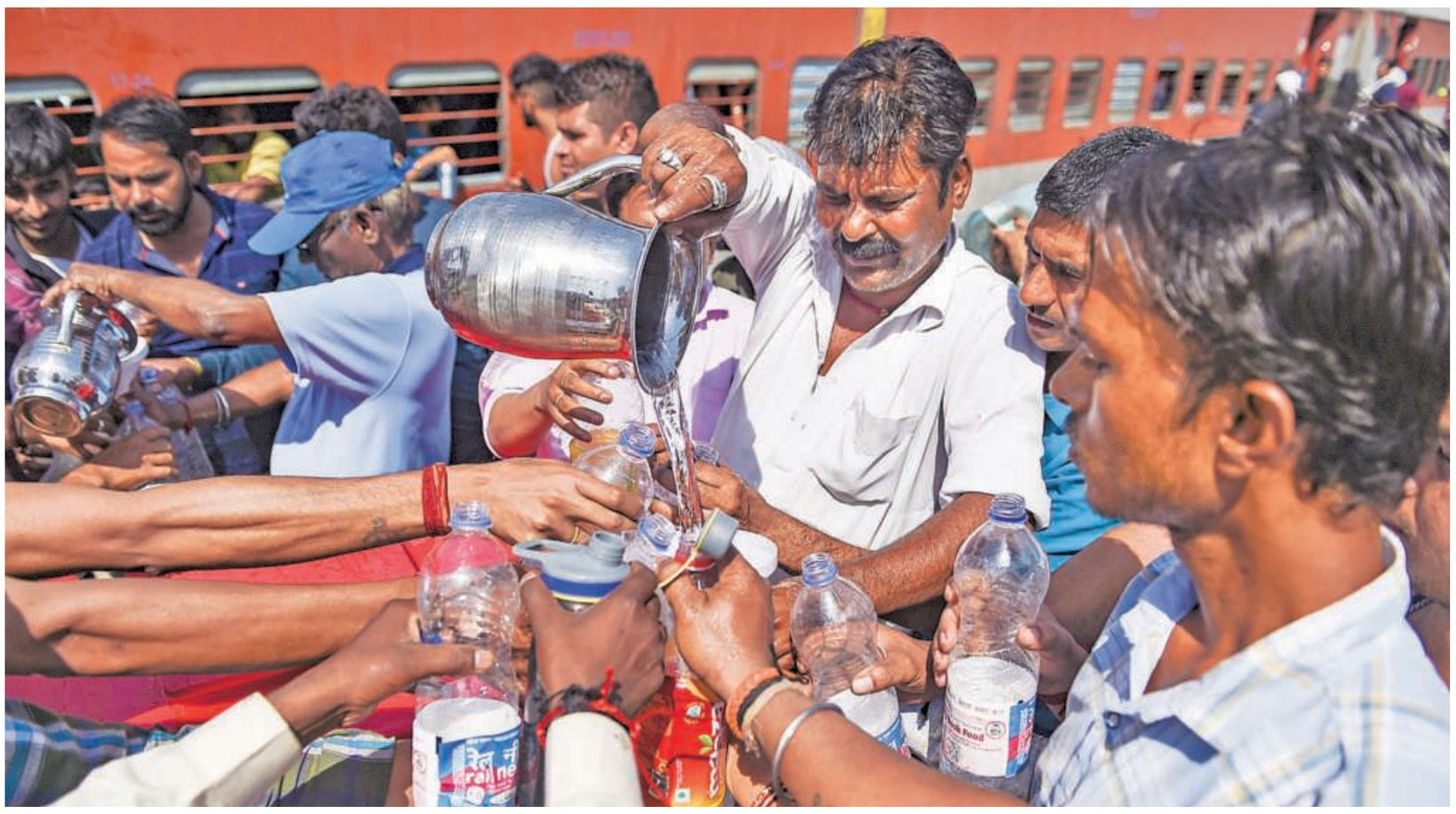
# Dealing with summer of '26

An early March heat spike has raised concerns of a long summer as El Niño risks grow. While India is more prepared now, gaps in planning, funding and implementation persist



**SANJEEB MUKHERJEE & MD KAIFEE ALAM**
New Delhi, 24 March

On March 11, the maximum temperature in Delhi touched 36.8°C, making it the hottest March day in half a century. The unprecedented spike rang alarm bells as it signalled an early onset of summer.

