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The News Clippings on Water Resources Development and allied subjects are enclosed for perusal of the Chairman, CWC, and Member (WP&P/D&R/RM), Central Water Commission. The soft copies of clippings have also been uploaded on the CWC website.

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
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At 44.2°C, city sees hottest day of season

TIMES NEWS NETWORK 

New Delhi: The mercury crossed 44 degrees for the first time this season, as scorching hot weather conditions prevailed across the capital on Monday. A maximum of 44.2 degrees Celsius was recorded at Palam — four notches above normal, making it the season's hottest day for the observatory. Safdarjung, meanwhile, recorded a maximum of 41.8 degrees Celsius.

According to the regional met office, similar conditions are expected for the next two days with 'strong surface winds' likely for Tuesday. "While the dust storm had reduced the maximum temperature by a few degrees, it has once again risen and was recorded at 44° C at Palam. The temperature is, however, likely to be higher on Tuesday," said a met official.

The minimum temperature recorded at Palam was 27 degrees while at Safdarjung, it was 25.5 degrees Celsius. Humidity levels oscillated between 21 and 47 percent, officials added.

Forecast by the met office for Tuesday shows a maximum of 43° Celsius while the minimum is expected to be around 26 degrees Celsius, met officials said. "There will be clear skies with a possibility of strong surface winds during the day. The maximum temperature for the next two days will hover around 43 degrees," the official added.

Season's hottest day at 44°C

Delhi sizzled at 44°C on Monday, the hottest day of the season. Tuesday is set to be hotter with strong winds lashing the city. The heat is likely to persist on Wednesday as well. Humidity levels oscillated between 21 and 47% on Monday. **P2**

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IN FOCUS

7F22

Prime Minister Narendra Modi and Nepal Prime Minister KP Sharma Oli jointly laid the foundation stone of SJVN's 900 MW Arun-3 hydro electric project in Kathmandu earlier this month. The project is located on river Arun in Sunkhuwashabha district of Nepal.

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MUD BALLS, PLANT SPECIES ALSO AMONG BIOREMEDIATION TECHNIQUES TO BE TRIED

On cards: Coir logs to clean drains flowing into Ganga

SOWMIYA ASHOK
NEW DELHI, MAY 21

LOGS WOUND with coir, mud balls, dyes, and certain plant species may soon be used as tools to clean sections of heavily polluted drains that flow into the river Ganga.

The National Mission for Clean Ganga (NMCG) has approved eight projects that will use bioremediation techniques to clean specific drains in Patna, Hardwar, Allahabad, Bulandshahr and Varanasi. The total flow across all these drains adds up to 377 million litres per day (MLD). The total cost for the projects is Rs 23.77 crore. "The project proponents have been given a month to show if their methods are working be-

fore funds are released," NMCG director general Rajiv Ranjan Mishra told *The Indian Express*.

Bioremediation is a technique that uses bacteria, fungi or other biological agents that work towards reducing toxins in the environment, in this case a polluted water body.

"After assessing the pollution load of a particular drain, a consortium of bacteria is designed that eats away a lot of the pollutants in the drain," Mishra said. "Due to this, the water from the drain that eventually reaches the river has much lower pollution levels. But this technique has to be applied over and over, say every 15 days."

For instance, in Varanasi's Assi drain, which has a flow of 70 MLD, the microbial consortium will be embedded into logs

wound with coir and placed at specific points in the drain. "The logs will be placed across the drain and some part of the logs will also be above the water. This has two functions. One, to increase retention time for the microbes to treat the water, and secondly, to trap solid waste in the drain, which can then be removed manually every day," said a senior NMCG official. Municipal workers will collect the solid waste that floats in the water and take it to the dumping yards.

In Allahabad's Nehru Drain, with a flow of 26 MLD, mud balls will be lowered into the drain. "The mud ball is divided into one part mud, one part bacteria. If the pollution is very heavy, the mud ball will sit on the sludge and continue to ferment. It will

remain there for a fortnight," said the official in charge.

Mishra said such in-situ bioremediation technologies have been taken up as a pilot project and once their efficacy is established, they will be scaled up. The Expression Of Interest call by NMCG drew over 200 proposals. "It is not feasible to set up a sewage treatment plant or a sewage network in all cities and towns in Ganga basin. These are some innovative ways to manage waste water and if these work then we have enough data to scale up the projects," he said.

NMCG officials say that a monitoring committee decides the points in the drain, termed 'control areas,' between which the in-situ bio-remediation technologies are to be employed; a

third party inspection committee is entrusted to monitor the water quality at both ends of the stretch picked up for treatment.

In Rajpura, Digba and Danapur drains in Patna, a simple consortium of microbes will inoculate particular sections of each drain. In Hardwar's Laksar drain, which has a flow of 193 MLD, a specific dye will be used to increase dissolved oxygen levels and break down organic matter into water and carbon dioxide.

Galaothi drain in Bulandshahr will see a phytoremediation, which will be the use of certain plant species, that will help to reduce pollution levels. Ramnagar drain will see a method of aeration — simply allowing more air to enter so it can sustain the existing micro-organism.

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Capital suffers as Haryana misses water share deadline

Govt Will Return To SC If River Board Fails To Settle The Issue

Paras.Singh@timesgroup.com

New Delhi: With Haryana missing its water share deadline on Monday, the capital continues to witness 40-50 MGD shortage in supply and complaints continue to pour in from areas in south and west Delhi.

Delhi receives 375 MGD water from Haryana through three sources — the Yamuna, the carrier-lined canal (CLC) and the Delhi sub-branch. "The flow of water is not affected from the Yamuna. However, the supply from CLC is disrupted. Though the deadline is over, we don't expect Haryana to disrupt the available supply till the next meeting of Upper Yamuna River Board (UYRB)," Delhi Jal Bo-

ard vice-chairman Dinesh Mohania said.

If the board can't sort out the difference, the Delhi government will again approach the Supreme Court, added Mohania, who is the MLA of Sangam Vihar.

The core of the dispute lies in calculating the water obligation and deciding which state should get the benefit of the water losses stopped by CLC

UYRB, the statutory body to resolve dispute among basin states, is scheduled to meet on Wednesday.

The apex court has rapped DJB for directly approaching SC instead of placing its plea before the board. One of the functions of UYRB, set up by

the Centre in 1995, was to regulate and supply water from all storage sites and barrages up to the Okhla barrage in Delhi, in accordance with the agreements among the governments of the six basin states of Uttar Pradesh,

Himachal Pradesh, Uttarakhand, Haryana, Rajasthan and Delhi.

The core of the dispute lies in calculating the water obligation and deciding which state should get the benefit of the water losses stopped by CLC, a concretised

pucca canal. "Haryana is arguing that it should be calculated on the basis of the amount of water released at the barrage. The Yamuna, due to its width and other factors, witnesses 50% water loss while the CLC losses are just 5%. As Delhi paid for the canal, we should get the benefit," Mohania argued.

DJB agreed that no written deal exists but argues it is getting water from Haryana on the same basis for the last 22 years. "According to the 1996 Supreme Court order, Delhi will continue to get as much water for domestic use from Haryana which can be consumed and filled in the two reservoirs at Wazirbad and Hyderpur," a senior DJB official said.

