Rain Fails To Provide Succour To Yamuna

Untreated Sewage Remains Cause For Concern

STRESS LEVELS

Station	DO (Min 5 mg/l)	BOD (Max 3 mg/l)	Fecal coliform (Max 2,500, desired 500 MPN/100ml)
JULY 2021			
Palla (in)	6.5	3.5	200
Azgarpur (out)	Nil	31	47,000
JUNE 2022			
Palla (in)	8.6	2.8	1,300
Azgarpur (out)	Nil	83	8,30,000
JULY 2022			
Palla (in)	8.8	2	1,000
Azgarpur (out)	Nil	76	8,10,000

Analysis

Total STPs | **35**

Total samples analysed (treated water samples) in June | **33**

No. of complying STPs as per DPCC standards | **10/33**

Estimated sewage generation | **3491.4 MLD** (million litres per day)

Sewage installed capacity | **2,874 MLD**

Sewage being treated | **2,591 MLD**

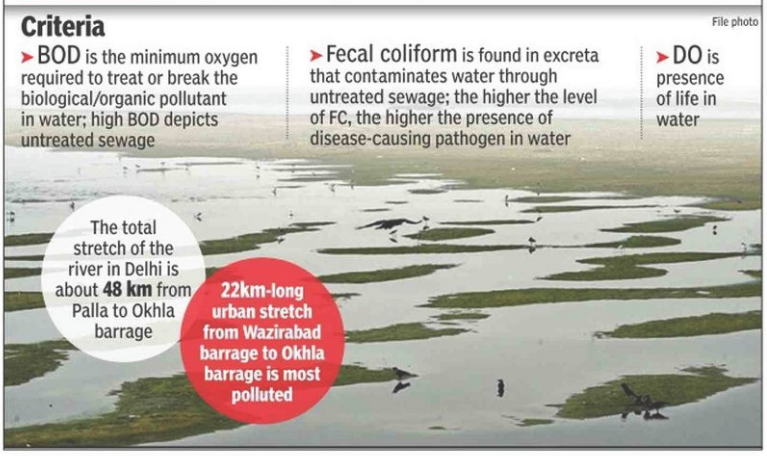
Gap in treatment | **900 MLD** (Over 25%)

- Several STPs underutilised
- Since July 2021, fecal coliform multiplied by over 17 times
- BOD worsened five times

Criteria

- **BOD** is the minimum oxygen required to treat or break the biological/organic pollutant in water; high BOD depicts untreated sewage
- **Fecal coliform** is found in excreta that contaminates water through untreated sewage; the higher the level of FC, the higher the presence of disease-causing pathogen in water
- **DO** is presence of life in water

File photo



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New Delhi: The monsoon has had almost no impact on the Yamuna's pollution levels, according to the latest analysis by Delhi Pollution Control Committee (DPCC) for the month of July.

The study said the fecal coliform, which indicates the presence of untreated sewage, saw negligible improvement despite rain in July as 23 of the 33 sewage treatment plants (STPs) analysed either didn't meet the prescribed parameters for biochemical oxygen demand (BOD), chemical oxygen demand (COD) and total suspended solids (TSS) or remained underutilised.

According to IMD, the city received an average rainfall of 286.3mm in July, a surplus of 37% over the normal 209.7mm for the month.

The report showed that compared to June, there was only marginal improvement in dissolved oxygen (DO) and BOD, the fecal coliform was over 324 times higher than the safe limit and 1,620 times higher than the desired level.

The faecal coliform (FC) level in the river at the entry point was 1,000 MPN (most probable number)/100ml against 1,300 last month. By the time it approached the exit and reached Asgarpur (at the confluence of Shahdara and Tughlakabad drains), it was 810,000 MPN/100ml against 8,30,000 in June — 324 times higher than the maximum permissible limit of 2,500 MPN/100ml, and 1,620 times higher than the desired limits of 500 MPN/100ml.

DPCC SAYS

A letter was issued to DJB on July 13 for taking rectification measures to meet the prescribed standards

According to experts, faecal coliform is found in excreta that contaminates the water through untreated sewage. The higher the level of FC, the higher the presence of disease-causing pathogens in the water.

The analysis further showed that the BOD, which should not exceed 3 mg/l, ranged from 2.8 to 83 in June and only marginally improved in July, ranging between 2 and 76.

DPCC's monthly report, which assesses the quality of the river and analyses direct and indirect pollution sources, pointed out a gap of 25% in sewage treatment and over 50% in solid waste management.

"A letter was issued to DJB on July 13 for taking rectification measures to meet the prescribed standards," DPCC said in its report.

