

Times of India 14-February-2021

How to 'clean' city's drains?

Roadmap for 10 govt bodies

Cell Submits 1st Report After Considering CPCB Suggestions

New Delhi: The Integrated Drain Management Cell (IDMC), a body set up on the directive of National Green Tribunal for remediation and management of drains in Delhi, has issued its first report with detailed plans for the city's civic agencies. The directions have considered suggestions made by Central Pollution Control Board on the agencies making use of alternative technologies for drains such as phytoremediation, constructed wetlands, microbials, bioremediation, waste stabilisation ponds and mechanically aerated lagoons.

Of the 10 agencies that oversee Delhi's drains system, by far the largest is public works department with over 2,000km of drains under its jurisdiction. PWD informed IDMC that an IIT-Delhi or Delhi Technological University consultant was being hired for its plans to construct a bioremediation plant at Chhatarpur and Chhatrasal Stadium by December. These plants will have the capacity, respectively, to process 2.5 and up to 1.5 million litres daily.

The irrigation and flood control department has the second biggest responsibility with 427km of drains. It said its analyses found bioremediation and phytoremediation unfeasible and so has reappointed NEERI to explore the alternatives.

New Delhi Municipal Council is already carrying out bioremediation in the 6.5-km Kushak drain and did not require action plans for its other drains. DDA, meanwhile, is constructing nine wetlands to handle the nine drains between DND Flyway and Dhobi ghat. These are likely to be completed by October. It also intimated IDMC of the construction of four sewage treatment plants with the capacity to cumulatively process 26.5 MLD.

The three municipal corporations said their consultancy reports were completed or in the process of finalisation, with work to commence once funds were released. For

➤ The recently formed Integrated Drain Management Cell has so far held 5 meetings with all agencies under which Delhi's drains fall

➤ Based on CPCB's recommendations to use alternative technologies such as phytoremediation, constructed wetlands, microbials, bioremediation, ex situ remediation, waste stabilisation ponds and mechanically aerated lagoons, agencies have been asked to form action plans

File photo



WHAT THE AGENCIES WILL DO

PWD (2,065 km of drains) | To construct bioremediation plants at two locations, Chhatarpur (2.5MLD) and Chhatrasal Stadium (1-1.5MLD); work to be completed by Dec 2021

Irrigation and flood control department (427 km) | Bioremediation and phytoremediation not found feasible under its 57 drains; has reappointed NEERI to adopt other technologies

New Delhi Municipal Council (335 km) | Bioremediation already being done at Kushak drain, no ac-

tion plan required for other drains

South corporation (259 km) | Consultancy report prepared by IIT-Delhi, timelines to be drawn for it

East corporation (141 km) | Action plan ready, waiting for funds to execute

North corporation (122 km) | IIT-Delhi appointed for bioremediation and phytoremediation

DDA (251 km) | Constructing nine wetlands on nine drains between DND Flyway and Dhobi Ghat, Jamia Nagar, which will be completed by



Oct 2021; also proposed construction of four STPs of capacities 9.5MLD, 7MLD, 5MLD and 05MLD

DSIIDC (98 km) | NEERI to give its report by Sept 2021; trapping of drains to be completed 4-6 months after that

Delhi Cantonment Board (40 km) | Action plan ready, to be executed now

NTPC (3 km) | Only Jaipur drain active, being treated at present

SDMC, its consultant, IIT-Delhi, suggested, after analysing the characteristics of 258km of drains, a three-step process of screening of floating material, creation of a silt arrest system and biological treatment. The cost involved

of solid waste in the drains increases the pollution load. For this purpose, screens should be installed at all culverts." It also recommended for drains less than 1m in width the installation of a primary treatment system every 300 metres.

Of the 10 agencies that oversee Delhi's drains system, by far the largest is Public Works Department with over 2,000km of drains under its jurisdiction. PWD claimed a consultant was being hired for its plans to construct bioremediation plants that will have the capacity to process up to four million litres daily

is expected to be Rs82 crore for the drain in the Barapullah basin and Rs 47.4 crore for those in the Najafgarh basin.