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Water is central issue in Shahkot

Seechewal village vows to vote for party that ensures clean water

APARNA BANERJI
TRIBUNE NEWS SERVICE

JALANDHAR, MAY 21

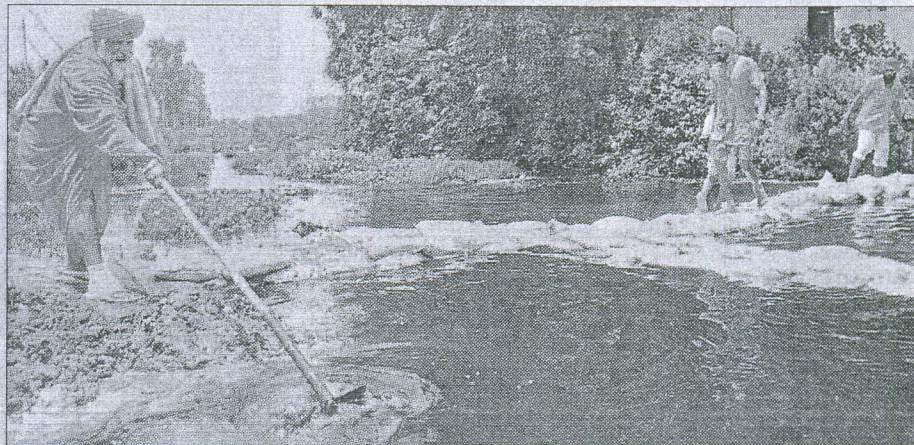
The hazardous Beas spill has catapulted the cleansing of toxin-ridden waters of Shahkot into one of the central issues ahead of the bypoll.

A week before the dumping of molasses into the Beas and subsequent threat to water across the state, posters bearing photographs of Sant Balbir Singh Seechewal across the Shahkot constituency sought that water be made a major issue in the byelection.

In Seechewal, posters pasted outside homes of a majority of villagers warn prospective candidates coming to seek votes, "Gande Paani Bein vich pana band karo, saade sareyan di ehi mang" (Stop dumping dirty water into the Bein. This is our only demand).

As the environmentalist's village — Seechewal — also falls in the constituency — the village on the banks of the Kala Sanghian drain has already decided to vote for the party that will ensure clean water.

The Shahkot constituency is



Environmentalist Balbir Singh Seechewal cleans the Kala Sanghian drain in Jalandhar. PHOTO: MALKIAT SINGH

home to two water bodies of the state — Chitti Bein and Kala Sanghian. However, the dumping of effluents from Phagwara industries into the Chitti Bein and toxins from Jalandhar industries into Kala Sanghian have left the water bodies polluted, leaving a trail of cancer, allergies and other diseases across the villages on the banks of the drains.

The Kala Sanghian originates from Himmatpur village and ends at Malsian village, where it joins East (Chitti) Bein, which further

falls into the Sutlej. At least 100 villages are located along its banks.

Surjit Singh of Seechewal village says, "Earlier this month, my nephew died of heart attack. My elder brother has cancer and another nephew, a resident of Bhodlipur village near Malsian, died of cancer. For us water is the only issue. We want the party which addresses this problem."

Environmentalist Seechewal said, "For us the cleansing of the Chitti Bein, Kala

Sanghian and the Sutlej are the only issues in the byelections. Much before the Beas fish died, we had taken up the water issue. Villagers can't stay here or marry because the water stinks and makes them sick. Of the 50 MLD STP for the Kala Sanghian drain, only 16 MLD is operational, while the rest untreated toxic water is flowing into drains. No other election issue — even unemployment — is relevant to us because employment is of use only when people are alive."

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3,000 families marooned in Tripura floods

6 dead in landslips due to heavy rain in past four days

SYED SAJJAD ALI
AGARTALA

Flash floods marooned at least 3,000 families in Tripura, where incessant rain triggered mudslides that have killed six people, including three of a family, in the past four days.

Chief Minister Biplab Kumar Deb declared financial assistance for the victims' families. Shelter has been provided in 36 makeshift camps.

Many areas submerged

Several localities in Agartala were submerged. Low-lying areas were the worst affected, requiring evacuation of people. Officials said the flood situation became grim owing to torrential rain in the hills of north Tripura, the source of all major rivers of the State. A portion of the Assam-Agartala National Highway was also flooded, disrupting normal traffic. Schools have been declared closed at several places.



In danger: Residents wading through flood waters at Baldakhal village in Agartala and, right, civil defence personnel rescuing people. ■ SPECIAL ARRANGEMENT

Tripura Education Minister Ratan Lal Nath inspected some flood-affected areas. "I have instructed the authorities to provide all support to people marooned in flood water," he said.

District officials on Monday said the National Disaster Response Force, fire services, defence personnel and

volunteers were jointly working to help the affected people.

Water receding

Officials said that the flood waters had started receding in West Tripura, Gomati, Khowai and Sipahijala districts of the State.

The two major rivers of

Tripura, Gomati and Haora, were also flowing below the danger level, they said.

However, around 17,480 people were still housed in relief camps in the four districts, State Disaster Management Authority officer Sarat Das said.

"There was no report of any fresh flood from any part

of the State and the river Haora is flowing at 9.48 m, well below its danger level of 10.50 m. River Gomati is flowing at 19.80 m, while its danger level is 21.50 m," Mr. Das said.

"Many people have returned to their homes. But, flood waters have not receded entirely from their houses

and living conditions are yet to be restored," District Magistrate of West Tripura, Sandeep Naredo Mahatme said.

Meanwhile, the local meteorological department said rainfall and thunderstorms were likely to occur in all districts of the State during the next 24 hours.

(With PTI inputs)

Act on four fronts to secure depleting water stock: Policy, infrastructure, behaviour, data

Amitabh Kant and Parameswaran Iyer



In a recent Mann ki Baat address, Prime Minister Narendra Modi reminded us about this dry season and the need to take conservation measures. This is a good opportunity to take stock of India's big water challenges. Critical groundwater resources – accounting for 40% of our water – are being depleted at rapid rates. Droughts are becoming more frequent, causing distress to rain-dependent farmers.

If nothing changes, and fast, things will get much worse: estimates indicate that water demand will exceed supply by a factor of two by 2030, driving economic losses of 6% of GDP by 2050. The challenges need to be addressed at four levels – policy, infrastructure, behaviour and data.

First, on the *policy* front, our legal framework ties water rights to land rights, reinforcing the perception that water is free and leading to overuse. Placing water on the State List has deepened zero sum thinking among states. Second, our water storage *infrastructure* is inadequate. We only capture 8% of our annual rainfall. Leaky transportation networks cause further losses of almost 40% of piped water in urban areas. And, we recycle less than 15% of used water.

Third, there is little incentive for responsible *behaviours*. Most water is free or highly subsidised, and our water prices are amongst the lowest in the world. Needless to say, a higher price disincentivises excessive consumption. Finally, our water *data* systems are under-developed. Weak data and analytics contribute to inefficient allocations and incorrectly priced water, and discourage innovation.

