





71 lakes across Karnataka fare badly on Water Quality Index. The Water Quality Index test for 71 out of 77 lakes across the state showed unsatisfactory results. The tests were conducted by the Karnataka State Pollution Control Board (KSPCB). As per the Central Pollution Control Board (CPCB) guidelines, KSPCB conducts water quality tests in lakes and tanks across the state once in three months. The latest WQI results for the tests done in February/March say that only six of the 77 lakes tested across the

state have passed the quality test. These include two lakes in Raichur, two in Davanagere and one each in Vijayapura and Mangaluru.

Pollution board orders closure of 114 factories near Bellandur lake. Responding to National Green

Tribunal's order to shut pollution-causing industries around Bellandur lake, the Karnataka State Pollution Control Board (KSCPB) has finally cracked its whip and ordered closure of 114 factories. The industrial units that were closed were based out of Bellandur Lake catchment area and were accused of discharging untreated effluents into the lake. The KSCPB has issued closure directions invoking clauses under Water (Prevention and Control of Pollution) Act 1974.

Despite severe backlash from various citizen groups, the condition of Subramanyapura lake, Dorekere lake and Gowdanapalya lake near Uttarahalli has not improved. Rapid urbanisation around these lakes has transformed them into sewage tanks. **NAL to start monitoring water, air quality.** The Bengaluru-based National Aerospace Laboratories (NAL), which has been involved in research and development in the field of aerospace is now venturing into societal missions such as monitoring the quality of rivers in the country. The lab which is a constituent of the Council of Scientific and Industrial Research has evinced its interest to take part in Research Initiative for Real Time River Water and Air Quality Monitoring. The research initiative is part of the Intel – Department of Science and Technology Indo-US Science and Technology Forum.

Gomti river in Lucknow more polluted than Ganga in Varanasi: CAG report. "Water quality of the Ganga at Varanasi has improved whereas the quality of the Gomti river waters worsened," states the report for the year ending March 2016, tabled recently in the Vidhan Sabha. The report also said that the vehicular population in Lucknow was over twice of that of Varanasi, which contributed to higher air pollutant levels in the capital.

EDMC seals 43 units for polluting water. Following the Delhi high court's intervention, the East Delhi Municipal Corporation (EDMC) has cracked down on illegal polluting units which released suspected carcinogenic substances in the groundwater. In an affidavit, the corporation has claimed it has sealed 43 such units and emptied 24 more after these were found to be operating without valid permissions.

<u>The New Indian Express</u>, 7 May 2017 | <u>DNA</u>, 23 May 2017 | <u>Bangalore Mirror</u>, 24 May 2017 | <u>Bangalore</u> <u>Mirror</u>, 24 May 2017 | <u>The Times of India</u>, 25 May 2017 | <u>The New Indian Express</u>, 29 May 2017



Chennai's air pollution alarmingly toxic. A <u>study</u> conducted by the Coastal Resource Centre has revealed that the air quality in Chennai is alarmingly toxic. Shattering the commonly held belief that only industrial regions and parts of north Chennai need to worry about air pollution, the study showed that indicators in elite residential neighbourhoods like Poes Garden and Boat Club Road are not much better. The study took eleven 24-hour samples from Chennai and the edges of the Chennai Metropolitan Area in April 2017. Six of

the worst samples were from north Chennai.

Bihar to conduct study on city's pollution level. Bihar State Disaster Management Authority will soon conduct a study on air, soil, water and noise pollution in Patna in order to find solutions for improving the overall environment in the state capital. The Authority officials will assess climate change and its impact in the region, recent changes in the land use pattern and its impact on current pollution level in the city. The study will be conducted by dividing the city into various zones based on their pollution levels and the proposed field survey will be conducted using modern and accurate techniques. The study will also include preparation of pollution-based mapping of different areas.

