

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन नदी विकास एवं गंगा संरक्षण विभाग  
केंद्रीय जल आयोग  
जल प्रणाली अभियांत्रिकी निदेशालय



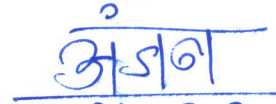
Government of India  
Ministry of Jal Shakti  
Dept. of Water Resources, RD&GR  
Central Water Commission  
Water System Engineering Directorate

दिनांक: 24.02.2020

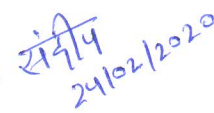
**विषय - समाचार पत्रों की कटिंग का प्रस्तुतिकरण।**

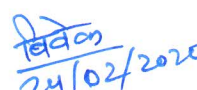
जल संसाधन विकास और संबद्ध विषयों से संबंधित समाचार पत्रों की कटिंग को केंद्रीय जल आयोग के अध्यक्ष के अवलोकन के लिए संलग्न किया गया है। इन समाचारों की कटिंग की सॉफ्ट कॉपी केन्द्रीय जल आयोग की वेबसाइट पर भी अपलोड की जाएगी।

संलग्नक: उपरोक्त

  
24.02.2020  
वरिष्ठ कलाकार

जल प्रणाली अभियांत्रिकी निदेशालय

सहायक निदेशक, (ज. प्र. आ.) निदे०   
24/02/2020

उप निदेशक, (ज. प्र. आ.) निदे०   
24/02/2020

निदेशक, (ज. प्र. आ.) निदे०   
24-02-2020

सेवा में,

अध्यक्ष, के. ज. आ., नई दिल्ली

जानकारी हेतु - सभी संबंधित केन्द्रीय जल आयोग की वेबसाइट [www.cwc.gov.in](http://www.cwc.gov.in) पर देखें।



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# 21st-century India needs a pragmatic water policy

J.HARSHA

India has had three National Water Policies (NWP) so far. The first was framed in 1987, the second in 2002 and the latest one in 2012.

Government of India has now constituted a committee for the formulation of the fourth National Water Policy; the process is underway, and the exercise is expected to be completed in a few months. In addition, a number of states have their own water policies applicable within their political boundary.

But despite multiple policies, the water crisis is not getting any better.

In the third decade of the 21st century, one might already be witnessing any one of these water crises: failure of borewells; stink emanating from toxic streams in the town; taps running dry; guzzling water tankers and unforeseen floods causing significant loss of life and property, etc.

About 600 million in India suffer from severe water crisis; and 40 per cent Indians may not have access to drinking water by 2030 according to Government think tank NITI Aayog.

170 million people live in 66 coastal districts of India spanning 7,500 km. They face the challenge of saline water ingress and contaminated groundwater. As per Central Water Pollution Board, India's gap between sewage generation and treatment plant stands at 60 per cent as in 2018.

These are the signatures of water policies not making significant impact in India. And that raises an important question: What ails India's water policies?

A water policy can only be termed successful if and only if it achieves all the goals set for itself and attracts no criticism from stakeholders.

Looking at the goals envisaged in National Water Policy – 2012, progress has been observed with respect to National Water Informatics Centre, water conservation activities, use of drip-sprinkler irrigation etc.. However, there is not much progress in the case of adaption and accounting of climate change in water crisis, institutional reforms, integrated water resources management, creation of River Basin Organisations, pollution in water bodies, dam-induced water crisis, etc.

Given the fact that NITI Aayog, a stakeholder, has outlined a bleak water future for India, the success of NWP-2012 cannot be said to be spectacular.

So, how should next national water policy shape up?

First and foremost, the formula-



tion of national water policy should synchronize with the state and local water policies in order to achieve the goals or conversely, the state and local water policies should align with the priorities attached with national water policies. This is because the implementing agencies of water policies largely belong to state and local governments. At present, the link between national water policy and various states and local policies is missing.

So how to establish the link between national water policy and state water policies?

As water is intricately connected to multiple sectors, multiple and diverse agencies, the right way to link and change the pattern of behavior of any agency so as to align them with national policy goals is through incentivisation and/or accountability. Currently, the system of providing incentives for achievement of policy goals is limited whereas accountability for not implementing the policy goal is absent. This has to change in next water policy.

No matter where the subject of "water" lies in the Constitution of India, the policy goals can only be achieved with collaborative or participatory mode rather than dictating via top-down approach from union to state to local agencies.

Second, national water policies should connect stakeholders in diverse agencies vertically and laterally.

This is because those profession-

als, practitioners, scholars and managers who work on the frontlines within and without government are aware of the challenges to the national policy goals. Example: Scientist – B at the ground level is aware of local challenges more than Scientist – G. Similarly, an Executive Engineer in the command area is aware of challenges more than the Chairman of his organization.

Currently, the policy formulation process and the implementation process are disconnected from the inputs of the knowledge and experience of professionals and managers down the hierarchy, be it water supply utilities or pollution control or flood forecasting. Therefore, it is not enough if water policies are formulated with only top echelons of the government agencies.

Third, the performance of the policy over time has to be measured. For example, NITI Aayog's Composite Water Management Index gives an indicator of the status of water management across the states. Similarly, an index for implementation of water policy goals across states gives a picture of the stage of implementation of policy goals from time to time and helps in course correction.

Further, all of India's three national water policies and various state water policies lack a progress-tracking system. If water is "elixir" of life or if water truly matters to India right from economy to environment, then there is need to create a "centralized delivery and tracking unit"

that independently tracks and reports the progress of implementation of policy goals to the union government.

Fourth, before embarking upon the new National Water Policy, it is essential to conduct post-implementation reviews of the past water policies, to ascertain the goals envisaged, the policy expectations, the goals realised and missed, and the causes of success and failure in implementation. Such a review is necessary for NWP-2012 before finalisation of NWP-2020.

Then, the new water policy should resist the urge to be over-optimistic or underestimate the challenges and formulation without satisfactory evidence. For example, the large dam induced water crisis due to sedimentation and loss of live storage is the new "invisible" crisis of the 21st century that has been severely underestimated in water policies so far.

Last but not most important, the success of any policy depends on its implementation phase which again depends on the health of multiple agencies transforming the policy goals into reality.

Currently, India's water organisations being the implementing agencies are the direct descendants of colonial organisational structures be it state WRDs or Pollution Control Boards or central agencies.

The command and control style, lack of a multi-disciplinary and water specific cadre, domination of civil engineers with a goal of build-

neglect-rebuild and sycophancy run contrary to modern water management practices such as integrated water resources management, multi-disciplinary organisations, and hydrological unit-based scientific water management.

The lack of financial and decision-making autonomy, budgetary issues, suppression of expert advice, misuse of colonial-inspired conduct rules destroy the participation of frontline managers and professionals leading to gaps between policy goals and implementation.

So, any new national water policy sans reformation of water organisations will resemble a 21st century army equipped with colonial era arms and ammunition (like .303 Lee Enfield rifles).

Hence, reformation and realignment of water organisations in line with policy goals and strategies is the key for success of any future national water policy.

The coming two decades pose a daunting challenge to water sector in India due to mounting population, urbanization, climate change, pollution and aging large dams. The crisis is set to worsen under a business-as-usual scenario. Hence, the next national water policy should be more pragmatic and implementable with targets, strategies and timelines in the best interests of the country.

The writer is Director, Central Water Commission, Government of India. The views expressed are personal.