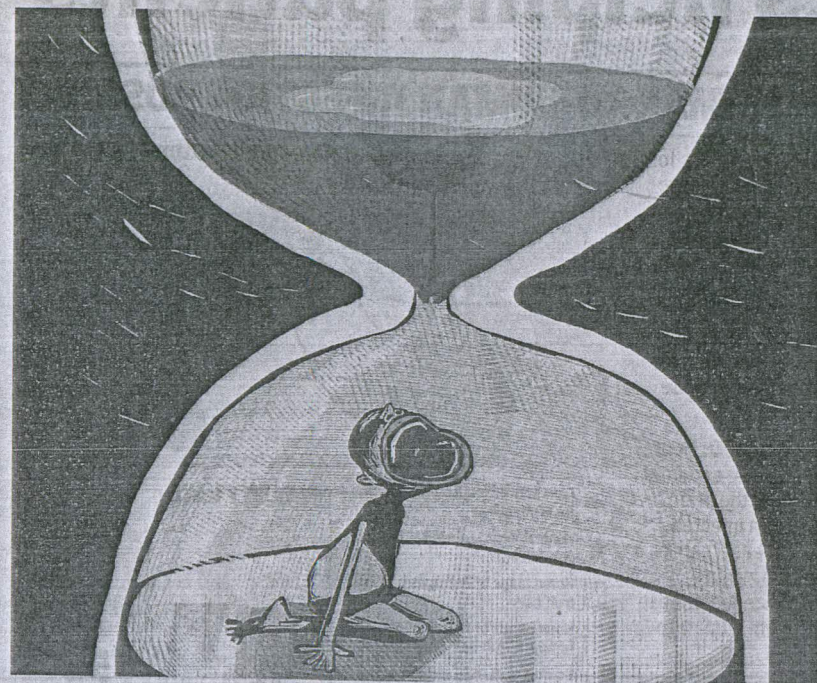
At the policy level we need an integrated legal framework for surface and groundwater governance to be established, which puts all water rights in the national trust, ie the government retains ultimate ownership and control of water, not the individual. The legal framework should make the Union government a co-equal partner with the

states in agenda setting, allocation, raising and disbursing funds and monitoring our water resources.

As many experts have suggested, this would mean moving water from State to Concurrent List. Further, scarce central funds should be released based on the performance of states in service delivery, and on a competitive basis like the recent results-based financing system under the National Rural Drinking Water Programme in the ministry of water and sanitation. Niti Aayog's creation of a Composite Water Management Index to competitively measure the performance of states is also an important step.

Serious consideration should be paid to the idea of creating a consolidated and streamlined ministry of water. A National Water Council responsible for coordination and oversight should be set up that resembles the GST Council. These institutions should emphasise an integrated approach in which technical experts, engineers, economists and ecologists come together with representatives from basin-state governments and end users to have a say on water issues.

Water is very much a local issue and the subsidiarity principle of managing it



There is critical need for a comprehensive water pricing and regulatory regime that reflects the true economic and social cost of water while allowing for drinking water to be priced at an affordable rate

at the lowest appropriate level needs to be adopted. Best practices of decentralised planning for water conservation such as in Hiware Bazaar, Maharashtra and the Swajal model of community-based drinking water in Uttarakhand need to be emulated and scaled up across the country. The focus on improved efficiency at the decentralised level also needs to be maintained for the agriculture sector, which consumes 80% of our water.

States like Gujarat are leading on this by bringing micro-irrigation to over six lakh farmers, 50% of whom are small and medium ones. The Andhra Pradesh government is also prioritising water efficiency in agriculture, by earmarking Rs 11,000 crore to bring 40 lakh acres of land under micro irrigation over

the next five years.

There is also critical need for a comprehensive water pricing and regulatory regime that reflects the true economic and social cost of water while allowing for drinking water to be priced at an affordable rate. Extensive evidence-based research has shown that there is willingness to pay for improved services by the user, but unwillingness to charge. The latter needs to change.

Infrastructure development for water conservation, ground water recharge and storage is another key priority. Decentralised water infrastructure development approaches should be encouraged wherever possible by involving user communities. A good example is seen in Dewas district in Madhya Pradesh. Here, through government support to farming communities for building ponds as alternative storage and supply sources, the district has achieved a 6-40 feet rise in the water table, even while increasing irrigated area by 120-190%.

Another area of infrastructure focus is developing a well-spread and functioning network of treatment plants and piping infrastructure treatment of municipal waste water in order to recycle it for agriculture and even drinking purposes. Israel, for example, meets 50% of its irrigation needs through treated municipal waste water.

Raising awareness and changing perceptions on water will require investments in behaviour change communication initiatives to internal and external stakeholders. To that effect, the 'National Campaign for Water Conservation' to be carried out under the ministry of drinking water and sanitation could borrow from the effective behaviour change communication initiatives of the Swachh Bharat Mission.

Recent innovations in data and analytics (eg use of smart chips and remote sensors in pipes and canals to uncover leakages, plan maintenance and repairs) should be leveraged. It is critical to establish a Central Data Platform to monitor and coordinate data on surface and groundwater usage.

Challenges and crises afford the best opportunities for transformative reforms. We must seize the moment in the water sector.

Amitabh Kant is CEO, Niti Aayog. Parameswaran Iyer is Secretary, Union ministry of drinking water and sanitation

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New way to clean water polluted by mercury



FROM THE LAB

AN UPDATE FROM INDIA'S FINEST
RESEARCH INSTITUTES

AMITABH SINHA

PUNE, MAY 21

MERCURY IS one of most toxic substances for humans. Its consumption can result in a variety of brain, skin, and heart disorders, and can even be fatal. The Central Pollution Control Board said in a paper last year that just 1 g of mercury, found in a clinical thermometer, was enough to contaminate a water body of surface area nearly 20 acres to the extent that the fish in it would be unsafe to eat.

Mercury is produced naturally, for example in volcanic eruptions, and also by a large number of industrial processes. Mercury contamination is not widespread in India, but there

are areas, in states like Maharashtra, Gujarat, Haryana and Odisha, where it has been found to be mixed in water in dangerous concentrations. Water bodies in mining areas, and around leather industries — which release mercury — are prone to contamination.

About four years ago, a group of researchers from IIT-Madras developed a simple kit to help people test whether their drinking water had traces of mercury, or similar toxic heavy transition metal ions like cadmium or lead. The water, when tested with this kit, takes on a colour if contaminated. Their work appeared in the journal *ACS Sustainable Chemistry and Engineering*.

While the kit was very useful, the researchers soon realised that they needed to go a step further and find a way to purify contaminated water. Thus began a search for a purification method, which, after four years of effort, yielded a novel process that not only filters out the mercury impurities from water but also produces clean hydrogen as a by-product that can be used as a fuel.

This new process developed by the team at IIT-Madras involves the creation of a mercury nano-alloy that, apart from separating itself

out of the contaminated water, splits water molecules to produce clean hydrogen gas. This work has been accepted for publication in the *International Journal of Hydrogen Energy*.

To start the process, an aluminium salt, like a nitrate or sulphate, is added to the contaminated water sample. This salt becomes the source of Al^{3+} ions. Mercury is available in the sample in the form of Hg^{2+} ions. One of the researchers, Dr Tiju Thomas, explained that the key to the process is the simultaneous reduction of these positive ions to their neutral elemental form, Al and Hg. For this, the team

added a powerful reducing agent like sodium borohydride to the solution. Once the aluminium and mercury are reduced, they mix with each other to form a nano-alloy.

This nano-alloy then reacts with water instantaneously. In this reaction, aluminium gets back to Al^{3+} form, but this is entirely benign to human beings. Mercury, on the other hand, accelerates the splitting of water molecules, ensuring a high rate of release of hydrogen gas, which can be collected and stored. Mercury itself is left behind as sediment, and can be filtered out easily. The hydrogen produced in the process can be used as a fuel.

Incidentally, the nano-alloy has been found to be a useful catalyst in other chemical reactions. Dr Thomas said the novelty of their process lay in the fact that it was achieving multiple objectives, all with important benefits in their own ways. And this was not accidental, either. Right from the beginning, he said, the effort had been to look for processes that could yield collateral benefits.