In comparison, the Yamuna was in a much better shape in July last year. While the FC level was well above safety standards even then, it has multiplied 17 times since then. The BOD at the city's exit point was less than half last July.

As per records, the river had a permissible amount of DO, BOD and FC when it entered the city. By the time it was halfway through the city, its pollution levels had multiplied manifold. The DO was nil, making it a virtually dead river.

According to the monthly analysis report, the pollution levels show that a large amount of untreated sewage is still being discharged into the river.

According to the report, there were 18 major drains falling into Yamuna in the Delhi stretch between Wazirabad to Okhla. However, according to Delhi Jal Board out of the 18 drains, only 11 were being completely tapped. While two major drains — Delhi Gate and Sen Nursing Home — were partially trapped, other two major ones — Najafgarh and Shahdara had been included in an upcoming sewer project to be trapped and treated.

Hindustan Times- 08- August-2022

IMD warns of heavy rainfall, flash floods in central India, west coast

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NEW DELHI: Heavy rainfall of more than 200mm is likely in the next 3-4 days over parts of central India and the west coast, which could lead to flash floods at several locations, the India Meteorological Department warned on Sunday,

A low-pressure area has formed under the influence of a cyclonic circulation over northwest Bay of Bengal and its neighbourhood off the coasts of Odisha and West Bengal on Saturday evening, the weather forecaster said. This is likely to intensify into a depression and move west-northwestwards across Odisha and Chhattisgarh.

The monsoon trough, an elongated area of low pressure, is also active and lying south of its normal position and will continue to remain so during next 4-5 days, the weather office said.

There was 6% excess rainfall across the country as on Sunday, according to data. SANCHIT KHANNA/HT

"Already, some parts of Odisha and Konkan region have started receiving very heavy and extremely heavy rain on Sunday. Under the influence of the depression, rain will increase over central India during the next 3-4 days," said M Mohapatra, director general, IMD.

"When there is extremely heavy rainfall, inundation of low-lying areas is possible. We had issued a flash flood warning for Odisha," Mohapatra said. "For riverine floods, the Central Water Commission will issue warnings. Local population should be prepared for heavy rainfall."

Rainfall will lessen over UP, Bihar, and Gangetic West Bengal because the depression is expected to move over Maharashtra, MP and Gujarat, he said.

There was 6% excess rainfall over the country as on Sunday, with 37% excess over south peninsula; 9% excess over central India; 1% excess over northwest India and a 15% deficiency over east and northeast India.

Gangetic West Bengal has a rainfall deficiency of 46%; Jharkhand 48%; Bihar 34%; eastern Uttar Pradesh 44% and western Uttar Pradesh 38%. East and northeast India recorded the lowest rainfall and highest maximum, mean and minimum temperature in July in 122 years, according to the weather bureau's monthly climate summary.

"Just like the lows that formed in July, this depression will also form south of its normal position. It is not forming over head Bay. That is one of the reasons why it is unlikely to bring rain to the rain deficient region of Indo-Gangetic plains," said Ananda Das, in-charge of tracking cyclones at the weather office.

The agency has sounded a red alert in Telangana and Maharashtra for Monday, and orange alert for all of central and western India, including Madhya Pradesh, Chhattisgarh, Gujarat and Maharashtra, for Tuesday and Wednesday.

Authorities need to act to prevent rainfall related disasters in these regions.

₹2,000-CR MITHI RIVER REVAMP TO START IN OCTOBER

MUMBAI: Come October and the Brihanmumbai Municipal Corporation (BMC) will start the much-awaited rejuvenation of the Mithi river to mitigate flooding and improve the quality of water, at a cost of ₹2,000 crore. Residents from low-lying areas in Bandra Kurla Complex, Sion, LBS Marg and Chunabhatti living close to Mithi River can now breathe easy as they do not have to worry about the water level crossing the danger mark during high tide.

The Mithi River Water Quality Improvement Project will include the installation of 26 flood gates between Andheri airport and Mahim Creek to arrest sewerage and industrial waste, which will reduce pollution and improve the quality of water. →P3

₹2K-cr Mithi rejuvenation work to begin in Oct: BMC

The project aims to mitigate floods in low-lying areas and arrest sewerage to tackle water pollution