**Pioneer, Delhi**

## FIRST COLUMN

### Mitigate India's water stress

The Govt should come up with a comprehensive roadmap and the States have to step up their efforts for successfully achieving the JJM target



SONIA GROVER



NIYATI SETH

India is a water stressed nation with per capita water availability of about 1,544 cubic metres. It has been ranked 13th among 17 extremely water-stressed countries as listed by the Aqueduct Water Risk Atlas released by the World Resources Institute (WRI). The country, closely followed by neighbouring Pakistan, was under "extremely high" levels of baseline water stress. As many as 12 of the 17 water stressed countries were from the Middle East and North Africa (MENA) region and the document warned that climate change may complicate the crisis in coming years.

A region is said to be water-stressed when the demand exceeds the available volume of water or when poor quality restricts its use. Alarmingly, both groundwater and surface water in the country are extremely exploited. In a grim reflection of the situation in the country, groundwater levels declined by more than eight centimetres per year between 1990 and 2014 in northern India.

The rapidly declining per capita water share, source vulnerability and growing contamination of groundwater are some of the causes for serious concern India. Both surface and groundwater resources are highly exploited and figures released by the Ministry of Jal Shakti paint a dismal picture. About 1,186 of 6,881 groundwater "assessment units" are categorised as over-exploited. It has been reported that India extracts more groundwater than China and the US combined. Also, the latest report of the Niti Aayog mentions that 21 cities of the country will exhaust their groundwater resources soon. Of the States and Union Territories, Chandigarh was the most water-stressed, followed by Haryana, Rajasthan and Uttar Pradesh.

To address these concerns, the Union Government launched the Jal Jeevan Mission (JJM) which promises water to every household in the country by 2024. In the Union Budget 2020, under the head of Wellness, Water and Sanitation scheme, (about ₹3.60 lakh crore was approved earlier for the JJM) ₹11,500 crore has been allocated for 2020-2021. The main focus this time will be on source sustainability and augmentation. Various water conservation measures like rainwater harvesting, renovation or rejuvenation of tanks and lakes, reuse of waste water, development of recharge structures, desalination along with watershed development and intensive afforestation will also be undertaken. These measures will not only enhance the water availability of the country but also ensure sustainability of the available resource. This is a much appreciated step as it was the need of the hour. The Government's plan is a well-thought-out approach which will focus on the source which is needed for sustainable management of the resource.

However, the allocated Budget for 2020-21 is just 15 per cent higher than the previous year's Budget that was around ₹10,000 crore (the allocation for 2019-20 was almost double of that for 2018-19). It is an ambitious target to be achieved in the next five years, given that previously the National Rural Drinking Water Programme (currently subsumed under the JJM) aimed at providing drinking water supply in rural areas by 2030 at an estimated cost of ₹6 lakh crore. But the JJM has low Budget allocations with a shorter timeline. Also, the allocation this year is just about three per cent of the total Budget sanctioned for the scheme, given that the first year is critical to impart momentum to this flagship programme. Also, there are lessons to be learnt from past programmes such as the National Rural Drinking Water Programme (NRDWP) which has now been subsumed under the JJM.

The target under the NRDWP was to provide piped water tap connections to 35 per cent of rural households by 2017 but the latest figures of 2019 showed that the connections have only reached around 18 per cent of the households. The performance of NRDWP was not very satisfactory and some of the reasons were that the contribution of States was on the lower side. Also, some States faced paucity of funds for the piped water scheme. Telangana had to borrow money from banks to operationalise its mission for piped drinking water supply from surface water sources (Mission Bhagiratha). Another key factor was that the allocated amount usually remained unspent because of late submission of proposals and the long time taken for implementation of the sanctioned projects.

The Government should come up with a comprehensive road map and the States have to step up their efforts for successfully achieving the mission target. Perhaps 2020 is a crucial year for both the Centre and the State Governments to overcome the challenges and expedite the implementation process.

(Grover is Fellow and Seth is Research Associate, Water Resources, TERI)

**Asian Age, Delhi**

### River talks: India's offer to Pak

**Islamabad:** India today offered her co-operation to Pakistan in solving issues relating to the sharing of the waters of the eastern rivers and in the field of flood control.

The offer was made by V.V. Chari, leader of the Indian delegation, in his opening statement at the secretary-level talks on eastern rivers between the two countries, which began here today.

Mr Chari, however, made it clear that India could not view with equanimity any contemplated Pakistani project fraught with disastrous consequences to India. Mr Chari was referring to Pakistan's project on the river Padma in east Pakistan, as contained in the report given to the Indian delegation. He said the project, if executed, would inundate large densely populated areas of India. He would therefore, ask Pakistan to formulate a scheme which, while being realistic and satisfying the reasonable irrigation requirements of the regions in east Pakistan, did not force India into an intolerable position.

— PTI



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Millennium Post, Delhi

# Reserving & harnessing Ggm's groundwater reserves is top priority of govt, says Khattar

## OUR CORRESPONDENT

**GURUGRAM:** While presenting the report card of 100 days of its government, Chief Minister Manohar Lal Khattar mentioned that preserving and harnessing Gurugram and south Haryana's groundwater reserves was the top priority of his government.

To achieve the daunting task the public agencies in Gurugram have begun to take several measures. To begin with there are plans to build 41 sewage treatment plants (STP). The capacity of these STP's will range from 25,50 to 100 kilolitres per day. The treated water from these plants will be used in parks and for other horticultural purposes.

It is important to note that to tackle the city's pollution the civic agencies in Gurugram are preparing for a green drive in various parts of the city. Efforts are also being undertaken to revive the city's defunct water bodies. For this Gurujal, a body that has been formed by the public-private partnership was formed in the year 2019. Eight months after its formation, three water bodies in and



around Gurugram have been revived partially. There are plans to revive over 100 such water bodies in the Gurugram district.

For making sure that water bodies in the city remain replenished, there are plans by the Municipal Corporation of Gurugram (MCG) and Gurugram Metropolitan Development Authority (GMDA) to connect at least 13 water bodies with stormwater drain.

If implemented this would ensure that the water bodies will be filled with water throughout the year. The Gurugram civic agencies have also earmarked

certain ponds whose excess area will be used for the development of parks and cycling tracks. Real estate development and rapid urbanisations have resulted in most of the areas of ponds being converted into an area for commercial usage.

According to Gurugram Metropolitan Development Authority (GMDA) officials, 47 of the identified waterbodies are tanks, and 135 are water bodies that have not been found in survey records and need further analysis.

According to GMDA, there are 644 waterbodies, cover-

ing an area of approximately 1,142 acres including 124 main water bodies. The officials of the department of town and country and planning have already taken action against certain builders for not developing rain harvesting pits in their complexes. Even as officials of public agencies reaffirm the commitment to preserve the groundwater reserves there are still complaints of illegal borewells being dug at various parts of the city. The latest complaint was received from Ulhawas village near the Golf Course extension road.



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Millennium Post, Delhi

# 1,800 cusec water released into Yamuna ahead of Trump visit

## OUR CORRESPONDENT

**NEW DELHI:** In preparation for United States President Donald Trump's visit to India, while walls have been put up in Gujarat to purportedly hide slums, the government has released around 1,800 cusec of water into the Yamuna river in an attempt to make sure that the American President's view of the Taj Mahal includes a full river in the foreground — and one that does not smell like sewage.

According to environmental activists, a large tranche of the water was released into the Hindon river a few days ago, through which the 500 cusec of water will drain into the Yamuna. In addition, several other tributaries and canals that drain into the river have also been used to supply the surplus water for beautifying Trump's visit to Agra.