THE RESEARCH

A process to filter out mercury from water, releasing hydrogen fuel as byproduct

RESEARCHERS:

Abdul Malek, Edamana Prasad
and Tiju Thomas, IIT-Madras

For your research to be considered for this column, write to the author at amitabh.sinha@expressindia.com

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SIMPLY PUT QUESTION & ANSWER

22/5

How heat footprint has grown

Large new study crunches decades of IMD data to unpack patterns of warming — and some cooling — across India, points to impact on agriculture in a country with 17.5% of world's population but only 2.4% of its area

SOWMIYA ASHOK
NEW DELHI, MAY 21

A NEW study that used comprehensive surface temperature data to record changes in daily mean temperatures across India over seven decades has found "a consistent pattern of warming" over the northwestern and southern parts of the country from the 1950s to the 2000s, even as the "broad zone anchored over northeastern India and extending southwestward across central India" saw "a pattern of cooling" during this period.

The results, published recently in *Scientific Reports*, a journal of the Nature group, have been reported by Robert S Ross and T N Krishnamurti of Florida State University, Sandeep Pattnaik of IIT-Bhubaneswar, and D S Pai of the India Meteorological Department. The study has examined the patterns in the overall warming of the planet that has accelerated since the 1950s, and its possible impact on Indian agriculture. ("Decadal surface temperature trends in India based on a new high resolution data set": *Scientific Reports* 8: 2018)

What is the key finding of the study?

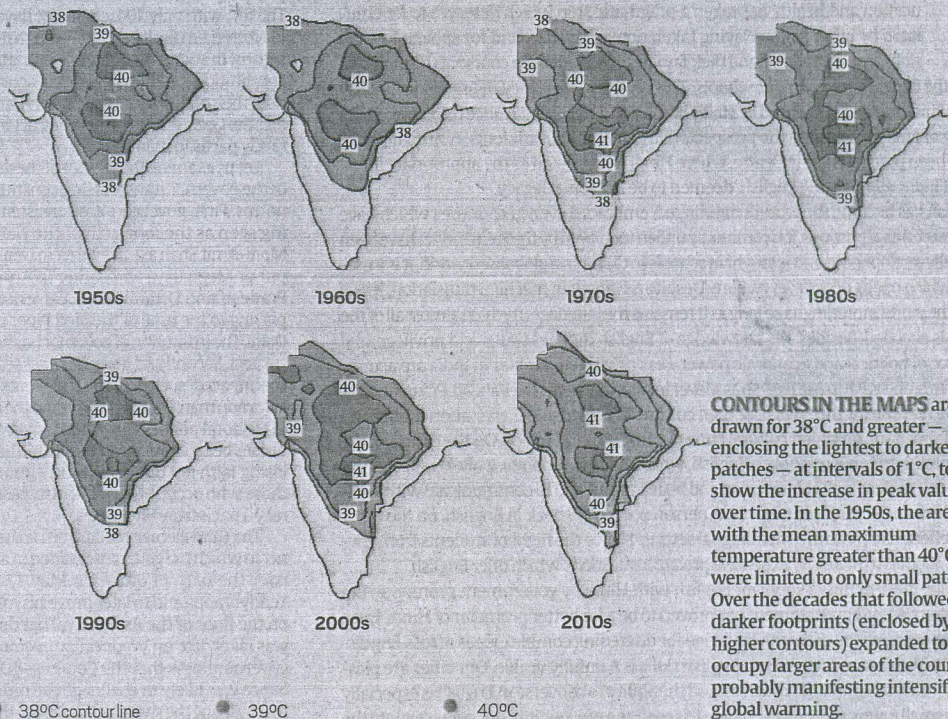
Essentially that while the "decade mean maximum surface temperatures over India in the pre-monsoon months in the 1950s showed limited areas with values as high as 40°C", by the 2010s, the "area with values exceeding 40°C had expanded to include the majority of the Indian peninsula, with peak values in south-central India reaching 42°C". At the same time, there is "a definite, and somewhat surprising, cooling (or in some instances, reduced warming)" in the Northeast over these decades — a pattern of warming and cooling that is explained by "the presence of a large region of anthropogenic brown haze over India and the adjacent ocean regions", especially in the winter and spring. "The haze", the researchers say, "is composed of aerosols that absorb solar radiation, which reduces insolation at the Earth's surface leading to cooling, while increasing absorption in the aerosol layer leading to warming".

On what data is the study based?

An examination of all-India surface mean temperature anomalies for 1901-2016 reveals an "unmistakable rapid rise, particularly since about 1980, as seen in annual, winter, pre-monsoon, monsoon and post-monsoon period depictions", notes the study. Beginning

Decade by decade, contours of India's warming

Over the decades, the areas with decadal mean maximum temperature values exceeding 40°C have expanded to include most of the Indian peninsula, with peak values in south-central India reaching 42°C



Source: "Decadal surface temperature trends in India based on a new high-resolution data set", by Ross, Krishnamurti, Pattnaik, Pai: 2018

1969-2005, a range that was subsequently expanded to 1951-2013. Temperature data from 395 Indian meteorological stations were categorised into the periods April 1-May 31 (pre-monsoon), July 1-September 30 (monsoon), and January 1-March 31 (winter), for which researchers looked at the maximum, minimum and daily mean temperatures.

And what do the data suggest?

In the 1950s, the area with a mean maximum temperature higher than 40°C was small — only one spot in south-central India showed values ~41°C. "The region with val-

larges", says the study. A very slight fall is seen in the 1990s, and then, "the region with temperatures greater than 40°C expands dramatically in the 2000s and the 2010s, (that) with temperatures greater than 41°C expands, and a region with temperature greater than 42°C appears in south-central India in the 2010s". Also, a notable warming trend that begins in northwestern India in the 1970s, accelerates in the 2000s and 2010s. The broad conclusion: "These decadal mean temperature patterns suggest that global warming is manifesting itself over parts of India in the maximum temperatures ob-

What do these findings imply?

India, the researchers underline, is "more vulnerable to climate change because its agricultural system must feed 17.5% of the world's population with only 2.4% of the land and 4% of the water resources of the planet". A mid-range projection of climate change for 2020-39 has indicated a reduction in crop yields of between 4.5% and 9%, the study says. One point of comfort: maps of multi-decadal temperature change show that the primary rice- and sorghum-growing regions "lie directly in the swath of multi-decadal temperature cooling (or re-

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FISH DEATHS: CONTAMINATED WATER CONTINUES TO FLOW IN CANALS

Molasses spill kills 'vulnerable, threatened' species in Beas

No legal record of cases against pollution violators

VISHAV BHARTI
TRIBUNE NEWS SERVICE

CHANDIGARH, MAY 21

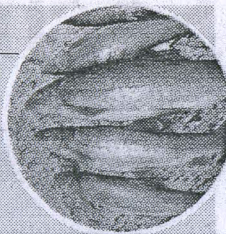
Molasses spill in the Beas has killed several species of fish, which figure as "nearly threatened" or "vulnerable" in the international list of endangered species.

The state's wildlife wing has identified 10 species of fish which mainly became casualty due to contamination of the river water four days back. Evaluating fish mortality on the basis of the International Union for Conservation of Nature's (IUCN) Red List of threatened species, it was found that common snow trout fish falls in the category of "vulnerable" species. It indicates that the species is at a high risk of endangerment in the wild. World over total 1,245 fish species have been categorised as vulnerable.