Noida gets its first automatic air ambient monitoring system. The Continuous Ambient Air Quality Monitoring Station unit was installed by Ecotech, Australia in association with Envirotech, which is funded by the Uttar Pradesh Pollution Control Board. Noida has around 8000 industrial units, six sewage treatment plants and hundreds of under-construction realty projects, which are major causes of pollution. **Pollution from diesel vehicles is 50% higher than lab tests show**. Pollution from diesel trucks, buses and cars globally is more than 50% higher than levels shown in government lab tests, a new study says. That extra pollution translated to another 38,000 deaths from soot and smog in 2015, the researchers estimated. The research published in the journal <u>Nature</u> was a follow-up to the testing that uncovered the

Volkswagen diesel emissions cheating scandal. Researchers compared the amount of key pollutants coming out of diesel tailpipes on the road in 10 countries and the European Union to the results of government lab tests for nitrogen oxides. The researchers calculated that the extra nitrogen oxides were responsible for about 31,400 deaths in 2015 because of tiny soot particles in the air and 6600 deaths from extra smog.

The European Union, which has mostly diesel cars, had an extra 11,500 deaths; China, 10,600; India, 9300; and the United States, 1100.

<u>The Times of India</u>, 7 May 2017 | <u>The New Indian Express</u>, 11 May 2017 | <u>Mint</u>, 15 May 2017 | <u>DNA</u>, 15 May 2017



Gurudongmar glacier in Sikkim recedes one-fourth, says study. The Gurudongmar glacier in Sikkim — the source of one of iconic lakes in the world by same name — has receded one-fourth since 1989, a new study has found, implying down-stream impact on hydro-power projects and livelihood of people in Bengal and Bangladesh. The Gurudongmar lake, named after founder of Tibetan Buddhism in the 8th century Guru Rinpoche, is the main source for Teesta river that flows from Himalayas in Sikkim to Bangladesh.

According to the study published in <u>American Geophysical Union</u>, the Gurudongmar glacier retreat has increased by nearly four times between 1965 and 1989.

Hill stations in India worst hit by global warming. Long-term temperature records show that India's hill stations are warming up faster than towns, medium-sized cities and the big metropolises. For instance, Shimla, the summer capital of the British Raj, witnessed its hottest day in 170 years with a temperature recording of 32.4°C on May 28, 2010. While the average warming for the entire nation has been 0.91°C over the whole of the last century, five hill stations -- Kodaikanal, Shimla, Darjeeling, Madikeri and Srinagar – have registered a spike of 0.4°C every decade since the 1970s. In other words, the hill stations have warmed up by 2°C in the last 40 years. These findings were part of a <u>study</u> published in the *American Journal of Climate Change* that monitored surface temperatures from 1901 to 2013 across 36 locations across India.

India gets bonds to help tackle climate change. More than \$40 million in bonds are available to help India address challenges from climate change. The Asian Development Bank said it raised \$47 million in bonds due in February 2021 that will help drive capital toward climate change mitigation projects in India. The ADB said the funds will help drive the development of wind and solar projects across six states in India.

Laws to tackle climate change exceed 1200 worldwide. Nations around the world have adopted more than 1200 laws to curb climate change, up from about 60 two decades ago, which is a sign of widening efforts to limit rising temperatures. The study reviews laws and executive policies in 164 nations, ranging from

national cuts in greenhouse gases to curbs in emissions in sectors such as transport, power generation or industry. 47 laws had been added since world leaders adopted a Paris Agreement to combat climate change in late 2015, a slowdown from a previous peak of about 100 a year around 2009-13 when many developed nations passed laws. The study said that developing nations were legislating more but there were many gaps. Nations including Comoros, Sudan and Somalia had no climate laws.

Indian Ocean is warming faster than others. Indian Ocean is warming faster than all other oceans as it is hemmed in by the Asian land mass. Scientists at the National Centre for Antarctic and Ocean Research relied on satellite observations and a global network of floating buoys, which chart temperature, salinity currents and other data to arrive at the findings. While melting glaciers accounted for 70% of the global rise in sea levels, expansion of water due to heat was the biggest cause of rise in sea levels in the Indian Ocean. Marine scientists and researchers reckon sea levels primarily rise due to expansion of water due to atmospheric heat and melting of ice sheets and glaciers.