Environmental Conservationist Vikrant Tongad said



that the excess water, which has been released to impress the US head of state, is most likely being tapped from water reserves of farmers, who will soon require the water for the Wheat season. While he has said that the surplus water will definitely boost aquatic wildlife in the river and that the river's capacity is much larger, Tongad

expressed concern over the fact that 1,800 cusec of water — which is almost as much as Delhi's daily water requirement — will be going to waste as it eventually drains into the Bay of Bengal.

Tongad, who also founded Social Action for Forest and Environment, said that Yamuna's water-levels have anyway

been dangerously low, and the move might just be welcome given that it will boost the river's life but there are also concerns that the extra water will eat into the supply reserved for farmers and the agriculture sector.

In addition, officials have also said that water has been funneled into the Yamuna from the Ganges through several channels and canals and that it reached the river near Agra on February 22 after going through Mathura. Officials also said that the excess water will help reduce the content of toxic elements and pollutants in the Yamuna.

Meanwhile, all three cities where Trump and the First Lady are expected to visit during their 36-hour trip in the country have been seeing robust preparations to beautify and sanitise the areas where the President's motorcade is expected to pass through.



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# Building resilience against climate change

Climate change, it would seem, could not happen at a worse time in human history. It is clear that things are now spiralling out of control. Every year we are told is the hottest year, till the next year comes around. Then a new record is broken. It is getting worse — from forest fires, to the increasing frequency and intensity of storms, to blistering cold waves, and spiralling heat.

The fact is climate change is real; it is happening and it is making the poor in our world more marginalised. The farmers, pastoralists and all the others who work the land, use the water, and make a livelihood are the worst impacted. They are the victims of climate change. The poor in the world have not contributed to the making of the problem. But let's be clear, their pain will make our world more insecure. And this is only going to get worse. This is why we need to act and act now.

Each of these *not so natural* calamities takes away the development dividend that governments work so hard to secure. Houses and other personal belongings are washed away, roads and infrastructure are destroyed, and all then has to be rebuilt. It is also clear that the flood or the drought is not just about climate change or changing weather patterns. The fact is drought is about mismanagement of water resources, where not enough rain is being recharged or water is used inefficiently and inequitably. Flood is about the sheer inability to plan for drainage; for our lack of concern to protect the forests on watersheds or the near criminal act of building and destroying the

flood plains. The weird weather comes on top of the already mismanaged land and impoverished polity. It is like the last straw on the camel's back.

I call this the double-whammy. High temperatures are only adding to the already heat- and water-stressed lands. Lack of green cover increases desertification conditions; over-withdrawal of groundwater and poor irrigation practices degrade land. Then there is the over-intensification of land, largely because of the way we are doing agriculture — what we are eating. And how we are growing, indeed manufacturing what we eat.

The 2019 IPCC report on climate change and land rightly indicts modern agricultural practices for being over-chemicalised and over-industrialised and so adding to greenhouse gas emissions. The report has also called for changes in diets, which will make us tread lightly on earth. Our food and our climate change footprint are now connected.

It is also clear that increasing numbers of disasters because of the growing intensi-

ty and frequency of weird and abnormal weather will make the poor poorer. Their impoverishment and marginalisation will add to their desperation to move away from their lands and seek alternative livelihoods. Their only choice will be to migrate — move to the city or move to another country. The double-whammy, as I have called it, in the interconnected world is the push — lack of option — to the pull — bright lights that suggest a choice to better futures. Our globalised world is inter-connected and inter-dependent. It is something we must recognise.

This is where the opportunity exists. If we can improve our management of land and water, we can shave off the worst impacts of climate change. We can build wealth for the poorest and improve livelihoods. And, by doing this, we curb emissions of greenhouse gases, as growing trees sequesters carbon dioxide, improving soil health captures carbon dioxide, and, most importantly, changes practices of agriculture and diets reduces the discharge of such gases. This is where the real answer is.

So, we have to invest in the economies of the poor; we have to build their capacities so that they can not just withstand the next calamity but indeed overcome the calamity. For this, we must invest in creating ecological assets — from rainwater harvesting to better food systems that are resilient. We must also redefine what we mean by resilience — often high-input agricultural systems are productive but less resilient. Farmers are more vulnerable to shocks when their debts are high. We need, therefore, to understand the strength of small-holder agricultural systems that are multi-crop, low-input, and built for shocks. We must strengthen those and not replace them with ours. The knowledge of the poor is not poor. They are illiterate but very resource literate. Our effort must be to learn and to give.

But at the end, I would like to say with absolute conviction that the poor or the rich cannot "adapt" to increasing temperatures — the scale of the devastation will be enormous and catastrophic. So, even as we build and invest in businesses with a difference, we must take stronger action to curtail greenhouse gas emissions. As yet the world is doing too little, too late. This must change. For all our sake.

The writer is at the Centre for Science and Environment  
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## DOWN TO EARTH

SUNITA NARAIN



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## Yamuna water getting 'critically worse', CPCB analysis finds IE-23

**SHIVAM PATEL**  
NEW DELHI, FEBRUARY 22

WATER QUALITY of the Yamuna in Delhi was said to be "critically worse", after a recent analysis by the Central Pollution Control Board (CPCB) found a declining trend in the last five years.

Data collected by the CPCB and the Delhi Pollution Control Committee (DPCC) from 14 river monitoring locations showed except for two points — Palla, from where the river enters Delhi, and Surghat, ahead of the Wazirabad

Barrage — the water quality failed to meet several quality parameters between 2015 and 2019.

The analysis was submitted to the National Green Tribunal this month by a monitoring committee it had set up for Yamuna's rejuvenation. The committee said: "Improvement in the Yamuna's water quality at Delhi will require stoppage of sewage and industrial waste water discharged, from both Haryana — about 500 million litres per day (MLD) from several townships — and UP — 65 MLD at Ghaziabad. Besides, the flow of sewage through Najafgarh and

Shahdara drains... and all other drains in Delhi has to be trapped."

Water drawn from the Yamuna for supply to the city is taken before the Wazirabad Barrage. After this, a 22-km stretch till Okhla accounts for a major share of its pollution as a number of drains join it.

At four locations below Palla, the CPCB found the minimum presence of faecal coliform, an indicator of sewage contamination, largely exceeding 1 lakh MPN (Most Probable Number)/100ml against the standard of 500 MPN/100ml or lower.



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and documented at WSE Dte, CWC.

## Cleaning Yamuna on AAP's priority list: Rai

Tackling water pollution is another one

STAFF REPORTER  
NEW DELHI

Environment Minister Gopal Rai on Saturday visited a sewage treatment plant located in Delhi Gate and said that cleaning the Yamuna and eradicating water pollution from Delhi within the next five years are the top-most priorities of his government.

Briefing the media after the visit, Mr. Rai said: "There are around 35 sewage treatment plants [STP] across Delhi that function to eliminate pollutants from waterbodies through technically advanced mechanisms. These plants purify untreated water, generate gases that run the sewage plants, and extract waste from water which can be made into compost for agricultural use. Our focus is solely on eliminating water pollution in the city."

Cleaning the Yamuna was one of the promises in a 10-point 'guarantee card' released by the Aam Aadmi Party chief and Delhi Chief Minister Arvind Kejriwal in the run-up to the Assembly elections.

"Our primary focus is on cleaning the Yamuna and eliminating waste from the



There are around 35 sewage treatment plants across Delhi that function to eliminate pollutants from waterbodies through technically advanced mechanisms

GOPAL RAI  
Environment Minister

local waterbodies across the city in the next five years so that effluents from these waterbodies are removed before flowing into the river. Once we are successful in achieving this goal, we will also work on developing the riverfront of the Yamuna," Mr. Rai said.