Three species — dwarf river monster (*Bagarius bagarius*), malhi (*Wallago attu*) and *Chitala chitala* — which are

ENDANGERED FISH

VULNERABLE: Snow trout (*Schizothorax richardsonii*): Commonly found along the Himalayan foothills, it has witnessed a drastic decline in population due to introduction of exotics, damming and overfishing over the past decade. While in some areas the decline is more than 90 per cent, the overall reduction is inferred to be less than 50 per cent with similar rates predicted in future.



NEAR THREATENED

Dwarf river monster (*Bagarius bagarius*): It is found throughout the Indian subcontinent and harvested heavily in different parts of its range as food fish, for ornamental trade and as sport fish.

***Chitala chitala*:** With population decline of 30 per cent across much of its range in Pakistan, Bangladesh, India and Nepal due to pollution and over-harvesting, the species is assessed as 'near threatened'.

Malhi (*Wallago attu*): The species has undergone a significant decline due to overexploitation as a food fish throughout its range.

also commonly found in the river, fall in the "nearly threatened" category. Internationally, the "nearly threatened" category means that a particular species faces threat of extinction in the near future. The IUCN has placed 548 fish species in this category.

Punjab's Chief Wildlife Warden Kuldip Kumar said the contamination was like-

ly to affect the entire ecosystem of the river. "It will take a long time to recover from this damage," he said.

Six species, white carp (*Cirrhinus mrigala*), thaila (*Catla catla*), rohu (*Labeo rohita*), giant river cat fish (*Sperata seenghala*), bagrid catfish (*Rita rita*) and Indian river shad (*Gudusia chapra*), which were also killed in great numbers, fall in the

category of "least concern".

Different studies indicate that the Beas is home to 20 species of fish, a few of which fall in the "critically endangered" and "endangered" categories. There are 61 species of fish recorded in the Harike Wetland. It is home to one "critically endangered", four "endangered" and 13 "vulnerable" fish species.

PARVESH SHARMA
TRIBUNE NEWS SERVICE

SANGRUR, MAY 21

There's no legal record of any action taken by several regional offices of the Punjab Pollution Control Board against industrial units across Punjab, reveals an RTI query.

The board has 12 regional offices in the state. In violation of the environmental norms, several offices have failed to maintain a record of the action taken against such units from 2012-17.

"The information sought by you is not available in the records of this office," said the Sangrur office in a reply to the RTI application filed by activist Brish Bhan Bujrak.

Bujrak wrote a letter to Chief Minister Capt Amarinder Singh on Monday, seeking action against the board officers concerned for "destroying" the records.

Bujrak had sought to know the number of industrial units in each

Ten of 12 regional offices fail to show data of industrial units flouting norms, reveals RTI petition

district, the ones that violated norms and the legal action taken against them. But the offices in Ludhiana, which has maximum number of industrial units, Jalandhar, Amritsar, Hoshiarpur, Patiala, Fatehgarh Sahib, SAS Nagar and Sangrur confirmed that they had no such record available.

The Hoshiarpur regional office, which controls 773 units, said: "We do not have a record of the industrial units that violated norms from 2012-17 or action taken against them."

The Fatehgarh Sahib office gave the same reply, while the Amritsar office said the application was not clear. "The public information officer is bound to supply the sought informa-

tion," a reply from the Jalandhar office read.

"It's subjective in nature. No such record in such form is available," said all three regional offices in Ludhiana, which controls 366 water polluting and 428 air polluting units.

However, details show that the board authorities in the Faridkot regional office had acted against 25 industrial units in the district, 39 in Moga, 31 in Fazilka and 30 in Ferozepur for violating norms between 2012 and 2017. The Bathinda regional office is yet to reply.

Bujrak alleged that board officers were deliberately destroying the record of violators to help them. "If they do not maintain any record of violators then what is the purpose of conducting raids?" he asked.

Punjab Pollution Control Board (PPCB) Chairman Kahan Singh Pannu said: "We have all the information but not in the format the RTI applicant has sought."

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इस रेलवे स्टेशन पर हवा से हो रहा पानी तैयार

■ भाषा, नई दिल्ली : ओडिशा के पर्वतीय और आदिवासी बहुल इलाके के एक रेलवे स्टेशन पर पीने के पानी की समस्या दूर करने के लिए हवा से पानी तैयार किया जा रहा है। पूर्व तटीय रेलवे (ईसीआर) के एक अधिकारी ने बताया कि रेल नेटवर्क में यह ऐसा पहला प्रयोग है।



अधिकारी ने बताया कि यह रेलवे स्टेशन भुवनेश्वर से 460 किमी दूर राउली के दुर्गम इलाके में पड़ता है। यहां पीने का पानी बराबर सप्लाई करने में बड़ी मुश्किल आ रही थी। यहां तक कि ट्यूबवेल लगाने की कोशिशों का भी कोई नतीजा नहीं निकला। अब जो मशीन लगी है

वह वातावरण से हवा पाकर उसे एक 'कंडेंसर' से गुजारती है ताकि गर्मी के चलते भाप पानी में तब्दील हो जाए। ओडिशा के रायगढ़ जिले में कोरापुट-रायगढ़ सिंगल लाइन के इस स्टेशन पर 25 अप्रैल को यह मशीन लगाई गई। यहां तीन ट्रेनें रोज रुकती हैं। यह मशीन 50 फीसदी की कम आर्द्रता पर भी और 32 से 35 डिग्री सेल्सियस तापमान पर काम करती है। यह एक दिन में 120 लीटर पानी बना सकती है। इससे पेयजल संकट खत्म हो गया है। इस पर दो लाख रुपये खर्च हुए हैं।

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कल से मिलेगा दिल्ली को पानी!

बोर्ड में 23 मई को पानी के मसले मीटिंग

■ विशेष संवाददाता, नई दिल्ली
दिल्ली में बढ़ रहे पानी के संकट पर यमुना रिवर बोर्ड अब 23 मई को पानी के मसले पर हरियाणा और दिल्ली के साथ बैठक करेगा। डीजेबी को उम्मीद है कि इस मीटिंग में कुछ निर्णय निकलेगा। हरियाणा ने 21 मई तक यमुना में पानी छोड़ने का आश्वासन दिया है। ऐसे में मंगलवार से वह पानी छोड़ना बंद करता है या पानी की सफाई और कम कर देता है तो दिल्ली में पानी संकट और अधिक गहरा जाएगा।

दूसरी तरफ सोमवार को भी दिल्ली को करीब 35 से 40 एमजीडी पानी कम मिला है। यही वजह है कि विभिन्न जगहों पर पानी को लेकर प्रदर्शन भी हो रहे हैं। मालवीय नगर, उत्तम नगर, जनकपुरी, द्वारका, विकासपुरी, लोदी

रोड, कैलाशपुरी, ग्रेटर कैलाश, दिल्ली कैट एरिया में पानी की कम सप्लाई चल रही है। डीजेबी के अधिकारियों के अनुसार मुनक नहर में हरियाणा की तरफ से पानी सफाई में काफी कटौती की गई है। जबकि मुनक नहर में ही पानी की बर्बादी कम है। ऐसे में डीजेबी का कहना है कि कच्ची नहर और यमुना की बजाय मुनक नहर में सफाई बढ़ाई जाए तो पानी की इतनी तंगी नहीं होगी। मुनक नहर में छोड़ा जाने वाला पानी रास्ते में सिर्फ 5 से 7 पैसे ही बर्बाद होता है। जबकि यमुना में छोड़ा जाने वाला पानी का 50 पैसे हिस्सा दिल्ली पहुंच पाता है। कच्ची नहर में छोड़े जाने वाले पानी का 30 पैसे हिस्सा दिल्ली पहुंचता है।