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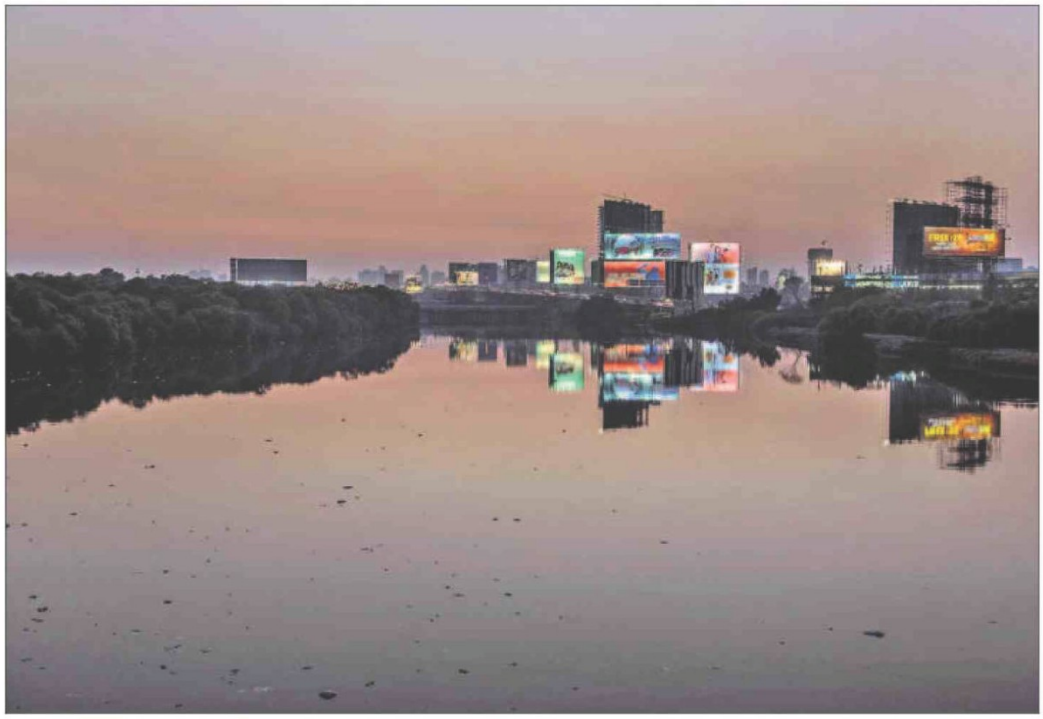

26 floodgates will be installed at a cost of ₹1,300 crore HT ARCHIVES

MUMBAI: Come October and the Brihanmumbai Municipal Corporation (BMC) will commence the much-awaited rejuvenation of the Mithi river to mitigate flooding and improve the quality of water, officials said. Residents from low-lying areas in Bandra Kurla Complex, Sion, LBS Marg and Chunabhatti living close to Mithi River can now breathe easy as they do not have to worry about the water level crossing the danger mark during high tide.

At the cost of ₹2,000 crore, Mithi River Water Quality Improvement Project will include the installation of 26 flood gates between Andheri airport and Mahim Creek to arrest sewerage and industrial waste, which will reduce pollution and improve the quality of water.

Vijay Aacharekar, deputy chief engineer of the BMC stormwater drain department, said that the work is anticipated to commence in October.

The civic body has floated tenders for appointing contractors for the construction of flood gates, water pumps and sewer lines, diversion of nullahs into municipal sewer networks, retaining walls and service roads between CST Bridge in Kurla to Mahim Causeway along the banks of Mithi River. The work will start from Prem Nagar Outfall in Kurla.

Aacharekar said that the BMC has also proposed 10-metre wide parallel service roads on both sides of the Mithi river banks from the airport to Mahim Causeway. The existing 2,000 slum dwellers will be removed and rehabilitated. "We will also construct a sewer line on both sides of the road so that sewerage that comes through the slums and other industrial means will be stopped there and later treated at the pumping station," he said.

Aachrekar added that during high tide, the water from the sea comes in reverse into the Mithi River, thereby increasing the water level. "This coupled with heavy rainfall and 26 outlets draining into the Mithi River causes major flooding in the low-lying areas of Sion, Chunabhatti and Kurla. To tackle the flooding problem, we are installing flood gate pumps so that seawater does not flow into the Mithi once the floodgates are shut."

The 26 floodgates, to be installed at the cost of ₹1,300 crore, will be at the discharge points in Mithi River between the airport to Mahim Creek. After the appointment of a contractor, work on the removal of encroachments will be undertaken gradually and clearance from Coastal Regulatory Zone (CRZ) will also be sought.

Additionally, a promenade with a viewing gallery will be constructed on the 4-km stretch of Mithi river bank between the western railway in Mahim to LBS Marg in Kurla and a 12 km walking track will be constructed on the periphery of the river.

"The main objective is to mitigate floods by installing floodgates, arrest sewerage and industrial waste to reduce pollution. The beautification of Mithi River will be done at a later stage and is not a part of the ₹2,000 crore project," said Aacharekar.