Though temperatures have cooled since then and are expected to stay that way till the end of March, the development — the mercury shooting up so early in the year — is ominous.

Weathermen say the early onset of El Niño, which could see a weak southwest monsoon in 2026, means India might have to brace for a long, hard summer this year with more intense and frequent heatwaves.

"The recent spell of sudden temperature spikes might have subsided for now due to some pre-monsoon activity along the Himalayas, but that does not mean temperatures will stay pleasant in April and May. In fact, our assessment shows it will be an intense summer this year," said Mahesh Palawat, vice president (meteorology and climate change) at Skymet Weather Services.

The state-run India Meteorological Department (IMD) in its last forecast said that "above-normal' maximum and minimum temperatures were expected over most parts of the country in the March to May period of 2026, barring few pockets of southern peninsular India, central and North-West India.

**IMD SAID "ABOVE-NORMAL' MAXIMUM AND MINIMUM TEMPERATURES WERE EXPECTED OVER MOST PARTS OF THE COUNTRY FROM MARCH TO MAY**

With March being spared from this intense heat after the initial few days, the possibility is that April and May could be hot. A long and harsh summer coupled with delayed or uneven onset of the southwest monsoon due to El Nino could affect sowing of kharif crops that usually starts in June with the onset of monsoon.

Experts said though India's irrigation coverage has considerably improved in the last few years, large tracts of farmland still are vulnerable to the monsoon's vagaries.

Oilseeds and pulses are the main crops that are particularly vulnerable to uneven monsoon in the kharif season as they are mostly grown on land dependent on rainfed irrigation. Uncertainty over steady supplies of key crop nutrients due to the West Asia crisis has further muddled the outlook.

### Reasons for the spike

Studies show that the spike in March was not limited to North India alone.

An analysis by Climate Trends, a Delhi-based consultancy, shows that in March, heatwave or severe heatwave conditions gripped isolated pockets of Himachal Pradesh, with maximum daytime temperatures markedly above normal by 5.1–8°C. Heatwave conditions also gripped Vidarbha in Maharashtra, where temperatures were above normal by 3.1–5°C.

The report states that winter ended early in North India as climate change overrode the cooling effects of La Niña (which set in globally from December), driving early heatwaves and shrinking the Indian winter.

"Despite last year's La Niña conditions that typically cool global temperatures, global warming is reshaping long-standing weather patterns," Climate Trends said.

This is not the first time global warming has muscled out La Niña.

In 2025, the all-India annual mean land surface air temperature was 0.28°C higher than the 1991–2020 long-term average, making it the eighth warmest year since 1901, despite it being a La Niña year.

The report said that since 2020, four years have carried La Niña conditions, the last being 2023.

Under normal circumstances, La Niña would have pulled global temperatures down, but instead, relentless greenhouse gas emissions kept pushing them up, and each of those years still found its place among the warmest in recorded history.

In 2026, according to scientists, La Niña-led cooling was brief and unable to reverse the long-term warming caused by record levels of greenhouse gases in the atmosphere.

Climate Trends concluded that as climate change accelerates global warming, the reliability of natural climate cycles such as La Niña and El Niño is increasingly being disrupted, making seasonal weather patterns unpredictable.

### Heat risk in India

The early March heat spike was not a one-off. Heatwaves are becoming increasingly widespread.

According to a 2025 study conducted by a New Delhi-based policy think tank, the Council on Energy, Environment and Water (CEEW), around 57 per cent of Indian districts, home to 76 per cent of the country's population, are currently at risk of high to very high heat. It found that 417 out of 734 Indian districts fall in the high and very high risk categories (151 under high and 266 under very high risk).

Another 201 districts were in the moderate category, and 116 in either low or very low categories. This does not mean these districts are free of heat risk – only that it is less than that faced by other districts, CEEW said.

The study identified the 10 states and Union Territories with the highest heat risk as Delhi, Maharashtra, Goa, Kerala, Gujarat, Rajasthan, Tamil Nadu, Andhra Pradesh, Madhya Pradesh, and Uttar Pradesh.

"Extreme heat is already having a multifaceted impact on day-to-day life, straining public health systems, pushing power demand to record highs, damaging crops, depleting water resources, and reducing the productivity of humans, livestock, and agriculture. Due to heat stress, India could lose the equivalent of 35 million full-time jobs and experience a 4.5 per cent reduction in gross domestic product (GDP) by 2030," CEEW warned.