खबरों के लिए ट्विटर
पर फॉलो करें

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अधिकतम तापमान सामान्य से दो डिग्री अधिक, जबकि न्यूनतम एक डिग्री रहा कम



गर्म हवाओं से अपने चेहरे को बचाती हुई युवतियां। फोटो : दीपक

नई दिल्ली, (पंजाब केसरी) : राजधानी में सोमवार को अधिकतम तापमान 41.8 और न्यूनतम तापमान 25.8 डिग्री सेल्सियस दर्ज किया गया। अधिकतम तापमान सामान्य से दो डिग्री अधिक, जबकि न्यूनतम एक डिग्री कम रहा। मंगलवार को तापमान 43 और 26 डिग्री तक रहने का अनुमान है। बीते 24 घंटे में आद्रता 47 और 11 फीसद दर्ज की गई। पालम केन्द्र पर सबसे अधिक 44.2 डिग्री

पारा 44 के पार... ²²/_{१५}

तापमान रहा। दिल्ली में सोमवार की सुबह से ही तापमान चढ़ गया और बारह बजने तक धूप और गर्मी से लोगों का बेहाल होना शुरू हो गया। आलम यह रहा कि देर शाम को भी लू के थपेड़े महसूस किए गए। माना जा रहा है कि यह सप्ताह गर्मी के लिहाज से पसीन छुड़ाने वाला रहेगा क्योंकि मौसम विभाग का अनुमान है कि हर दिन तापमान में अब वृद्धि होगी और मई माह का सबसे अधिकतम तापमान भी दर्ज होगा।

सिर्फ 21 मई की बात करें तो वर्ष 2013 को छोड़कर अधिकतम तापमान सोमवार को सबसे अधिक दर्ज किया गया। हालांकि मई माह में अभी तक सबसे अधिक तापमान 11 मई को 42.8 डिग्री दर्ज किया गया था। दिल्ली के अन्य केन्द्रों पर अधिकतम तापमान सोमवार को पालम में 44.2, रीज 43.3, आया नगर 42.8, जाफरपुर 42.7, डीयू

42.6, नरेला व नजफगढ़ में 42.3, लोधी रोड 41.8 और मुगेशपुर में



किस दिन कितना रहेगा अधिकतम तापमान

22	43
23	43
24	43
25	43
26	43
27	43

41.4 डिग्री सेल्सियस दर्ज किया गया। मौसम विभाग के मुताबिक उत्तर पश्चिम भारत के मैदानी इलाकों में अगले दो-तीन दिनों में अधिकतम तापमान दो से तीन डिग्री बढ़ने की संभावना है। दिल्ली में 23 मई को आसमान में आंशिक रूप से बादल छाए रहने के आसार हैं। 22, 23 और 25 मई को आसमान साफ रहेगा। इस दौरान को भी बादल और बृदाबादी हो सकती है।

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नहरों में आए जहरीले पानी से लोगों में आया उबाल

नेशनल हाइवे को जाम
कर जताया विरोध

श्रीगंगानगर @ पत्रिका . पंजाब में व्यास नदी में शुगर मिल का लाखों टन शीरा और अन्य अपशिष्ट बहने से प्रदूषित हुआ जहरीला पानी राजस्थान की नहरों में आते ही जिले के लोगों में उबाल आ गया है। विभिन्न संगठनों ने सोमवार को

साधुवाली चेक पोस्ट के पास लिंक कैनाल पर नेशनल हाइवे जाम कर दिया। करीब बीस मिनट के जाम के चलते दोनों तरफ एक-एक किलोमीटर तक वाहनों की कतार लग गई।

लिंक कैनाल पर इकट्ठे हुए लोगों ने सुबह करीब साढ़े दस बजे से राजस्थान से पंजाब जाने वाले और पंजाब से राजस्थान आने

वाले लोगों के वाहनों को रोककर नहर में आ रहे गंदे पानी को दिखाया और पंजाब से आ रहे कैसर के बारे में बताया। इसके बाद सुबह साढ़े ग्यारह बजे नेशनल हाइवे पर जाम लगाकर रोड पर ही धरना लगाकर बैठ गए। इससे पंजाब और राजस्थान दोनों तरफ एक-एक किलोमीटर तक जाम लग गया।

22/5

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सुरेन्द्रनगर में पारा 45.3 डिग्री...

गुजरात में अहमदाबाद दूसरा सबसे गर्म शहर

पत्रिका न्यूज़ नेटवर्क

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अहमदाबाद/आणंद प्रदेशभर में भीषण गर्मी बरकरार है। सोमवार को सुरेन्द्रनगर का तापमान 45 डिग्री के पार पहुँच गया, जो राज्य में सबसे अधिक है।

दूसरा सबसे गर्म शहर (43.4) अहमदाबाद रहा। शहर में तेज गर्म हवा तथा कड़ी धूप ने खूब परेशान किया। अहमदाबाद शहर में रविवार की तुलना में तापमान में

वृद्धि हुई है। सुबह दस बजे के बाद से ही कड़ी धूप की चुभन महसूस हुई। दोपहर को धूप ऐसी कि मानों आग बरस रही हो। इसबीच गर्म हवाओं के थपेड़े शरीर को झुलसा रहे थे। आमदिनों में अतिव्यस्त रहने वाली सड़कें भी सोमवार दोपहर को सूनी नजर आईं। बाजारों में भी ज्यादा अवागमन नहीं रहा। गर्म हवा और कड़ी धूप के अलावा हवा में आद्रता की मात्रा भी 55 फीसदी तक रही, जिससे उमस भरी गर्मी का जोर भी बरकरार रहा। गुजरात रीजन में अहमदाबाद शहर में सबसे अधिक तापमान रहा। उधर आणंद शहर में

प्रमुख शहरों में तापमान

सुरेन्द्रनगर	45.3
अहमदाबाद	43.4
भुज	43.2
गांधीनगर	43.0
राजकोट	42.5
वडोदरा	41.6
सूरत	34.8

भी भीषण गर्मी के कारण लोग परेशान नजर आए। आणंद कृषि यूनिवर्सिटी ने आगामी सप्ताह में लू चलने की आशंका जताई है।

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समय से पहले 5 जून को कर्नाटक पहुंचेगा मानसून

**दक्षिण पश्चिम
मानसून के 97
प्रतिशत सामान्य रहने
की उम्मीद**

पत्रिका न्यूज़ नेटवर्क

rajasthanpatrika.com

बेंगलूरु, गर्मी और जल संकट से परेशान कर्नाटक में इस बार समय से पूर्व ही मानसून दस्तक देने के लिए तैयार है। इस बार केरल में 29 मई को मानसून के पहुंचने की उम्मीद है जबकि 5 जून को कर्नाटक में मानसून की बारिश शुरू हो सकती है।

दक्षिण पश्चिम मानसून इस वर्ष अपने सामान्य समय के अनुरूप आगे बढ़ रहा है पिछले कुछ दिनों के दौरान केरल सहित कर्नाटक के कई भागों में मानसून पूर्व की बौछारें लगातार भिगी रही हैं। मौसम विभाग ने भी इस वर्ष



मानसून के सामान्य रहने की भविष्यवाणी की है और जून से सितंबर के बीच दक्षिण पश्चिम मानसून की अवधि में 97 प्रतिशत बारिश का अनुमान है। सामान्य वर्ष के दौरान कर्नाटक में सात जून को दक्षिण पश्चिम मानसून पहुंच जाता है लेकिन इस बार दो दिन पूर्व ही राज्य में मानसूनी बौछार शुरू होने की उम्मीद है।