### Action plan

Earlier this week, the Minister had chaired a high-level meeting with the officials of the Delhi government's Environment Department and Delhi Pollution Control Committee, to formulate action plans on resolving environmental issues in the Capital. Several meetings have been planned over the next week to oversee the functioning of pollution monitoring in the city.



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## Adequate water in Kawal Tiger Reserve H-23

No man-animal conflict foreseen on account of enough reserves, say officials

S. HARPAL SINGH  
ADILABAD

The worrisome man-animal conflict in the Kawal Tiger Reserve (KTR) on account of water seems to be a thing of the past. There was no incident of wild animals straying into human habitations for water last year and it would hold good for the current season too as there is enough water for them to tide over the harsh summer in the Reserve, which is spread over 893 sq km of core area and 1,122 sq km of buffer.

### Water holes

The Reserve covers areas in Adilabad, Kumram Bheem Asifabad, Mancherial and Nirmal districts in Telangana.



**No scarcity:** Wild animals in Kawal Tiger Reserve will have enough water this summer. ■ S. HARPAL SINGH

Water will be available for a comparatively longer period in natural bodies, thanks to a prolonged monsoon and also the intensified efforts of the Reserve management in making it available through artificially creat-

ed water holes. There is water still flowing in the Kadem canal, which cuts through the KTR core area and the recent release in the Saraswati canal from the Sri Ram Sagar Project also resulted in water being availa-

ble from Khanapur in Nirmal district to Luxettipet in Mancherial.

"The high point of the construction of artificial water holes this season is the huge saucer pits, 5 m in diameter, meant for the large herds of bisons. As many as 22 of these, each with a capacity to hold a tanker full of water, have been constructed at strategic locations in Mancherial, Jannaram and Kadem in addition to the existing ones which are half the size," said KTR Field Director C.P. Vinod Kumar.

"Bisons are large animals and move in herds of 15 to 18 requiring enormous quantum of water. The larger saucer pits will meet that requirement," he said.



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# Irrigation scheme: State lost Rs 821 cr in five years

## 55k hectares irrigated against targetted 79k hectares

DH-28

BENGALURU, DHNS

**K**arnataka lost Rs 821.86 crore over a 5-year period that affected the implementation of irrigation schemes, as authorities failed to adhere to guidelines under the Centre's Accelerated Irrigation Benefits Programme (AIBP).

The figure also included Rs 493.69 crore, which was not released by the Centre without giving any reasons.

This was revealed in the latest report by the Comptroller & Auditor General (CAG) tabled in the Legislative Assembly earlier this week.

The Rs 821.86 crore was almost one-fourth of the

Rs 3,500 crore sanctioned for projects to be implemented by the Krishna Neeravari Nigam Limited (KNNL) and the Krishna Bhagya Jala Nigama Ltd (KBJNL).

Moreover, of the total 79,838 hectares identified to be covered under the AIBP to create irrigation potential, only 55,516 hectares was covered in five years (2013-18). According to the report, 12 major/medium irrigation projects were executed under the AIBP, especially for the benefit of drought-prone districts of the state.

While the implementing agencies were eligible for a central assistance of Rs 3,523.35 crore, assistance



**According to the CAG report, 12 major/medium irrigation projects have been executed under the Accelerated Irrigation Benefits Programme, especially for the benefit of drought-prone districts of the state. DH FILE PHOTO**

of only Rs 2,701.49 crore was received.

"This short receipt of Rs 821.86 crore was due to failure of the implementing agencies to achieve the annual targeted irrigation potential, adhere to the projected expenditure, furnish annual audited certificates to the Central Water Commission (CWC)/ Ministry of Water Resources

etc," the CAG said.

For instance, KBJNL received just Rs 70 crore in 2015-16 against an eligible amount of Rs 232.50 crore for the construction of Narayanapura Left Bank Canal due to non-submission of annual audit certificates. The CWC did not release any central assistance during 2015-16 and 2016-17. But Rs 368.86 crore

was released during 2017-18 against a requirement of Rs 810.5 crore, resulting in a shortage of central assistance by Rs 441.64 crore.

These factors not only led to the loss of central grants, but also caused additional burden on the state government, which was forced to raise funds from external sources. This also led to an additional financial implication of Rs 52.19 crore per year, the CAG said.

"...the projects could not be fast-tracked owing to lack of preparedness by the implementing agencies to complete the works within the dates of completion committed to the central government," the CAG observed.

The report noted that the envisaged field irrigation channels were not fully completed in any of the six projects audited by the CAG, even after a lapse of two to 18 years after their original scheduled dates of completion.



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**पर्यावरण मंत्री गोपाल राय ने किया दिल्ली गेट ट्रीटमेंट प्लांट का दौरा**

# ‘यमुना किनारे रिवर फ्रंट विकसित करेगी सरकार’

PK-23/2.



प्लांट का निरीक्षण करते वन एवं पर्यावरण मंत्री गोपाल राय।

**नई दिल्ली, (पंजाब केसरी):** दिल्ली की सत्ता में तीसरी बार काबिज होने के बाद अरविंद केजरीवाल के नेतृत्व वाली आम आदमी पार्टी (आप) सरकार काम के मोर्चे पर एक्शन मोड में आ गई है। प्रदूषण के मुद्दे पर आप सरकार बढ़चढ़कर कार्य कर रही है। वन एवं पर्यावरण मंत्री गोपाल राय ने शनिवार को घोषणा की कि हमारा पहला लक्ष्य है कि दिल्ली के सभी नालों से गंदे पानी को शोधित करके यमुना नदी में गिराया जाए और यमुना के किनारे रिवर फ्रंट तैयार किया जाए। सरकार कुछ दिनों में इसका प्लान तैयार करके इस दिशा में आगे बढ़ेगी।

केजरीवाल सरकार की दस गारंटी में शामिल दिल्ली के वायु प्रदूषण को कम करने और यमुना के प्रदूषण को खत्म करने की दिशा में आगे बढ़ते हुए पर्यावरण मंत्री गोपाल राय ने शनिवार को दिल्ली गेट स्थित आधुनिक तकनीकी पर आधारित (सीवर ट्रीटमेंट प्लांट) एसटीपी प्लांट का निरीक्षण किया। इस दौरान अधिकारियों ने पर्यावरण मंत्री के सामने दिल्ली के नालों से यमुना में गिर रहे गंदे पानी को शोधित (ट्रीट) करके यमुना में गिराने का प्रजेंटेशन दिया। प्रजेंटेशन से मंत्री गोपाल राय ने कहा कि दिल्ली के अंदर वायु प्रदूषण के साथ जल प्रदूषण भी प्रमुख समस्या है। खासतौर से यमुना नदी के जल प्रदूषण को साफ करने की बेहद जरूरत है। सभी रिपोर्ट बता रही हैं और हमने जो प्रजेंटेशन देखा, उसके मुताबिक जल प्रदूषण का मुख्य कारण दिल्ली के अलग-अलग हिस्सों से यमुना में गिर रहे नाले हैं। दिल्ली में गंदे नाले के गंदे पानी को ट्रीट करने के लिए लगभग 35 एसटीपी लगाए गए हैं। ये एसटीपी नाले से होकर जाने वाले प्रदूषित पानी को ट्रीट करते हैं और तब उस पानी को यमुना नदी में