The Indian Express- 08- August-2022

In Delhi, officials keep eye on Yamuna level

EXPRESS NEWS SERVICE
NEW DELHI, AUGUST 7

PRE-EMPTING AN increase in the Yamuna water level amid rain, the Northeast Delhi district magistrate has asked Delhi Police to increase police deployment round-the-clock around flood-prone areas.

"According to the forecast by the Central Water Commission, Yamuna water level is likely to increase and reach 201.5 metres (as against the warning level of 204.5 metres) between 6 pm to 8 pm. It may further rise slightly by tomorrow. For constant monitoring of the situation, it is requested that sufficient police personnel be deployed round-the-clock at all flood-prone locations in the district to keep people living in low-lying areas safe and away from the river," read the letter sent to DCP Northeast by DM Geetika Sharma.

There are a total of nine flood-prone and low-lying areas in Delhi — Old Iron Bridge, Kisan Basti towards ISBT, Kisan Basti towards Seelampur, Usmanpur Pusta, Garhi Mandu village, MCD toll at Sonia Vihar, Annapurna Mandir, Sabhapur bus terminal and Badarpur Khadar Village.

Sharma also directed all district SDMs to deploy sufficient civil defence volunteers at vulnerable locations to coordinate with police.

. Officials added that all districts have also prepared district-wise disaster management plans for evacuation and to prevent incidents like fire emergencies and flooding.

The Indian Express- 08- August-2022

Jal Jeevan mission: A Maharashtra village holds a lesson for the rest of India

ALOK DESHPANDE
MUMBAI, AUGUST 7

PIMPALGHAR-RANJNOLI, A village situated in the industrial belt of Thane district's Bhiwandi tehsil along the Mumbai-Nasik highway, has used funds under the Jal Jeevan Mission (JJM) to ensure that all 842 families in the village get tap water connection. In other words, each of the 5,644 residents of the village has access to 55 litres of water every day.

Under the JJM, the central government, in partnership with states, aims to provide potable water in adequate quantity and prescribed quality on a long-term basis to every rural household, including in tribal areas of the country, through tap water connection by 2024.

With industries mushrooming all around it, Pimpalghar-Ranjnoli has been a preferred residential destination for labourers from different parts of the country. But as more and more labourers came to the village, water demand rose sharply.

"It was necessary. One cannot live without water. Women benefited the most due to this initiative. Earlier we used to spend half a day in ensuring water availability for the household chores. But that is all a thing of the past now," said Sulochana Bhagat, former sarpanch of the village.

GOVERNANCE
MAHARASHTRA

Even during the Covid-19 pandemic, the village used its funds — around Rs 7 to 8 lakh — to lay down the pipelines.

What is equally remarkable about Pimpalghar-Ranjnoli's achievement is the fact that the village has effectively ensured that residents pay the user charges for tap water. Often, such initiatives and success stories fail because local authorities fail to bring about a discipline where people pay the required user charges. In the absence of such user charges, many similar initiatives become unsustainable.

Each connection gets a water bill of Rs 100 per month.

Receipt of the village water bill. Pimpalghar-Ranjnoli has a 90 per cent bill payment record. *Express*

According to G L Chowdhari, the Village Development Officer of Pimpalghar-Ranjnoli, the village has a 90 per cent bill payment record.

"Village gets a bill of around Rs 25,000 to Rs 27,000 from BMC every year and we try to pay the full amount without any dues," he said. The village gets its water from pipelines running through villagers' fields that take water to Mumbai from dams in Thane district.

Not satisfied with its achievements, the village is also extending its efforts towards reducing water wastage.

At Pimpalghar-Ranjnoli, each household gets water in the morning — from 7 am to around 11 am.

"Earlier, when we had less water, it was used carefully. Now, many times, taps remain open, wasting water. I roam to close running taps and tell people that we must save water. Convenience cannot make us irresponsible," said Vicky Patil, who works with the gram panchayat.

While Pimpalghar-Ranjnoli can stand out as a model for the rest of the country, it is part of a broader effort by the state government to implement JJM. Maharashtra is one of the leading states in the country in implementing the JJM.

As per the data from the central government, almost 71 per cent of households in Maharashtra have access to a tap connection; the national average is just under 52 per cent. By this metric, Maharashtra ranks ninth after Goa, Telangana, Haryana, Andaman and Nicobar islands, Punjab, Bihar, Himachal Pradesh and Manipur.

"Around 90 per cent of the villages in the state already had at least one tap. It helped us in planning the mission. Our challenge was to ensure that every household in the village gets the tap water," said Hrishikesh Yashod, Mission Director, JJM, Maharashtra.