मौसम विभाग के निदेशक सीएस

पाटिल के अनुसार चार से पांच दिनों के दौरान पूरे राज्य में मानसून पहुंच जाएगा। यानी दस मई तक राज्य के सभी हिस्सों में मानसूनी बारिश होने लगेगी। कर्नाटक राज्य प्राकृतिक आपदा निगरानी केन्द्र के अनुसार राज्य के अधिकांश भागों में इस समय मानसून पूर्व की बारिश हो रही है और अगले कुछ दिनों के दौरान और ज्यादा बारिश हो सकती है जो मानसून के

आगमन के ठीक पूर्व रुकेगी।
**किसानों को मिलेगी
राहत**

दक्षिण पश्चिम मानसून के समय पर दस्तक देने से राज्य के किसानों को बड़ी राहत मिलेगी। पिछले वर्ष राज्य में अच्छी बारिश हुई थी लेकिन बारिश अगस्त महीने से शुरू हुई थी जिस कारण खरीफ फसलों की बुआई पर असर पड़ा था।

इस बार अगर 5 जून को मानसून का आगमन होता है और नियमित रूप से बारिश बरकरार रहने पर न सिर्फ समय पर खरीफ फसलों की बुआई हो पाएगी बल्कि सिंचाई के भी किसानों को चिंता नहीं करनी होगी।

इसके अतिरिक्त कावेरी और महादयी नदियों को लेकर राज्यों के बीच जो विवाद चल रहा है उसका भी सुगम समाधान सुनिश्चित होगा।

Hindustan Times
Statesman
The Times of India (N.D.)
Indian Express
Tribune
Hindustan (Hindi) ✓

Nav Bharat Times (Hindi)
Punjab Keshari (Hindi)
The Hindu
Rajasthan Patrika (Hindi)
Deccan Chronicle
Deccan Herald

M.P. Chronicle
Aaj (Hindi)
Indian Nation
Nai Duniya (Hindi)
The Times of India (A)
Blitz

and documented at Bhagirath(English)& Publicity Section, CWC

आईएमडी के मुताबिक-ज्यादा तापमान ग्लोबल वार्मिंग का संकेत • दिल्ली, पश्चिमी यूपी समेत उत्तरी राज्यों में असर दिखेगा लू और भीषण गर्मी से झुलसा पूरा उत्तर भारत



देश : त्रिपुरा में बारिश-बाढ़ से हालात बदतर

दुनिया : पाकिस्तान में लू और गर्मी से 65 मरे

नई दिल्ली | एजेंसी

आंधी-तूफान का दौर बीत जाने के बाद आसमान एक बार फिर साफ हो गया और सूरज की तपिश बढ़ने लगी है। तापमान में इजाफे से पूरा उत्तर भारत भीषण गर्मी का प्रकोप झेल रहा है। महाराष्ट्र का चंद्रपुर 48 डिग्री सेल्सियस तापमान के साथ सोमवार को देश का सबसे गर्म स्थान रहा।

आईएमडी प्रमुख डी शिवानंद पई के मुताबिक, सामान्य से ज्यादा तापमान ग्लोबल वार्मिंग का संकेत है। इसका सबसे ज्यादा असर महाराष्ट्र, दिल्ली, पश्चिमी उत्तर प्रदेश, राजस्थान, मध्य प्रदेश, हरियाणा और पंजाब में दिखेगा। महाराष्ट्र के अधिकतर स्थानों पर पारा 40 डिग्री को पार कर गया है, जबकि चंद्रपुर 48 डिग्री सेल्सियस के साथ सबसे गर्म रहा। इसके अलावा विदर्भ के गढ़चिरौली में तापमान 47 डिग्री, नागपुर और वर्धा में 46 डिग्री, अकोला, यवतमाल और अमरावती में 45 डिग्री मापा गया।



त्रिपुरा के अगरतला में सोमवार को भारी बारिश से मकान ढह गए। • प्रेस

राहत की उम्मीद नहीं

मौसम विभाग के मुताबिक, आने वाले दिनों में उत्तर भारत में आसमान पूरी तरह साफ रहेगा और एंटी-साइक्लोनिक हवाओं से तापमान 2 डिग्री और बढ़ने का अनुमान है। राजस्थान, मध्यप्रदेश जैसे राज्यों में पारा 46 डिग्री सेल्सियस के पार जा सकता है। इस दौरान लोगों को गर्म हवाएं भी झेलनी पड़ेंगी और रात के समय में भी तापमान सामान्य से ज्यादा रह सकता है।

यहां हो सकती है बारिश

मौसम विभाग ने अगले 24 घंटे के दौरान बिहार के कुछ इलाकों में आंधी और बारिश की संभावना जताई है। भागलपुर और पूर्णिया जिले के आसपास के क्षेत्रों में बादल आने के साथ बारिश हो सकती है। इसी तरह केरल में भी झमाझम बारिश होने की संभावना है।

बाढ़-बर्फबारी से परेशानी

अगरतला में पिछले 24 घंटे से लगातार हो रही बारिश से पश्चिम त्रिपुरा, गोमती और खोवाई में बाढ़ की स्थिति बन गई है। जिले के 25 हजार से ज्यादा लोग घर छोड़कर राहत शिविरों में चले गए हैं। यहां इस साल मानसून के पहले 798 मिलीमीटर बारिश दर्ज की गई है, जो सामान्य से दोगुना है।



कराची में सोमवार को भीषण गर्मी से राहत दिलाने के लिए वाटर कैनन लगाए गए हैं। • प्रेस

पड़ोसी देश भी परेशान

पाकिस्तान के कराची में भीषण गर्मी और लू से करीब 65 लोगों की मौत हो गई है। मौसम विभाग ने कराची और सिंध में तीन दिन तक लू चलने की चेतावनी जारी की है। कराची में सोमवार को तापमान 44 डिग्री रहा, जबकि दक्षिणी सिंध प्रांत में 46 डिग्री पहुंच गया। दूसरी ओर, श्रीलंका में मानसून की भारी बारिश और तेज हवाओं से करीब सात लोग मारे गए और 1,000 से ज्यादा विस्थापित हो गए। देश के कई इलाकों में भूस्खलन की चेतावनी जारी की गई है।

फ्रिज जितना ठंडा है चिली

दक्षिणी अमेरिका में एंडीज पर्वत और प्रशांत महासागर के बीच स्थित चिली देश में मई के महीने में पारा 7 डिग्री के आसपास है, जो आपके फ्रिज जितना ठंडा है। यहां सनशाइन कोस्ट एयरपोर्ट पर सोमवार सुबह तापमान 6.5 डिग्री रहा। इसी तरह दुनिया के अन्य देशों में 21 मई को तापमान की इस प्रकार रहे।

वाशिंगटन	लंदन
22°	22°
टोक्यो	बीजिंग
19°	17°
बर्लिन	मॉस्को
23°	20°

नोट : आंकड़े डिग्री सेल्सियस में

भारत सरकार

Government of India

केन्द्रीय जल आयोग

Central Water Commission

बाढ़ पूर्वानुमान प्रबंधन निदेशालय

Flood Forecast Monitoring Directorate

Tele/ Fax: 011-26106523, 26105274

e-mail : fmd@nic.in, fmdweb@gmail.com

Room No. 208(S), Sewa Bhawan,
R.K. Puram, New Delhi-110066.