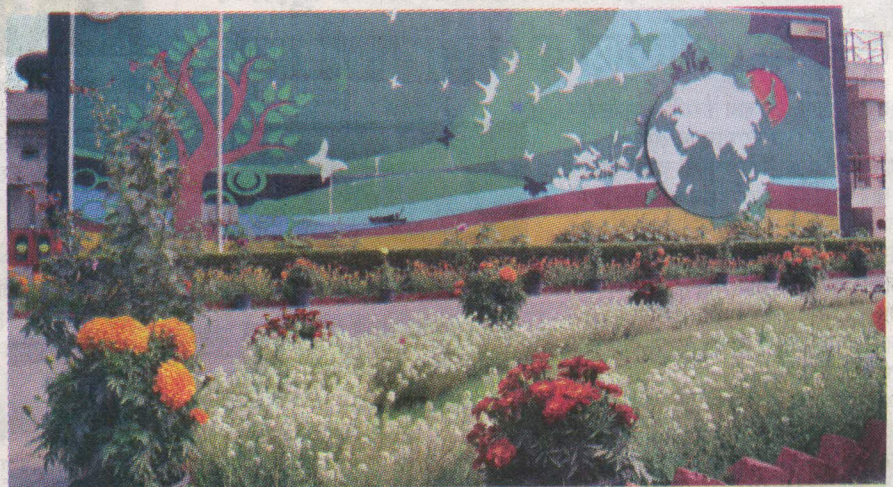
गिराया जाता है। गोपाल राय ने कहा कि 27 फरवरी को पर्यावरण सम्मेलन का आयोजन किया जा रहा है, जिसमें एनजीओ व विशेषज्ञ अपने विचार और सुझाव रखेंगे।

## नजफगढ़-शाहदरा ड्रेन से यमुना में आ रहा सबसे गंदा पानी

राय ने कहा कि नजफगढ़ और शाहदरा ड्रेन से काफी बड़े पैमाने पर प्रदूषित पानी यमुना में आ रहा है। दिल्ली सरकार इस पर गंभीरता से ध्यान देगी ताकि हम यमुना को साफ कर सकें। दोनों ड्रेन के प्रदूषित जल को शोधित करने के लिए दिल्ली सरकार 6 पैकेज में इंटरसेप्टर सीवर परियोजना (आईएसपी) लागू कर रही है जिसके तहत इन नालों में बहने वाला अपशिष्ट जल फंस जाएगा। इन दोनों नालों में प्रदूषण के कुल भार का लगभग 60 प्रतिशत भाग नदी में आता है। आईएसपी के 31 मार्च 2020 तक पूरा होने की संभावना है और जिसके बाद यह इस्तेमाल में लाया जाएगा।

## आधुनिक ट्रीटमेंट प्लांट से बन रही बिजली और खाद

पर्यावरण मंत्री ने कहा कि दिल्ली गेट स्थित एसटीपी आधुनिक तकनीक पर आधारित है। दिल्ली के अंदर ऐसे दो ट्रीटमेंट प्लांट काम कर रहे हैं। इस ट्रीटमेंट प्लांट की खासियत यह है कि यह गंदे नाले के पानी को साफ कर रहे हैं और इसी से गैस भी बनाई जा रही है। इस गैस से तैयार हो रही बिजली से ही यह ट्रीटमेंट प्लांट चल रहा है। साथ ही इससे निकल रहा मलबा खाद के रूप में किसानों के काम आता है।





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# Fresh western disturbance brings rain and snow: IMD

HT Correspondent  
letters@hindustantimes.com

**NEW DELHI:** The eighth western disturbance (WD) of February hit northwest India on Thursday, bringing thundershowers to the northern plains, including Delhi NCR, and snowfall to Jammu and Kashmir, Himachal Pradesh and Uttarakhand. The maximum temperature also fell by about 3 to 5 degrees in most parts of northwest India due to cloud formation associated with the WD on Friday, according to the India Meteorological Department (IMD).

IMD defines WD to be cyclonic circulation in the mid and lower tropospheric levels which occur in middle latitude westerlies and originate over the Mediterranean Sea, Caspian Sea and

Another intense WD is expected to affect the northwestern region on February 27 and 28, which will also bring rain to the northern plains.

Usually, two to three WDs are expected in each of January and February. In 2020, in January there were 10 WDs, three to four of which were intense ones, according to RK Jenamani, senior scientist at National Weather Forecasting Centre.

"Not only WDs, the easterly wave is also very active. Because of the interaction of winds, there is rain in Madhya Pradesh, Chhattisgarh and rain is likely



■ Vehicles move along a snow covered road after fresh snowfall in Golo village in Shimla on Friday.

DEEPAK SANSTA/HT PHOTO

for parts of east India also. We are seeing a trend of higher number of WDs since last year and easterly waves with high amplitude. It's very difficult to explain what is causing this," said K Sathi Devi, head of national weather forecasting centre.

In Delhi and parts of NCR, there were gusty winds on Friday, with speeds of up to 50 kmph on Thursday midnight. "Due to cloud cover we can expect the day temperature to remain low for a couple of days," said Kuldeep Shrivastava, head of regional weather forecasting centre.

Jolly Grant airport in Dehradun received 40mm of rainfall on Thursday, the highest in northwest India, as per RWFC's data. The maximum temperature in Delhi on Friday was 20.9°C, 4

degrees below normal and nearly 7 degrees lower to the maximum temperature on Thursday of 27.5°C. "The extra tropical flow regime has come down towards the south. This may be because of natural variability. The other reason is that westerly winds are weaker than normal leading to development of more troughs which bring intense weather to northwestern India," explained DS Pai, senior scientist at IMD Pune.

Due to a likely formation of anticyclone over Bay of Bengal from February 23, easterly current from Bay of Bengal is very likely to strengthen over east India and cause scattered rain and thundershowers in parts of east India on February 23 and 24.



# The next mission

Like Swachh Bharat, Jal Jeevan Mission will benefit the wider economy



PARAMESWARAN IYER

LAST MONTH, I had the opportunity to present the key learnings from the Swachh Bharat Mission (SBM) at the ministerial round table discussion on "scaling up sanitation in Africa" at Addis Ababa. While the ministers of sanitation from the African countries of Ethiopia, Nigeria, Kenya and Senegal marvelled at India's astronomical success in tackling open defecation in just five years, they unanimously agreed that one of the biggest hurdles they faced in replicating the SBM model in their countries was that they were not able to convince their finance ministries to invest heavily in sanitation like India has done since 2014. The unspoken assumption was that they had not received political support from the highest level for scaling up sanitation in their countries.

In India, the prime minister's leadership in championing a hitherto neglected subject like sanitation has been unquestionably the key ingredient for success of SBM. This then triggered the large investment on sanitation through public financing. We have been very fortunate that since 2014, our finance ministers saw the importance of investing in sanitation and its far reaching health, economic and environmental benefits. Hence, the central and state governments have invested in excess of one lakh crore on sanitation over the past five years. A majority of these funds have gone towards incentivising the poor and marginalised households to construct and use household toilets, bringing about behaviour change, and building capacities of field functionaries. Over 10 crore toilets have been built in rural India and nearly 55 crore people have stopped defecating in the open, all in just five years. This has contributed in bringing down global open defecation by more than half.