IIT-D said the pollution load on the drains should be reduced by stopping sewage flowing into storm-water drains. The report said, "Heavy load

EDMC's action plan for 140km of drains includes bioremediation in Kazzorwali, Babarpur, Gokulpur, Geeta Colony and Kasturba drains. An EDMC official said use of phytoid beds and mechanical trash removers was already in place in Shahdara

Jheel and Babarpur drain.

On Wednesday, Praveesh Sharma, leader of the House in EDMC, presenting the budget for 2021-22, said alternative technology to manage waste water was likely to cost Rs59.6 crore for 15 years.

Delhi State Industrial Infrastructure Development Corporation, which manages 98km of drains, expects a NEERI report by September. It will then take up work on the drains and finish it in the next 4-6 months.

The Integrated Drain Management Cell has so far held five meetings via video-conferencing. Its report says, "... categorisation of drains has been carried out on the basis of discharge in the drains, their width, depth of water and pollution" and that action plans for managing these drains have been prepared by Delhi's civic agencies based on these factors.

Deccan Chronicle 14-February-2021

Dams in south India stare at gradual death

HARLEEN MINOCHA | DC
HYDERABAD, FEB. 13

Live storage capacity in dams across the country, including in Telangana state and Andhra Pradesh, has taken a major hit, according to the Union government's report titled 'Sedimentation of Reservoirs in India 2020'.

It stated that major reservoirs in these states were in the list of reservoirs that have lost more than 50 per cent of gross water-holding capacity, dead

storage and live capacity.

According to a 1992 survey, Nizamsagar dam in Telangana state reported a 60.47 per cent loss in its gross capacity. Nagarjunasagar that was last surveyed in 2009 recorded a 40.73 per cent loss of dead storage whereas the Vamsadhara dam in Andhra Pradesh had a 60.43 per cent loss of live storage capacity, up to 2004.

As a result, experts said, storage in these reservoirs was receding at a far faster

rate than anticipated, and this had serious ramifications for the future. Several reservoirs may already be choked, given that the data was from surveys conducted decades ago, the report said. The Union ministry of Jal Shakti in its report last August had said that India can store 257 billion cubic metres (BCM) of surface water in reservoirs, and that the quantity of water held in them or live storage could be extended to a maximum of

385 BCM in the near future.

The report pointed out that the southern region, comprising Telangana state, Andhra Pradesh, Karnataka, Kerala and Tamil Nadu with 36 reservoirs that are monitored by the Central Water Commission have a total live storage capacity of 52.81 BCM.

As per the ministry's Reservoir Storage Bulletin, issued on August 8, 2020, the total live storage available in these reservoirs was 32.08 BCM, which

represents 61 per cent of their total live storage capacity. The average rate of siltation in these reservoirs, like the Nagarjunasagar, has been observed is more than what was designated as an acceptable rate. While the designed rate of siltation of 1,000 cubic metres per square km per year in Nagarjunasagar reservoir was 0.22, the average observed rate of siltation came out to be 0.30.

Dead storage loss in Nagarjunasagar was also

a cause of concern. Dead storage is the total storage below the lowest discharge outlet from the reservoir. It may be available to contain sedimentation, provided the sediment does not affect the lowest discharge.

Telangana state is now planning to create vegetative cover along the catchment area, and is also exploring the option of artificial reservoirs, construction of check dams on small streams to arrest sedimentation as much as

possible, said Sridhar Rao Deshpande, OSD to Chief Minister K

Chandrasekhar Rao. "It is a big task to desilt huge reservoirs. This issue is not just limited to India, but is a global problem. However,

southern states are more affected because the north has Himalayan rivers," he said. The way ahead to prevent these reservoirs from dying is to work towards preventing further damage through sedimentation, he said.

