC [Prelims - Defence & Security]

- The Indian Navy commissioned INS Mangrol (P82), its third Mahe-class ASW-SWC, at Naval Dockyard, Mumbai, on 12 October 2026.
- **Class & Role** Mahe-class **Anti-Submarine Warfare Shallow Water Craft (ASW-SWC)**; designed for coastal and shallow-water operations.
- **Builder** Designed and constructed by Cochin Shipyard Limited (CSL), Kochi; over **80% indigenous content**.
- **Hull Number** Pennant number P82; commissioned at Naval Dockyard, Mumbai, under Western Naval Command.
- **Capabilities** Anti-submarine warfare, underwater surveillance, and low-intensity maritime operations.
- **Name Origin** Named after Mangrol, a coastal town and fishing harbour in Gujarat's Junagadh district.
- **Legacy** Carries forward legacy of earlier INS Mangrol (M85), a minesweeper that served until April 2004.

The Hindu; source checks: Ministry of Defence commissioning release

AWARDS, DAYS & MISCELLANEOUS

Sveriges Riksbank Prize in Economic Sciences 2026 [Prelims - Awards, Days & Miscellaneous]

- *American economists Robert E. Hall and Michael Woodford won the 2026 Nobel Prize in Economics.*
- **Official Name Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel**; awarded by the Royal Swedish Academy of Sciences.
- **Awarded For** Establishing the 'microeconomic foundations of macroeconomic stabilisation' and developing new macroeconomic models.
- Hall's contribution His 1978 work examined consumption under forward-looking expectations and showed why unexpected new information matters for changes in consumption. This helped ground macroeconomic analysis in household decisions.
- Woodford's work His framework links firms' pricing decisions and forward-looking behaviour to inflation and monetary policy, helping analyse stabilisation in economies with price rigidities.
- **Affiliations Robert E. Hall** — Stanford University and Hoover Institution (emeritus); Michael Woodford — Columbia University. Their contributions concern the microeconomic foundations of macroeconomic stabilisation.

The Hindu; source checks: Royal Swedish Academy award announcement

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