विषय : दिनांक २०, २१, २२ की समाचार की कतरन (News Clippings) प्रस्तुत करने के सम्बन्ध में ।

मानसून/ बाढ़ सम्बन्धी समाचारों की कतरन (News Clippings) अवलोकन हेतु प्रस्तुत हैं :

संदर्भ : उपरोक्तानुसार

Handwritten signature
(सहायक निदेशक) 22/5/18

उप निदेशक (बा.पू.प्र.)

Handwritten signature
22/5/18

निदेशक (बा.पू.प्र.)

210245
22/05/2018

कृपया केन्द्रीय जल आयोग की वेब साईट पर अपलोड करने की व्यवस्था करें ।

उप निदेशक (तकनीकी प्रलेखन)

Handwritten signature

दिनांक २०/५/१८ को निम्नलिखित समाचार पत्र में प्रकाशित मानसून/ बाढ़ समाचार

Hindustan Times (Delhi)
भारत टाइम्स (दिल्ली)
The Tribune (Chandigarh)
The Hindu (Chennai)

✓ The Assam Tribune (Guwahati)
The Times of India (Mumbai)
The Telegraph (Kolkata)
हिन्दुस्तान (पटना)

The Deccan Herald (Bengaluru)
The Deccan Chronical (Hyderabad)
Central Chronical (Bhopal)



दिनांक : २१/५/१८

Hindustan Times (Delhi)

The Indian Express (New Delhi)

The Tribune (Chandigarh)

The Hindu (Chennai)

The Deccan Herald (Bengaluru)

The Deccan Chronicle (Mumbai)

The Deccan Chronicle (Hyderabad)

The Deccan Chronicle (Bhopal)

✓ The Deccan Herald (Bengaluru)

The Deccan Chronicle (Hyderabad)

Central Chronicle (Bhopal)

Uncomfortable territory

DECCAN HERALD

21/5/18



A man pulls his cows to a safer place through a flooded area after heavy rain at Baldakhal village on the outskirts of Agartala, Tripura on Sunday. Incessant rain in the state triggered landslides killing two persons and flash floods inundating several areas. REUTERS

Showers hit normal life, destroy crops in many dists

Low-lying areas submerged, roads inundated, crops washed away in fields

BENGALURU: Heavy rain lashed several parts of the state, particularly north Karnataka in the early hours of Sunday.

Heavy showers wreaked havoc in Koppal town on Sunday. The downpour left low-lying areas of the town submerged. Shops in the cellars of commercial complexes near Gadiyara Kamba (Tower Clock) Circle were the worst hit.

Rainwater gushed into several shops. Electronic goods including television sets have been damaged after rainwater gushed into the shops.

Owners of a photo studio, electronic goods shop, saloon among others suffered losses worth lakhs of rupees. The traders expressed their anguish at the CMC authorities over poor drainage and clogged stormwater drains, which led to the flooding.

According to the Met department, Koppal town recorded 9 mm of rainfall, highest in the state for Sunday. Munirabad experienced 3 mm of rain while Kukanur received one mm rain.



Rainwater floods a agriculture field at Koluru in Koppal district. DH PHOTO

Heavy rain accompanied by thunder and strong wind lashed Karwar (Uttara Karnataka district) in the early hours of Sunday.

Trying times

As it was the weekly shandy day, roadside vendors of vegetables and fish faced trying times. But things settled down as the day progressed. The showers gave residents res-

pite from the sweltering heat. Mango, areca and plantain crops worth lakhs of rupees were lost in the heavy rain and strong winds in Mundgod taluk in the district on Sunday morning.

Farms flooded

More than 80 acres of horticulture crops grown in shade nets and polyhouses were washed away in the

Lightning kills Kerala trekker

A 24-year-old youth from Thrissur, Kerala, was struck dead by lightning at Kodachadri hills in Hosanagara taluk of Shivamogga district in the wee hours of Sunday.

The deceased Vishnukumar alias Anilkumar was part of three-member team from Kerala, which had come to Kodachadri for trekking. The incident occurred when they were at Sarvajna Peeta on Kodachadri ranges of the Western Ghats.

downpour at Yettinabudih village of Ballari taluk on Saturday evening. Watermelon, musk melon, onion, tomato, capsicum and chilli crops were flooded by the rainwater.

Horticulturist Krishnamurthy is among the many who have suffered losses to the tune of lakhs of rupees.

Thundershowers were reported from Hosapete and

surrounding places in Ballari district.

Trees and electricity poles were uprooted as strong winds and heavy rain lashed many places in Gadag district in the early hours of Sunday. Mango crops were also destroyed.

Dharwad received good rain late on Saturday night and in the early hours of Sunday. It rained for more than two and half hours in Kundagol.

The moderate to heavy rainfall is likely to continue in Mysuru region, comprising Mysuru, Mandya, Hassan and Chamarajanagar, for two days. The region has been receiving rain for the last one week.

Heavy rain coupled with lightning and thunder lashed different parts of Dakshina Kannada late on Saturday night.

Heavy winds brought down the Dhvajasthambha of the daivasthana in Shibarooru.

Electrical appliances in a household were damaged when lightning struck a house in Balkuru of Kundapura taluk. A house was partially damaged after a tree fell on it in Bailumane village.

DH News Service

19/05/18
The Hindu (Chennai)
The Tribune (Chandigarh)
The New Indian Express (Chennai)
The Hindu (Chennai)

19/05/18
The Hindu (Chennai)
The Hindu (Chennai)
The Hindu (Chennai)
The Hindu (Chennai)

19/05/18
The Hindu (Chennai)
The Hindu (Chennai)
The Hindu (Chennai)
The Hindu (Chennai)

22/5/18

Hindustan Times (Delhi)

हिन्दुस्तान टाइम्स (दिल्ली)

The Tribune (Chandigarh)

The Hindu (Chennai)

The Assam Tribune (Guwahati)

The Times of India (Mumbai)

The Telegraph (Kolkata)

दि तेलुगु (बंगलूर)

The Deccan Herald (Bengaluru)

The Deccan Chronicle (Hyderabad)

Central Chronicle (Bhopal)

Tripura floods kill 6, displace thousands

AID CM Biplab Deb announces ₹5 lakh for kin of the deceased

Priyanka Deb Barman

letters@hindustantimes.com

AGARTALA: Six persons were killed and thousands left homeless in Tripura after flash floods triggered mudslides following heavy rain in the last 48 hours, state government officials said on Monday.

The state emergency operation centre confirmed six deaths and injuries to three due to landslides. Around 17,840 people were living in 71 relief camps set up across the northeastern state, said officials, who described the scale of pre-monsoon rains as unprecedented.

Parts of the state capital Agartala and outskirts of West Tripura, Khowai, Gomati and Sepahijala districts were submerged while Haora and Gomati rivers were flowing above the danger mark.

Weather department has warned of more rain in the coming days in the state that has recorded 857.7mm of rainfall since March 1 against the annual



■ Flooding at Katakhal area in Tripura on Sunday.

HT PHOTO

figure of 2,200 mm.

Waterlogging and flash floods are common in the state's low-lying areas during the monsoon.

Chief minister Biplab Deb visited the water-logged areas of his assembly constituency Banamalipur and also announced a compensation of ₹5 lakh each to the families of dead and ₹1 lakh for the reconstruction of dam-

aged houses.

"The government will extend all possible assistance to the flood victims at the earliest," Deb said.

The Centre had accepted the state government's proposal to build two dams on the Haora river to check floods and store water for the dry spell, officer on special duty to chief minister Sanjay Mishra said.