### How prepared is India?

Studies show that although India's preparedness for heatwaves has improved significantly over the past decade, with a growing emphasis on early warning systems, coordinated response strategies and public awareness, things still remain far from ideal.

The IMD now issues heatwave forecasts and alerts, allowing state governments to activate response measures in time.

This shift has been driven in part by the National Disaster Management Authority, which issued national guidelines for heatwave management back in 2016.

Since then, India has increasingly adopted Heat Action Plans (HAPs), with more than 250 cities and districts across 23 heat-prone states now reporting operational plans, according to government data.

**ACCORDING TO A 2025 STUDY BY CEEW, AROUND 57 PER CENT OF INDIAN DISTRICTS, HOME TO 76 PER CENT OF THE COUNTRY'S POPULATION, ARE CURRENTLY AT RISK OF HIGH TO VERY HIGH HEAT**

However, experts say many of these measures remain limited in scope or poorly implemented.

Aditya Valiathan Pillai, a climate researcher at King's College London, said responses to heatwaves are based on emergency measures issued at the national or state level. HAPs often house long-term measures that have not been institutionalised yet.

Directives from higher levels drive emergency measures that are important but they seem to have weaker effects on policy," said Pillai. He added that while bureaucrats at higher levels are aware of heatwave issues, government workers who actually implement mitigation measures are far less aware.

"HAP is a fairly new phenomenon and is still in the process of getting rooted in urban local bodies and panchayats. It is in an adolescence phase but needs to mature fast given the scale of the threat," he added.

Structural gaps in planning further weaken the effectiveness of these measures.

A review of 37 HAPs conducted by the New Delhi-based Centre for Policy Research (CPR) found that only two included systematic vulnerability assessments. This limits the ability of authorities to identify and target high-risk populations effectively.

"Many HAPs broadly list vulnerable groups such as elderly people, outdoor workers, and pregnant women, but they do not identify where these populations are concentrated or how they should be specifically protected," said a climate policy expert who studies occupational heat.

According to CEEW, although India's primary strategy for tackling extreme heat is through HAPs, they need further strengthening, since 95 per cent of HAPs lack a detailed assessment of heat risks and vulnerabilities. "This gap makes it challenging for authorities to pinpoint and prioritise high-risk areas and allocate financial resources effectively. This is particularly relevant as heatwaves, since 2024, are now eligible for financing under state disaster mitigation funds," CEEW said.

Apekshita Varshney, founder of Heat Watch, a non-profit platform working on extreme heat and climate adaptation, said the real scale of India's heat crisis is felt by communities in the informal sector who have no platform to report it.

"Heat is lethal for some and merely uncomfortable for others," she said.

### Why financing remains a challenge

At the national level, the 16th Finance Commission has recommended the inclusion of heatwave as the 13th disaster covered by the Disaster Management Act of 2005.

"(The) notification gives heatwaves the same validity and importance as any other disaster and increases accountability of responsible departments," said Pillai.

At the state level, Pillai said that 11 states have notified it as a disaster, which enables them to use 10 per cent of their state disaster relief fund, which is shared with other state-notified disasters.

The analysis conducted by CPR found that only three out of 37 plans clearly identified sources for funds, highlighting a lack of dedicated funding and resource planning.

Varshney believes that recognition at the state level is meaningful but not enough. "Until we have central notification, ring-fenced budgets, and mandatory expenditure reporting, accountability will remain elusive," she said.

She also called for a much more serious conversation around extended producer responsibility (EPR) for heat management. EPR is a policy approach that holds producers, importers, and brand owners accountable for taking necessary steps to mitigate heat produced as a result of their commercial activity."The 'polluter pays' principle must apply here. Finance for adaptation and the resources to live a dignified life must flow from those who have contributed most to this crisis, nationally and internationally."

Urban planning and infrastructure are also inadequately integrated into many heat strategies. Rapid urbanisation has increased the urban heat island effect, particularly in densely built cities where concrete surfaces trap heat. However, several city-level plans do not adequately identify heat hotspots or incorporate long-term urban planning measures.

As heatwaves grow more frequent and intense, experts say the next phase of preparedness must move beyond emergency response. It will require stronger coordination between labour, health, urban development, and disaster management departments — backed by dedicated funding and a long-term mitigation roadmap.

## The human cost

Deaths due to heat stroke

Sources: Mospi, NCRB