Will the Paris Agreement still be able to deliver after the US withdrawal. In the short term, the United States' withdrawal from the Paris Agreement will certainly have ripple effects globally. But rather than fatally undermine the Paris Agreement, it will likely cause other countries to reaffirm their firm commitment to the full implementation of the climate deal.

<u>The Times of India</u>, 9 May 2016 | <u>Reuters</u>, 9 May 2017 | <u>UPI</u>, 17 May 2016 | <u>The New Indian Express</u>, 24 May 2017 | <u>Hindustan Times</u>, 30 May 2017



Indore bags Swachh Bharat trophy. Indians have voted Indore in Madhya Pradesh as the cleanest city, while Gonda in Uttar Pradesh has been found to be the dirtiest. Bhopal occupies the second-best spot among 434 cities, followed by Visakhapatnam in Andhra Pradesh and Surat in Gujarat. About 1,800,000 people's response to a set of six questions was considered for the survey - <u>Swachh Survekshan 2017</u>, a part of the Swachh Bharat Abhiyan. Overall, the survey had elicited the views of 3,700,000 people — about 60 per

cent of the total urban population.

Visakhapatnam cleanest, Darbhanga dirtiest amongst 75 most busy railway stations. The Visakhapatnam

railway station is the cleanest, followed by Secunderabad, among the 75 most busy stations in the country. As per the latest <u>Swachh Rail</u> <u>Swachh Bharat Report</u>, the Jammu railway station occupied the third spot, while the New Delhi station was ranked at 39 among the busiest stations. The survey was carried out by the Quality Council of India. The Darbhanga railway station in Bihar was the dirtiest among the busiest stations.



The Minister of Railways dedicated a <u>Swachh Rail Portal</u> to showcase rankings of stations and trains, methodology adopted for rankings and stations/trains specific dashboards.

Waste management drive in 4000 cities. The Prime Minister has announced that a massive waste management campaign will be launched in 4000 cities across the country on June 5, the World Environment Day. Under the campaign, waste bins of blue and green colours would be distributed in these cities along with an awareness drive.

Business Standard, 5 May2017 | The Economic Times, 17 May 2017 | The Pioneer, 29 May 2017



Reservoir levels: More water than expected, more expected. Key reservoirs in the country, except those in the south, are showing comfortable storage levels for this time of the year, as they wait for a fresh infusion of waters from monsoon rainfall in a few days' time. The 91 big reservoirs currently hold a

total of 35.053 billion cubic metres of water that is about 10 per cent more than what is

expected at this time of the year, according to the Central Water Commission. Of the total 35.053 billion cubic metres storage, 4.36 bn cu m is being held in the six reservoirs of north India, 5.66 bn cu m in the 15 reservoirs of eastern region, 6.87 bn cu m in the 27 reservoirs of western India, 14.25 bn cu m in the 12 reservoirs of central India, and 3.92 bn cu m in the 31 reservoirs of southern India.

The reservoirs in the Narmada, Mahi, Ganga, Sabarmati, Godavari, Tapi and Mahanadi basins are showing better than normal storage as of now while those in the Indus and west flowing rivers of the south have normal water levels.

Water conservation: Nabard to help 1,00,000 villages before monsoon. Ahead of the monsoon, the National Bank for Agriculture and Rural Development (Nabard) will be reaching out to 100,000 villages with its water conservation programme. The Nabard will be working with villagers on better use of water for agriculture and household purposes. Amid a drought-like situation in several areas, the Nabard targets to help farmers extend water availability and usage by at least two months. It also asked banks to provide advances to farmers if any demand comes for irrigation after the campaign.

4000 villages in Rajasthan to start water harvesting. By the year-end, over 4000 villages in the state will start water harvesting to meet its daily and agricultural requirement in the second phase of Mukhyamantri Jal Swavalamban Abhiyan (MJSA). In its first phase of MJSA launched last year, about 3600 villages will conserve rainwater. The programme has been sourced through crowdfunding to make state villages self-water reliant, increase ground water levels and reduce water depletion.