The returns on these investments have been manifold, and their effects on the broader economy, markets and employment have been significant. The UNICEF recently estimated that investments in sanitation in India are yielding a 400 per cent return with each rural household in an open-defecation-free village saving Rs 50,000 on account of avoided medical costs and time savings. The Toilet Board Coalition has estimated that the sanitation infrastructure and services market in India will be worth over \$60 billion by 2021, many new jobs, even in the most rural areas of the country, apart from reducing health and environmental costs and generating savings for households. Many people en-

gaged in the business of manufacturing toilet related hardware accessories have reported huge growth in sales during the SBM period. They project a continued up-trend through retrofitting and upgrades. This has been corroborated by another recent study by UNICEF in which they have estimated that SBM has resulted in creating over 75 lakh full time equivalent jobs over the past five years, giving the rural economy a major boost.

It is fairly clear now that investment in sanitation is actually a facilitator for broader economic, health and social gains. This is the chain of arguments that we encouraged the sanitation ministers of Africa assembled at Addis Ababa to use to bring their finance ministries on board.

Back home, our government continues to prioritise the water and sanitation sectors as key pillars of broader rural development. The government is committed to ensuring that this success is sustained. On October 2, 2019, the prime minister, when commemorating the ODF declaration by all states, said that this is but a milestone and not the finish line, and that we must all ensure that people continue to use toilets and that no one is left behind. This has been backed up by the finance minister in the budget for 2020-21, wherein she announced about Rs 10,000 crore for rural sanitation to focus on ODF sustainability, bio-degradable waste management, grey-water management, sludge management and, critically, plastic waste management for all villages by 2024.

The next critical basic service, and arguably the most aspirational of them all, that this government is committed to delivering, is piped water supply. On Independence day this year, the prime minister announced the Jal Jeevan Mission (JJM) from the ramparts of the Red Fort with the goal of ensuring piped water supply for all households of India by 2024 and with a commitment of Rs 3.6 lakh crore of central and state funds for the scheme. In the Union budget for 2020-2021, the government has already allocated Rs 11,500 crore for JJM, with an additional Rs 12,000 crore being made available through extra budgetary resources.

In addition, a huge impetus to the rural water supply and sanitation sector is the earmarking of 50 per cent of the Rs 60,750 crore grant for rural local bodies provided under the Fifteenth Finance Commission for drinking water and sanitation. This will ensure that the gram panchayats and local communities have more skin in the game, and are responsible for the upkeep of their water and sanitation infrastructure, providing a boost to the sustainability of service delivery to people. This approach will ensure that just like sanitation, provision of water supply and its upkeep will also become everyone's business.

The writer is secretary, Department of Drinking Water and Sanitation, Ministry of Jal Shakti. Views are personal.



SITUATION ALARMING IN SEEMANCHAL AND SOUTHERN PART OF STATE

# Report shows sharp dip in water table across Bihar

**SANTOSH SINGH**  
PATNA, FEBRUARY 21

THE WATER table has dipped alarmingly across Bihar between August 2019 and February 2020, according to the latest telemetry report by the state Minor Water Resources Department released last week.

The dips in water table range from 13 feet to 25 feet. The situation is particularly alarming in the Seemanchal and the southern part of the state.

About 10 districts, including Katihar and Begusarai, reported a dip of 17 feet to 25 feet in its water table and Patna too reported a 17-foot dip. The report also says the water table in the

state has gone down from 10 to 200 feet in the last 10 years.

According to the report, the groundwater level in Bihar earlier ranged from 40 feet to 200 feet, but the recent dips have brought down the range to between 60 and 250 feet. While this could lead to water crisis during summers, a drought could aggravate the problem.

The telemetry report said two blocks of Katihar district in Seemanchal reported a dip of 25 feet from the 50-foot water level in August. While the dip was 19 feet in Rafiganj, Aurangabad, it was 17 feet in Jogapatti, West Champaran, 22 feet in Bhagwanpur, Begusarai, 24 feet in Mansoorchak, Begusarai, 18 feet in Gaya and 17 feet in

EXPLAINED

## E. Why water table is dipping in state

UNEVEN DISTRIBUTION of rains, lack of water-harvesting measures and encroachment upon water bodies are being cited as the major reasons for the alarming dip in water table across Bihar. A recent survey by the state government showed that 34,559 water bodies had been encroached upon. So far, temporary encroachment has been cleared from 20,432 water bodies and permanent encroachment from 2,123 water bodies.

Bakhtiyarpur, Patna, Bhagalpur, Aurangabad, Arwal and Buxar reported dips between 12 and 14 feet.

Water conservation practitioner Kishore Jaiswal, who has

worked with NABARD and other agencies over the last 10 years on water harvesting in Munger, Jamui and Banka, called the situation "very alarming".

"The depleting groundwater

level is a crisis that is emerging worldwide, but in Bihar it is getting acute due to loss of forest and vegetation, dependency on groundwater and depletion in surface water resources, overexploitation of groundwater with the coming of powerful pumps and cultivation of high water-consuming crops," he said.

"There is an urgent need to check soil erosion, revive traditional water management practices and more efficient use of water in agriculture. Also, roof rainwater harvesting system should be used to take care of urban needs," he said.

Kumar Arun Prakash, special secretary of the Minor Water Resources Department, said, "Though we have not yet fully

analysed the report, the water level has surely dipped alarmingly in seven-eight districts in comparison to the last two years. But we have initiated several measures under the Jal, Jeevan, Hariyali mission to improve the water table. An exercise to remove encroachment from water bodies and clear them of silt is being conducted on a mass scale and the results could start showing from next year."

Under the mission, about 3,000 ponds are being cleaned and over 2,000 checkdams have been planned in small rivers.

"All these measures are part of the project due for completion by 2022," said a government official.



# The quality of water still awaits a verdict

Clean supply is a basic right like clean air and is needed for survival. The citizens of Delhi must fight for their fair share of this important natural resource



KOTA SRIRAJ

Last November saw at least four reports coming out in quick succession pertaining to the quality of the piped water supply in the Delhi-National Capital Region (Delhi-NCR). In two of its reports, the Union Ministry of Consumer Affairs stated that the tap water samples collected from different parts of Delhi failed to meet safety norms. However, these reports were quickly followed by two more studies, this time from the Jal Shakti Ministry and the Delhi Government, which rebutted the Union Ministry's reports and gave a nod of approval to the Capital's water supply.

They even labelled the water

quality to be better than that of some European cities. Even though the comparison with European cities seems a bit far-fetched, what is really worrying is the fact that the citizens of Delhi still have no conclusive answer regarding the quality of their water supply. And all the reports did was to spark off a slanging match between various political parties in an election year.

Traditionally, we rely on the authentic testing standards and procedures of the Bureau of Indian Standards (BIS). In September 2019, the BIS collected tap water samples from 11 locations across Delhi and tested the same for odour, colour and pH values and Total Dissolved Solids. These were part of the 24 parameters on which the samples were assessed. The water samples eventually failed on all the 24 parameters, leading to a major hue and cry in the political as well as public sphere.

However, even as the confusion over the authenticity of various reports remains, children and the elderly continue to consume water with dubious quality. The only one to



gain out of this mess is the water purifier industry, which is witnessing an unprecedented boom on the back of the fears of the populace. The just-concluded elections also did not see any of the contesting parties give clarity on how they would approach the problem of unsafe drinking water and air pollution in the national Capital.

So, for the citizens of Delhi, the problems continue unabated as they battle with dirty air and water, with

no respite in sight. In January, a leading media group commissioned a study to test the water quality in seven Lok Sabha constituencies across Delhi in an effort to highlight the water quality woes of the Capital before the February 8 Assembly elections. Termed as Operation Paani, the initiative involved collecting water samples from across the city on three different days and getting them tested by independent water quality experts.