The state has planned 37,422 schemes within JJM at an estimated cost of Rs 20,968.79 crore in Zilla Parishads (ZP). As of July 25, Detailed Project Reports (DPRs) for 31,430 (84 per cent) schemes are ready. Out of these, technical sanctions for 26,278 and administrative approval for 22,597 have been given. A total of 19,156 tenders have been issued.

The state has issued work orders for 12,438 schemes. Out of the total schemes, 1,914 are complete while work on remaining 10,057 is ongoing. FULL REPORT ON www.indianexpress.com

The Hindu- 08- August-2022

Gates of twin reservoirs to be opened

STAFF REPORTER
PATHANAMTHITTA

Even as the swollen rivers have mostly retreated to their original course, Pathanamathitta district in Kerala continued to be on the edge as the authorities decided to open gates of the Kakki-Anathodu twin reservoirs on Monday at 11 a.m.

District Collector Divya S. Iyer, chairperson of the District Disaster management Authority , directed officials to raise four shutters of the reservoir to discharge up to 100 cumecs of water into the Pampa.

Authorities have also issued an orange alert for the Pampa reservoir, where the water level touched 983.50 metres on Sunday as against a full reservoir limit of 986.33 metres.

Water let out of Cheruthoni dam

There will be no flood-like situation, says Kerala Water Resources Minister

A CORRESPONDENT
IDUKKI

Three shutters of the Cheruthoni dam of Idukki reservoir was opened to release 100 cumecs of of water on Sunday evening. Earlier at 10 a.m., one shutter was opened.

The water was released as per the rule curve level fixed by the Central Water Commission. A red alert was sounded on Saturday when the water level reached the rule curve level of 2,382.53 ft.

Meanwhile, Tamil Nadu informed Kerala that of the 10 shutters remaining open in the Mullaperiyar dam, three shutters (V7, V8 and V9) would be raised further to 0.50 metre at 1 p.m. releasing more water to the Periyar. The water from the Mullaperiyar dam reaches the Idukki reservoir. The water level in Mullaperiyar dam reached 138.30 ft. An additional of 3,119 cusecs of water was released from 1 p.m. Tamil Nadu had informed that the Vaigai dam, where the water from the Mullaperiyar dam goes, was full resulting in the opening of the shutters to release water into the Periyar. Tamil Nadu was drawing water at 2,122 cusecs on Sunday.

A view of Idukki reservoir after a shutter of the Cheruthoni dam was opened on Sunday. ▪ SPECIAL ARRANGEMENT

Water Resources Minister Roshy Augustine said there would be no flood-like situation owing to water release from the Cheruthoni dam. He said the shutter was opened to keep up the rule curve level. He said 79 families in the downstream area were given notice and 26 relief camps were opened. Five villages and gram panchayats were issued alerts.

An official of the Dam Safety and Research Station told *The Hindu* that the present rule curve level would be in prevalence till August 10. As per the rule level, Idukki dam can store water up to 84% till then. With the new curve level from August 10 to till August 20 in prevalence, Idukki dam can store water at 86%. The next rule level is from August 31 which is 89%. The maximum level of 97% is from November 20 to 30, he said.

3 Kerala dam shutters raised, discharge set at 100 cumecs

EXPRESS NEWS SERVICE @ Idukki

THREE of five shutters of Idukki dam in Kerala were raised on Sunday to release 100 cumecs (around 3,531 cusecs) of water. This is the eleventh time since the dam's commissioning in 1976 that the shutters have been raised.

Meanwhile, six out of 10 open shutters of Mullaperiyar dam were further raised to a height of 50cm from the previous 30cm due to heavy inflow of water on Sunday. Discharge of water was increased to 3,232 cusecs. Water level in the dam was 138.4ft against permissible level of 142ft. The 10 shutters were opened on Friday.

Though there was no flooding owing to the raising of Idukki dam shutters, around 75 families in the flood-prone area of downstream Cheruthoni were asked to shift to relief camps if water in Cheruthoni river rose.

"The Idukki dam shutters were raised considering the possibility of heavy rain in the coming days. The controlled release of water will regulate its level in the dam and prevent a flood downstream," Water Resources minister Roshy Augustine told reporters.

The heavy rain lashing the district for the past one week and the raising of Mullaperiyar dam shutters caused water level in Idukki dam to rise. The upper rule curve (level to be maintained in a reservoir at different times of the year) of Idukki dam for August 10 was set at 2,383.53ft against the full reservoir level of 2,403ft. On Saturday, it crossed the red alert level and reached 2,382.53ft at 7.30am, prompting the decision to release water on Sunday.