Outlook 14-February-2021

SNAPSHOT

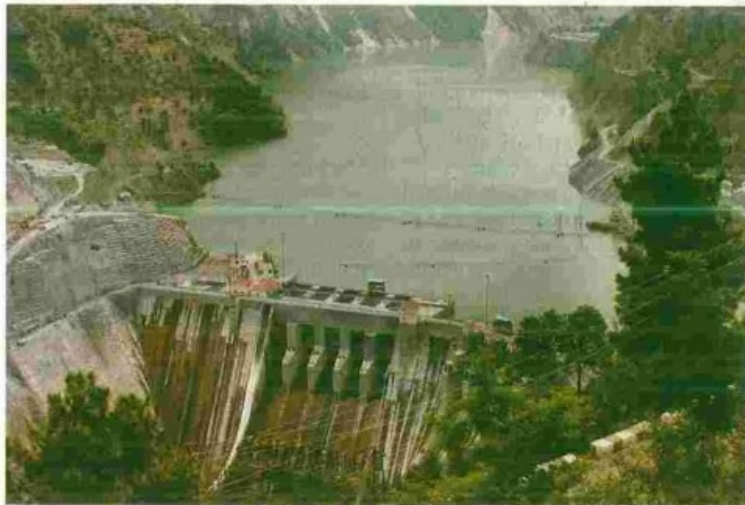
Valley of Dams

Naseer Ganai in Srinagar

J&K

There's alarm among residents of Jammu's Chenab valley, where work on a number of major hydro-power projects have picked up pace since the abrogation of Article 370 on August 5, 2019. Thousands of trees have been felled during excavation work. Locals fear the projects will cause damage to biodiversity and trigger earthquakes in this high-risk seismic zone. On January 11, a high-intensity earthquake rocked the Chenab valley, and the tremors were felt across J&K. The epicentre was in Kishtwar district. "With some of India's biggest power projects and dams being built along a 70-km stretch cutting across Kishtwar and Doda districts, we have become the world's biggest water laboratory," says Kishtwar district development council (DDC) member Zakir Bhat. "The power projects are coming up at the cost of people, who forfeit their resources without getting anything from the government. We should be part of all decision-making about how to harness this region's water resources."

A major tributary of the Indus, the Chenab flows into Kishtwar from Himachal Pradesh, and runs through four other J&K districts before entering Pakistan. Under the Indus Waters Treaty facilitated by the World Bank in 1960, India controls the Beas, the Ravi and the Sutlej, besides being allowed to use up to 20 per cent of the water of the Indus, the Jhelum and the Chenab for irrigation, transport and power generation. Article 370's abrogation was followed by a major push for maximum exploitation of the three Pakistan-controlled rivers, with the Centre deciding to expedite work on the 1,000 MW Pakal Dul, 624 MW Kiru and 540



UMER ASIF

MW Kwar power projects in the Chenab valley. There are plans to begin work on the 550 MW phase-II of the Dul Hasti project. On January 20, the Union cabinet approved an investment of Rs 5,281.94 crore for the 850 MW Ratle hydroelectric project on the Chenab in Kishtwar. "Jammu and Kashmir will be benefited by getting free power worth Rs 5,289 crore and through the levy of water usage charges worth Rs 9,581 crore from Ratle hydroelectric project, during the project life cycle of 40 years," reads an official communique.

Former J&K deputy CM Kavinder Gupta of the BJP says the nod to the Ratle project despite Pakistan's objec-

tion shows that "PM Narendra Modi will do everything possible to raise the level of development". However, local activist Shakir Siddique points out that then PM Manmohan Singh had also promised the locals one per cent of the power generated by the Pakal Dul project. "It is difficult to believe such promises. Also, these projects employ locals only as manual labourers," he adds.

Coming up just 10 km away from Pakal Dul, Ratle is also separated by the same distance from Baglihar, a run-of-the-river power project on the Chenab in Ramban district. "What is the government up to?" asks Doda DDC member Asim Hashmi. "Locals have been asking the government to take their views into consideration, but no one is listening. The government should first give free electricity to the Chenab region and let us participate in decision-making regarding power firms that exploit our resources."

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"We should be part of decision-making about harnessing our water resources," says a DDC member.