The tests eventually found that half of Delhi was getting unsafe drinking water. However, this time the report has not found any detractors. But then, the elections are over, so who is bothered to highlight the issue anymore. The spectre of beleaguered, frustrated and short on temper residents fighting for water near rusty water tankers is an all too common sight in India. Unfortunately, it is the same even in the national Capital and has remained so even after decades of governance by some of the so-called best governments in power. It seems like it is in the best interests of political parties not to solve such problems so that they can be milked for votes in the next elections.

This, sadly, is the fix that India finds herself in, where political issues are kept alive at the cost of the common man. So, how does Delhi get its water right? Clean water is a basic right like clean air and is needed for survival. The citizens must fight for their fair share of this important natural resource. The present Government in Delhi prides itself on the fact that it is people-friendly and

approachable, which means it must listen to the problems of the people and more importantly do something about solving the issues that matter to the populace. And not just the Government, water woes are an amazing opportunity for the corporate world, too, if India Inc wants to approach the issue through its corporate social responsibility (CSR) programme. Under the CSR programme, corporates can tie up with the Government and install an on-the-spot water checking mechanism that is connected to the water supply pipes. This will give a real time feedback on the quality of the water being supplied. If suitable technology is paired with this initiative, then water quality readings can be forwarded to the citizens' phone through an app and also be sent to the Government department concerned. This initiative will definitely improve water quality and Government accountability in one go, provided the politicisation of the issue stops and a genuine quest for a solution begins.

*(The writer is an environmental journalist)*



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The Statesman (New Delhi)  
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and documented at WSE Dte, CWC.

Asian Age, Delhi

## River talks: India's offer to Pak

**Islamabad:** India today offered her co-operation to Pakistan in solving issues relating to the sharing of the waters of the eastern rivers and in the field of flood control.

The offer was made by V.V. Chari, leader of the Indian delegation, in his opening statement at the secretary-level talks on eastern rivers between the two countries, which began here today.

Mr Chari, however, made it clear that India could not view with equanimity any contemplated Pakistani project fraught with disastrous consequences to India. Mr Chari was referring to Pakistan's project on the river Padma in east Pakistan, as contained in the report given to the Indian delegation. He said the project, if executed, would inundate large densely populated areas of India. He would therefore, ask Pakistan to formulate a scheme which, while being realistic and satisfying the reasonable irrigation requirements of the regions in east Pakistan, did not force India into an intolerable position.

— PTI



# यमुना को निर्मल बनाने के लिए न जमीन है, न पैसा

4-22/2

## खुलासा

नई दिल्ली। प्रभात कुमार

यमुना नदी को प्रदूषण मुक्त कर निर्मल बनाने के लिए दिल्ली जलबोर्ड ने अनधिकृत कॉलोनियों और ग्रामीण क्षेत्रों व अन्य जगहों पर कुल 56 सीवेज ट्रीटमेंट प्लांट (एसटीपी) लगाने की योजना बनाई। लेकिन, जलबोर्ड के पास इसके लिए न तो पर्याप्त जमीन है और न ही धन।

इसका खुलासा यमुना निगरानी समिति की ओर से एनजीटी में पेश तीसरी अंतरिम रिपोर्ट में किया गया है।

एनजीटी प्रमुख जस्टिस ए.के. गोयल की अगुवाई वाली पीठ के समक्ष समिति ने कहा है कि तथ्यों से यह साफ नहीं हो रहा है कि जल बोर्ड कब और कैसे ग्रामीण व अनधिकृत कॉलोनियों के सीवेज का शोधन कर पाएगा। दिल्ली सरकार के पूर्व मुख्य सचिव शैलजा चंद्रा और एनजीटी के पूर्व विशेषज्ञ सदस्य बी.एस. साजवान की समिति ने रिपोर्ट में पीठ से दिल्ली सरकार के मुख्य सचिव व अन्य संबंधित महकमों को सख्त आदेश जारी करने की सिफारिश की है। समिति ने कहा है कि सीवेज मास्टर प्लान 2031 के तहत दिल्ली में 32 एसटीपी लगाने की जरूरत है।



32

एसटीपी लगाने की  
जरूरत

42

अतिरिक्त विकेंद्रीकृत  
एसटीपी की योजना

1000

करोड़ का बजट है  
जलबोर्ड के पास

## 5600 करोड़ की आवश्यकता

समिति ने कहा है कि जलबोर्ड ने 42 विकेंद्रीकृत एसटीपी के निर्माण की योजना बनाई। इन 42 विकेंद्रीकृत एसटीपी के लिए भी जलबोर्ड के पास जमीन नहीं है। समिति ने कहा कि कुल 56 एसटीपी लगाने में 5600

करोड़ रुपये की जरूरत है, लेकिन जल बोर्ड के पास महज 1000 करोड़ रुपये ही हैं। समिति ने दिल्ली सरकार के मुख्य सचिव को जमीन आवंटन सुनिश्चित करने का आदेश देने की मांग की है।

## बैठकों के बाद भी नहीं निकला नतीजा

समिति ने कहा है कि उसने एसटीपी के लिए जमीन मुहैया कराने को लेकर डीडीए अधिकारियों और डिविजनल आयुक्त के साथ बैठकें की। लेकिन, कोई नतीजा नहीं निकला।

## यमुना पर भारी पड़ रही अनधिकृत कॉलोनियां

राजधानी की सैकड़ों अनधिकृत कॉलोनियां यमुना नदी के प्रदूषण का प्रमुख कारक हैं। इन कॉलोनियों में सीवर पाइपलाइन नहीं होने से यहां का मलमूत्र यमुना नदी में जा रहा है।

## शोधन के बिना जा रहा है दूषित जल

समिति ने कहा था कि अनधिकृत कॉलोनियों में सीवर पाइप लाइन नहीं होने से 70 लाख लोगों का मल-मूत्र नालों के जरिए शोधन के बगैर यमुना में चला जाता है। समिति ने केंद्रीय प्रदूषण नियंत्रण बोर्ड की रिपोर्ट का हवाला भी दिया।

## कोलीफॉर्म युक्त पानी पीने से कई बीमारियां

तय मानक से अधिक कोलीफॉर्म युक्त पानी के इस्तेमाल से लोगों में जल जनित रोग होने की आशंका कई गुणा अधिक होती है। इससे हैजा, डायरिया, टायफाइड, लीवर संबंधी बीमारियों के अलावा चर्म रोग होने की भी आशंका होती है।



Hindustan Times (New Delhi)  
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## जामनगर में नल से जल के लिए 153 करोड़ रुपए मंजूर

राज्य सरकार की ओर से 78 करोड़ रुपए का अनुदान जारी

RP-22/12

जामनगर @ पत्रिका. शहर में नल से जल के लिए 153 करोड़ रुपए की योजना को मंजूरी देने के साथ ही राज्य सरकार की ओर से 78 करोड़ रुपए का अनुदान जारी किया गया है।

सूत्रों के अनुसार शहर में नल से जल के लिए 153 करोड़ रुपए के कार्यों में से 117 करोड़ रुपए के कार्यों के लिए निविदा जारी कर दी गई है। शहर में पुरानी पाइप लाइनें बदली जाएगी और नए विकसित क्षेत्रों में 95 करोड़ रुपए के खर्च से पाइप लाइन बिछाई जाएगी। जामनगर महानगर पालिका के आयुक्त सतीष पटेल, शहर अभियंता शैलेश जोशी, उप अभियंता पी.सी. बोखाणी की ओर से शहर का सीमा क्षेत्र बढ़ने के चलते पाइप लाइन से पानी के वितरण के लिए अनेक परियोजनाएं राज्य सरकार की मंजूरी के लिए भेजी गईं। इसके तहत वर्ष 2020 में जामनगर शहर में नल से जल योजना पूरी करने के लिए 153 करोड़ रुपए की परियोजना भी मंजूरी के