File No.T-74074/10/2019-WSE DTE

Business Standard- 08- August-2022

Water-wisdom for climate change

This monsoon, when the precious rainwater goes down the drain, let us take a moment to recapitulate the knowledge of water management and what it means in a climate-risked world.

There are two incontrovertible facts: One, water is a key determinant of health security and economic growth. Two, water wars are not inevitable but will happen if we do not manage our resource prudently. This requires us to get the policy and practice of water management right. The good news is water literacy has increased.

Over the past decades, the country has learnt critical lessons on water management and evolved a new paradigm. Till the late 1980s, water management was largely confined to the issue of irrigation projects — building dams and canals to store and supply water over long distances. Then came the big droughts of the late 1980s. It became clear that it was not enough to plan for augmenting water supply through large projects. This was when the Centre for Science and Environment (CSE) published its report: "Dying Wisdom", which documented traditional technologies for rainwater harvesting in ecological diverse regions of India. The slogan was: Rain is decentralised, so is the demand for water. So, capture rain when and where it falls.

DOWN TO EARTH

SUNITA NARAIN

There was a paradigm shift in policy. During the droughts of the late 1990s, states launched massive programmes to capture rainwater by building ponds, digging tanks, and setting up check-dams on streams. By the mid-2000s, these efforts coalesced into the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) — investing labour in building rural water assets. By this time, it was understood that groundwater, considered a "minor" resource, was the "major" supplier of water for both drinking and irrigation. It was understood that over 50 per cent of agriculture in the country was still rainfed, and so water conservation and rainwater harvesting — ensuring that every well and waterbody was recharged — were critical for productivity and well-being.

In the 2010s, the crisis of urban drought hit home. Policy evolved as it learnt that augmenting water supply was only part of the challenge — cities were becoming dependent on long-distance sources; pumping and piping this water meant losses in distribution and rising electricity costs, which made the available water expensive and its supply inequitable. As water supply dried up, people turned to groundwater, but without recharge — ponds and tanks had been decimated by real estate or simply through neglect — it only meant declining water levels.

That was the decade when water supply was linked to pollution — more water supply meant more wastewater. This, without adequate treatment, leads to pollution of rivers and waterbodies, which in turn destroys available water and increases the cost of cleaning up drinking water.

A few years later, research showed the bulk of the urban residents were not even connected to underground sewerage, which is capital- and resource-intensive. Instead, they depended on on-site sewage "disposal" systems, where household toilets were connected to septic tanks or just holding tanks or even to open drains in the vicinity. The sewage treatment infrastructure was not designed to fit the city sanitation system and so remained underutilised. Rivers remained polluted.

In all this, new solutions emerged — if affordable water supply was critical, then cities needed to cut the length of distribution pipelines, which meant increased focus on local water systems like ponds, tanks, and rainwater-harvesting structures. Then, if cities needed to ensure affordable sanitation for all and affordable treatment of wastewater, on-site systems could be re-engineered so that waste was collected from each household, transported, and treated. But most importantly, we have learnt that if this urban-industrial wastewater is treated for reuse then water will not be lost; our rivers will not be lost.

Moreover, we must minimise our use of water and become much more efficient with every drop. This means doing everything from investing in water-efficient irrigation and household appliances to changing diets to ensure that the crops we eat are water-prudent.

This decade we can put all that we have learnt into practice to turn around the water story of India because in this decade we will see the revenge of nature as climate-change impacts grow. We need to scale up our work to invest in local water systems to capture every drop of rain so that we can build local resilience against drought. We also need to do this in our cities — the lakes and ponds are the sponges that will allow us to harvest the rain-flood and to make sure it does not turn into wasted water. Then we need to protect our forests and green spaces as this is how groundwater will get recharged. In times of water stress, we must make sure that wastewater — sewage — is not only treated but also recycled and reused. It is here that the waterbodies we protect in our cities — the same ponds and tanks that we use to divert and harvest rainwater — could be used to channelise the treated sewage and in turn recharge groundwater. Only this approach can make us water-secure.

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Hindustan- 08- August-2022

कानपुर में गंगा किनारे बसीं 11 बस्तियां कर रहीं जल को गंदा

उत्तर प्रदेश

कानपुर, वरिष्ठ संवाददाता। गंगा किनारे की 11 बस्तियां जल को मैला कर रही हैं। रोक के बावजूद बस्तियों से गंदगी गंगा में जा रही है। जिले से भेजी गई रिपोर्ट के बाद एनजीटी ने सर्वे कराने का आदेश दिया है। जिला प्रशासन जल्द ही टीम बनाकर सर्वे कराएगा।