Morning Standard 14-February-2021

SUCCESS

Floodwater harvesting helps raise groundwater level

EXPRESS NEWS SERVICE @ New Delhi

THE Palla project started by the Delhi government to increase groundwater level by way of floodwater harvesting has yielded a good result leading to improvement of groundwater up to 2 meters in the area. The development was recently announced by the DJB chairperson Satyendar Jain.

The Palla project was kicked off by Delhi government in 2019. Under the project, small ponds have been created in the floodplains that will collect water

from overflowing Yamuna during the monsoon season. It aims to create a reservoir between Palla and Wazirabad in Delhi to deal with water shortage in the capital.

Delhi having no source of water of its own is largely dependent on three sources for water – ground water, treated water and rain water.

Recently, Delhi Jal Board chairperson Satyendar Jain had said they will ensure extraction of around 55 MGD water from the different WTP complexes. Most of the Water Treatment



Delhi Jal Board vice chairman Raghav Chadha during a visit to Palla | TWITTER

Plants of Delhi Jal Board are located in floodplain zone where ground water gets recharged every year in the monsoon dur-

ing floods, hence this extraction of water will be recharged every year without compromising ground water levels.

This water will be extracted through tube wells and mixed with regular supply water in the reservoirs. This exercise will ensure water is supplied at adequate quantity and pressure at the tail end especially during summers. Jain further instructed the department to maximize utilisation of existing/defunct tube wells for groundwater recharge so that rainwater can be harvested during monsoons.

नई हिमनदीय झील पर अध्ययन कर रहा CWC

नई दिल्ली (भाषा)। केंद्रीय जल आयोग (सीडब्ल्यूसी) उत्तराखंड में ग्लेशियर टूटने से आई आपदा के बाद ऋषिगंगा के ऊपरी क्षेत्र में बनी कृत्रिम झील पर अध्ययन कर रहा है और इसमें से पानी को बाहर निकालने के लिए नियंत्रित विस्फोट की संभावना की पड़ताल कर रहा है।

■ नियंत्रित विस्फोट की संभावना पर विचार

सीडब्ल्यूसी अध्यक्ष सौमित्र हलदर ने शनिवार को बताया, अध्ययन भारत मौसम विज्ञान विभाग के इस पूर्वानुमान को ध्यान में रखकर किया जा रहा है कि क्षेत्र में 15 और 16 फरवरी को एक सेंटीमीटर बारिश और हिमपात हो सकता है। आयोग इस बारे में भी पड़ताल कर रहा है कि यदि जलस्तर 'गंभीर' स्तर तक पहुंचता है तो क्या किया जा सकता है। हलदर ने कहा, हम इस बारे में आकलन कर रहे हैं कि यदि मौसम विभाग के पूर्वानुमान के मुताबिक बारिश और हिमपात के बाद जलस्तर बढ़ता है तो क्या प्रभाव हो सकता है। हम इस बारे में भी अध्ययन कर रहे हैं कि यदि झील फटती है तो कितना पानी निकलेगा और इसे नीचे तक पहुंचने में कितना समय लगेगा। झील 400 मीटर लंबी, 25 मीटर चौड़ी और 60 मीटर गहरी है। हलदर ने कहा, वाडिया हिमालय भूविज्ञान संस्थान, रक्षा अनुसंधान एवं विकास संगठन, भारतीय अंतरिक्ष अनुसंधान संगठन का भारतीय सुदूर संवेदन संस्थान और उत्तराखंड राज्य आपदा प्रबंधन प्राधिकरण सहित कई एजेंसियों/संस्थानों ने झील पर अध्ययन किया है।

Jansatta 14-February-2021

पहले ही प्राकृतिक आपदा के बारे में चेताया था पर्यावरणविदों ने

जनसत्ता संवाददाता
देहरादून, 13 फरवरी

करीब सात साल पहले देश के जाने-माने पर्यावरणविदों ने केंद्र और राज्य सरकारों को उत्तराखंड में गंगा और अलकनंदा की सहायक नदियों पर बांध बनाने के मामले में चेताया था कि इन क्षेत्रों बांध बनाना बंद कर दिया जाए, वरना प्राकृतिक आपदा आ सकती है, पर पर्यावरणविदों की इस आशंका और चेतावनी को किनारे रखते हुए केंद्र और राज्य सरकारों ने उत्तराखंड में गंगा और भागीरथी की सहायक नदियों में बड़े-बड़े बांध बनाना जारी रखा, जिसका नतीजा इस साल 7 फरवरी को उत्तराखंड के चमोली जिले के रैणी गांव तपोवन ऋषि गंगा और धौली गंगा नदियों में आई आपदा के बाद हुई तबाही के तौर पर देखने को मिला।