Karnataka looks at drip irrigation for sugarcane farming. The Karnataka government will take up at least 30,000 acres of sugarcane farming land under drip irrigation for a pilot project to highlight the advantages of the low water intensive agricultural practices in the backdrop of unreliable monsoon seasons and resulting droughts leading to increase in the gap between demand and supply of the precious resource. Karnataka, which accounts for 10% of the total sugarcane produce in the country, has about 1 million acres of sugarcane under cultivation, of which around 300,000 acres are canal irrigated. Reeling under its second

consecutive drought year and resulting water shortages, the Karnataka government has been investing resources to reduce water consumption by the agricultural sector and promoting drought resistant alternatives like millets.

New platform to fix water crisis. Karnataka's urban water demand and supply gap is set to widen from 24% (2011) to 58% in 2030, according to 2030 Water Resources Group, a public-private-civil society collaboration. To address this growing gap between demand and supply, the state government and 2030 Water Resources Group launched the "Karnataka multi-stakeholder platform for water" recently. The partnership aims to transform water resources management by mobilising funds through financial institutions and identification of innovative demand-side management solutions. This is the first multi-stakeholder platform for water in India. Similar models will be replicated in Maharashtra and Uttar Pradesh.

Groundwater hits a low in Andhra Pradesh. The groundwater level has plunged in Andhra Pradesh, touching successive new annual lows since 2014. The major reservoirs, which are nearly empty, pose a threat to drinking water access. As it waits for monsoonal rains, the Andhra Pradesh Government has been focussing on recharging of groundwater. It has launched the '10 lakh farm ponds' plan.

<u>Business Standard</u>, 13 May 2017 | <u>Mint</u>, 24 May 2017 | <u>Deccan Herald</u>, 24 May 2017 | <u>The Hindu</u>, 27 May 2017 | <u>The Asian Age</u>, 30 May 2017 | <u>Indian Express</u>, 30 May 2017



Earth System Science.

India will lose 2305 sq km forest cover by 2025: ISRO study. India's north-east region and the Andaman and Nicobar Islands will lose 2305 sq km of forest cover – slightly more than the size of Mauritius – by 2025, an ISRO study has predicted. Scientists at the Indian Space Research Organisation (ISRO) used simulation techniques to study the distribution of green cover in the country by reconstructing the previous forest cover and predicted the loss in areas with high deforestation rates. The findings were published in the <u>Journal of</u>

World Bank approves Rs 960-crore for forest management. World Bank will provide an assistance of Rs 960 crore for increasing green cover in Uttarakhand. The proposal has been approved by the screening committee of the Union Ministry of Finance. Around Rs 470 crore will be spent on tackling forest fire and conservation of water resources. About 47% of the funds would be spent on integrated forest management, while 36% of the funds would be spent on tackling livelihood issues like man- animal conflict and promoting eco-tourism.

Ken-Betwa interlinking gets forest clearance. The environment ministry's Forest Advisory Committee has recommended the interlinking of the Ken and Betwa rivers in Madhya Pradesh. The project had hit a snag because it will submerge 5578 hectares of prime tiger roaming areas in the Panna National Park. This leaves only two more steps for the project to secure the complete set of approvals required under environmental regulations and Supreme Court orders. The Supreme Court's Centrally Empowered Committee would have to give a nod to the project and then the environment minister would have to clear the recommendations to let the project go ahead.

Telangana, Andhra Pradesh among states worst hit by wildfires. Forest fires are a major environmental hazard in Telangana and Andhra Pradesh, affecting large portions of wooded area every year. As per a recent study by Hyderabad's National Remote Sensing Center (NRSC) scientists, Andhra Pradesh stood second among all states and Telangana stood seventh, for the forest area that was affected by fires in a year. The study headed by NRSC recorded forest fires across India for 2014. It is the only Indian report that discloses state-wise figures. It found that 7850.26 sq km of forests got gutted in Andhra Pradesh which is about 25 per cent of the state's forest area. For Telangana, the figure was 3493.90 sq km, about 15 per cent of the state.

The Tribune, 13 May 2017 | The New Indian Express, 15 May 2017 | Business Standard, 26 May 2017