गंगा में लगातार प्रदूषण बढ़ रहा है। इसको कम करने की कवायद हो रही है। इसके लिए कई ट्रीटमेंट प्लांट भी लगाए गए हैं। टेनरियों की भी लगातार निगरानी हो रही है। इसके बावजूद गंगा बैराज से लेकर जाजमऊ तक गंगा किनारे की 11 बस्तियों से गंदगी बहकर जा रही है। इससे गंगा मैली हो रही है।

जलवायु परिवर्तन से मौसम के लिए पूर्वानुमान लगाना मुश्किलः आईएमडी महानिदेशक

नई दिल्ली। भारत मौसम विज्ञान विभाग के महानिदेशक मृत्युंजय महापात्रा ने कहा है कि जलवायु परिवर्तन ने मौसम संबंधी गंभीर घटनाओं की सटीक भविष्यवाणी करने की पूर्वानुमान एजेंसियों की क्षमता को प्रभावित किया है। उन्होंने बताया कि दुनियाभर की मौसम एजेंसियां अपने निगरानीअवलोकन नेटवर्क और मौसम पूर्वानुमान मॉडल में सुधार लाने पर ध्यान केंद्रित कर रही है। महापात्रा ने यह भी कहा कि हालांकि, देश में मानसूनी बारिश का कोई स्पष्ट रुझान देखने को नहीं मिला है, लेकिन जलवायु परिवर्तन के कारण भारी वर्षा के मामले बढ़े हैं, जबकि हल्की बारिश की घटनाओं में कमी दर्ज की गई है। भारत में मानसून पर जलवायु परिवर्तन के प्रभाव के बारे में पूछे जाने पर उन्होंने कहा, हमारे पास 1901 से लेकर अब तक का मानसूनी बारिश का डेटा उपलब्ध है। इसके तहत उत्तरी, पूर्वी और पूर्वोत्तर भारत के कुछ हिस्सों में बारिश में कमी, जबकि पश्चिम में कुछ क्षेत्रों, मसलन पश्चिमी राजस्थान में वर्षा में वृद्धि की बात सामने आती है। महापात्रा ने कहा, पूरे देश पर गौर करें तो मानसूनी बारिश का कोई स्पष्ट रुझान नजर नहीं आता। मानसून अनियमित है और इसमें व्यापक स्तर पर उतार-चढ़ाव देखने को मिलते हैं।

केंद्र सरकार ने 27 जुलाई को संसद को बताया था कि उत्तर प्रदेश, बिहार, पश्चिम बंगाल, मेघालय और नगालैंड में बीते 30 वर्षों (1989 से 2018 तक) में दक्षिण-पश्चिमी मानसून से होने वाली बारिश में उल्लेखनीय कमी देखी गई है। इन पांच राज्यों और अरुणाचल प्रदेश व हिमाचल प्रदेश में वार्षिक औसत बारिश में भी उल्लेखनीय कमी दर्ज की गई है। महापात्रा ने कहा कि हालांकि, 1970 से लेकर अब तक के बारिश के दैनिक डेटा के विश्लेषण से पता चलता है कि देश में भारी वर्षा के दिनों में वृद्धि हुई है, जबकि हल्की या मध्यम स्तर की बारिश के दिनों में कमी आई है। उन्होंने साक्षात्कार में कहा, इसका मतलब है कि अगर बारिश नहीं हो रही है तो यह एकदम नहीं हो रही है। और अगर बारिश हो रही है तो बहुत ज्यादा पानी बरस रहा है। कम दबाव वाला क्षेत्र बनने पर बारिश अधिक तीव्र होती है। यह भारत सहित उष्णकटिबंधीय बेल्ट में देखे जाने वाले सबसे महत्वपूर्ण रुझानों में से एक है। अध्ययनों ने साबित किया है कि भारी बारिश की घटनाओं में वृद्धि और हल्की वर्षा के दिनों में कमी जलवायु परिवर्तन का नतीजा है। वरिष्ठ मौसम विज्ञानी ने समझाया कि जलवायु परिवर्तन ने सतह पर बहने वाली हवाओं के तापमान में वृद्धि की है, जिससे

वाष्पीकरण दर में इजाफा हुआ है। उन्होंने कहा कि चूंकि, गर्म हवा में अधिक नमी होती है, लिहाजा यह तीव्र बारिश का कारण बनती है।