लिए राज्य सरकार को भेजी गई। इस परियोजना को राज्य सरकार की ओर से मंजूरी दे दी गई है। इसके अलावा पानी के पुराने पम्पिंग स्टेशनों की मशीनों की एनर्जी ऑडिट रिपोर्ट जलापूर्ति शाखा की ओर से तैयार की गई है। पानी के पुराने पम्प के स्थान पर बिजली की बचत के लिए पुराने पम्प बदलने का काम किया गया है। जलापूर्ति के लिए स्कोडा प्रणाली स्थापित की जाएगी। सभी जलस्रोतों से वितरण सेन्टरों तक पानी के स्तर की निगरानी की जाएगी। सभी कनेक्शनों के लिए एमबीपीई सामग्री से बनी टूटियों (नलों) व फिटिंग्स का उपयोग किया जाएगा।

शहर में रणजीत सागर से पंप हाऊस तक 18 करोड़ रुपए की लागत से पाइप लाइन बिछाई जाएगी। कुल 128 किलोमीटर की सीमा में नगर सीमा क्षेत्र, लालवाड़ी, महाप्रभुजी की बैठक क्षेत्र सहित अन्य स्थलों पर भी पाइप लाइन बिछाई जाएगी। फिलहाल शहर के लालवाड़ी, बेडी, जोड़िया-भुंगा, महाप्रभुजी की बैठक क्षेत्र, मोरकंडा आदि अनेक क्षेत्रों में टैंकों से जलापूर्ति की आवश्यकता है।



# गंगा की तर्ज पर साफ-सफाई के साथ बनेगी योजनाएं, आइआइटी कानपुर को सौंपा जिम्मा जोजरी समेत देश की 8 छोटी नदियां होगी पुनर्जीवित

RP-2242

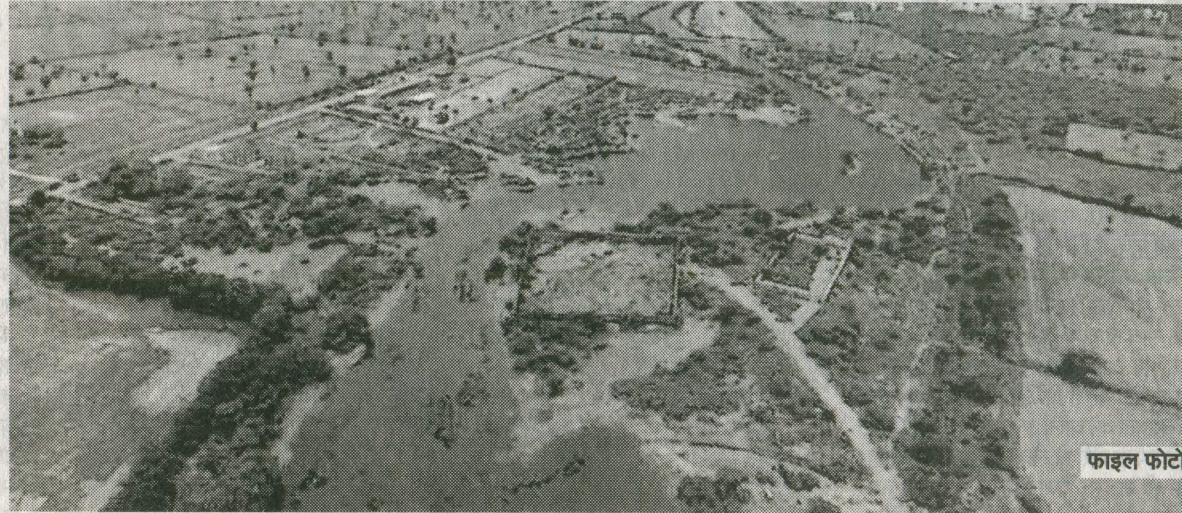


एक्सक्लूसिव

पत्रिका न्यूज नेटवर्क  
rajasthanpatrika.com

जोधपुर. केंद्रीय जल शक्ति मंत्रालय ने अब बड़ी नदियों के साथ देश की छोटी नदियों को पुनर्जीवित करने की कवायद शुरू की है। पहले चरण में जोधपुर की जोजरी सहित देश की आठ नदियां में पूरे साल जल प्रवाह सुनिश्चित करने के लिए भारतीय प्रौद्योगिकी संस्थान (आइआइटी) कानपुर स्थित सेंटर फॉर गंगा रिवर बेसिन मैनेजमेंट स्टडीज के संस्थापक अध्यक्ष प्रो. विजय तारे को जिम्मा सौंपा गया है।

मारवाड़ की गंगा कही जाने वाली जोजरी नदी के साथ ही वाराणसी की दोनों छोटी नदियों वरुणा व अस्सी, दिल्ली के



फाइल फोटो

नजफगढ़ नाला, इंदौर की कानस और कानपुर की सिसामहू नदी को परियोजना में शामिल किया गया है। जोजरी लूणी नदी की सहायक नदी है। यह नागौर के पोंदलू गांव से निकलकर जोधपुर के खेजड़ली के समीप लूणी में मिल जाती है। हाल ही राष्ट्रीय राजमार्ग के कारण अराबा गांव

के पास जोजरी अवरुद्ध हो गई है।

## 13 बड़ी नदियों की डीपीआर

जल शक्ति मंत्रालय से पहले केंद्रीय पर्यावरण एवं जलवायु परिवर्तन मंत्रालय ने भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद

(आईसीएफआरआई) को देश की 13 बड़ी नदियों पुनर्जीवित करने के लिए विस्तृत परियोजना रिपोर्ट (डीपीआर) बनाने का टास्क दिया था। इसमें राजस्थान की लूणी नदी के अलावा ब्रह्मपुत्र, व्यास, चेनाब, झेलम, रावी, सतलज, गोदावरी, महानदी, नर्मदा, कृष्णा, यमुना शामिल हैं। लूणी नदी की डीपीआर जोधपुर स्थित आफरी ने तैयार की है।

## इनका कहना है

नदियों की साफ-सफाई के लिए प्रो. तारे के नेतृत्व में टीम का गठन किया गया है। जोजरी नदी अगले पांच साल में साफ हो जाएगी।

**गजेंद्र सिंह शेखावत**, केंद्रीय जल शक्ति मंत्री

## बनेगा समन्वित दृष्टिकोण पत्र

प्रो. तारे जोजरी में जल प्रवाह बनाए रखने के साथ जोधपुर की भू-जल व पेयजल व्यवस्था को लेकर समन्वित दृष्टिकोण पत्र बनाकर मंत्रालय को सौंपेंगे। इसमें जोधपुर के बढ़ते भू-जल की समस्या, नदी में बढ़ रहा औद्योगिक प्रदूषण, कायलाना व तख्तसागर का कैममेंट एरिया, पानी आपूर्ति, गंदे जल की निकासी, किसानों के लिए उपचारित पानी की व्यवस्था को शामिल किया जाएगा। संभवतः अप्रैल में केंद्रीय जल शक्ति मंत्री गजेंद्र सिंह शेखावत जोधपुर में यह दृष्टिकोण पत्र लोकार्पित करेंगे। इसके बाद विभिन्न चरणों में कार्य शुरू होगा।