जलवायु परिवर्तन ने वायुमंडल में अस्थिरता बढ़ा दी है, जिससे संवहनी गतिविधियों, मसलन बादल गरजने, बिजली कड़कने और भारी बारिश होने के मामलों में वृद्धि हुई है। अरब सागर में चक्रवातों की तीव्रता भी बढ़ती जा रही है। चरम मौसम घटनाओं की आवृत्ति में वृद्धि पूर्वानुमानकर्ताओं के लिए चुनौती पेश कर रही है। अध्ययनों से पता चला है कि जलवायु परिवर्तन के कारण भारी वर्षा की भविष्यवाणी करने की क्षमता प्रभावित हुई है। महापात्रा के मुताबिक, आईएमडी राडार, स्वचालित मौसम केंद्रों, वर्षा गेज और उपग्रहों की संख्या में वृद्धि के जरिए अपने अवलोकनानिगरानी नेटवर्क को मजबूत कर रहा है, ताकि पूर्वानुमान लगाने की उसकी क्षमता में सुधार आ सके।

उन्होंने बताया कि पिछले पांच वर्षों में भारत मौसम विज्ञान विभाग और पृथ्वी विज्ञान मंत्रालय के अवलोकनानिगरानी नेटवर्क, मौसम मॉडल और कंप्यूटिंग प्रणाली में विस्तार के कारण चरम मौसम घटनाओं, मसलन चक्रवात, भारी बारिश, तूफान, लू, शीतलहर और कोहरे को लेकर सटीक अनुमान लगाने की आईएमडी की क्षमता में 30 से 40 प्रतिशत का सुधार हुआ है। महापात्रा ने बताया कि आईआईटीएम और एनसीएमआरडब्ल्यूएफ जैसे सहयोगी संगठन वायुमंडल, जबकि आईएनसीओआईएस महासागरों की स्थिति का मॉडल तैयार करते हैं, जिससे आईएमडी के पूर्वानुमान में सुधार आता है। उन्होंने कहा, हमने उत्तर-पश्चिमी हिमालय में छह राडार तैनात किए हैं और चार अन्य राडार इस साल के अंत तक लगाए जाएंगे। पूर्वोत्तर हिमालई क्षेत्र में आठ राडार की तैनाती के लिए खरीद प्रक्रिया जारी है। आईएमडी प्रमुख ने कहा, देश के बाकी हिस्सों में कुछ गैप एरिया (बिना राडार वाले इलाके) हैं, जिनमें 11 राडार तैनात किए जाएंगे। राडार की संख्या वर्तमान में 34 से बढ़कर 2025 तक 67 हो जाएगी।

Rajasthan Patrika- 08- August-2022

नीति आयोग की बैठक विभिन्न योजनाओं पर चर्चा

प्रदेश के लिए सिंचाई योजना और विशेष पैकेज की मांग :सीएम सोरेन

रांची @ पत्रिका. प्रधानमंत्री नरेंद्र मोदी की अध्यक्षता में रविवार को नीति आयोग के सातवें शासी निकाय की बैठक में मुख्यमंत्री हेमंत सोरेन शामिल हुए।

सीएम सोरेन शुक्रवार को ही नई दिल्ली पहुंच गये थे। इस बैठक में मुख्यमंत्री हेमंत राज्य में सुखाड़ की स्थिति इसके कारणों का उल्लेख करते हुए मध्यम सिंचाई योजनाएं और विशेष पैकेज की मांग की हैं। इसके अतिरिक्त सीएम सोरेन राज्य में किये जा रहे विभिन्न क्षेत्रों विशेष कर शिक्षा, कृषि और शहरी विकास की दिशा में किये जा रहे सरकार के प्रयासों का उल्लेख भी किया गया हैं।

कॉरपोरेटिव फेडरलिज्म के तहत केंद्र से झारखंड को सहयोग मिलते रहने का आग्रह भी सीएम ने किया। पीएम मोदी के समक्ष सीएम सोरेन राज्य में सुखाड़ जैसी बन रही स्थिति का उल्लेख किया गया हैं। राज्य की अर्थव्यवस्था में कृषि क्षेत्र का महत्वपूर्ण योगदान रहा है। राज्य के जीएसडीपी में कृषि क्षेत्र की हिस्सेदारी 14.5 प्रतिशत रही हैं। पठारी क्षेत्र, वर्षा कम होने, पथरीली भूमि और बैंकों से अपेक्षित सहयोग की कमी के कारण कृषि क्षेत्र में उम्मीद से कम सफलता मिली हैं। झारखंड में करीब 38 लाख हेक्टेयर कृषि भूमि हैं।

हर तीन-चार वर्ष के अंतराल में राज्य को सुखाड़ की स्थिति का सामना करना पड़ता हैं। इस वर्ष भी 31 जुलाई तक सामान्य से 50 प्रतिशत कम वर्षा हुई हैं और धान की रोपनी केवल 17 फीसदी भूमि पर ही हो पाई हैं। वर्तमान परिस्थिति में झारखंड सुखाड़ की ओर बढ़ रहा हैं।