तबाही में एक जल विद्युत परियोजना पूरी तरह बह गई और दूसरी परियोजना में भारी तबाही मची और 200 से ज्यादा लोग लापता हो गए। 13 से ज्यादा गांव पुलों के बहने से देश दुनिया के संपर्क से टूट गए और आज क्षेत्र में लोगों के विलाप की आवाजें सुनाई दे रही हैं, जो इस प्राकृतिक त्रासदी में अपनों के खोने के गम में डूबे हुए हैं। आज से करीब साढ़े छह साल पहले 16 जून, 2013 को केदारनाथ में ग्लेशियर के टूटने और झील के फटने से मंदाकिनी घाटी क्षेत्र में जो तबाही मची थी, उसने करीबन छह हजार से ज्यादा लोगों को अपने आगोश में ले लिया था और हजारों लोग बेघर हो गए थे और एक लाख से ज्यादा लोगों को आपदा क्षेत्र से बाहर निकाल कर सुरक्षित स्थानों पर पहुंचाया गया था। अब भी इस आपदा ग्रस्त क्षेत्र में यदाकदा नर कंकालों का मिलना जारी है।

केदारनाथ आपदा के बाद सुप्रीम कोर्ट ने इस हादसे का संज्ञान लेते हुए जाने-माने पर्यावरणविद् डॉ रवि चोपड़ा की अध्यक्षता में 18 अगस्त, 2013 को एक 14 सदस्यीय समिति बनाई थी, जिसे केदारनाथ आपदा के कारणों की जांच करने और उत्तराखंड में भविष्य में ऐसी आपदा रोकने के लिए अध्ययन कर सुझाव देने की जिम्मेदारी सौंपी गई थी। इस समिति में प्रोफेसर शेखर पाठक, नवीन जुयाल, भारतीय वन्यजीव संस्थान देहरादून के डॉ सत्य कुमार और हेमंत ध्यानी समेत कई पर्यावरणविद्, सामाजिक कार्यकर्ता और कई सरकारी अधिकारी शामिल थे।

इस समिति ने 8 महीने तक उत्तराखंड का भ्रमण कर व विभिन्न मुद्दों पर व्यापक मंथन कर 14 अप्रैल, 2014 में अपनी एक विस्तृत अध्ययन रिपोर्ट सुप्रीम कोर्ट को भेजी थी, जिस में उत्तराखंड में आपदा को रोकने के लिए विभिन्न महत्वपूर्ण सुझाव दिए थे, पर केंद्र और राज्य सरकारों ने इन सुझावों पर अमल करने का काम नहीं किया, जिसके नतीजतन इस साल 7 फरवरी को उत्तराखंड के चमोली जिले में आई आपदा ने राज्य सरकार की पोल खोल कर रख दी और यह जता दिया कि 7 सालों में राज्य सरकार ने राज्य में प्राकृतिक आपदा को रोकने के लिए कोई गंभीर कदम नहीं उठाया, अगर रवि चोपड़ा समिति की रिपोर्ट में दी गई सलाह मान ली गई होती तो उत्तराखंड को आज एक बड़े प्राकृतिक आपदा के प्रकोप से बचाया जा सकता था।

Amar Ujala 14-February-2021

ऋषिगंगा में आपदा के बाद बनी नई झील की जांच करेगा जल आयोग

एसडीआरएफ की टीम झील के पास पहुंची, अचानक बाढ़ आने की संभावना नहीं

नई दिल्ली। उत्तराखंड में हालिया जल आपदा का कारण बनी ऋषिगंगा में मलबे के कारण बनी नई झील की केंद्रीय जल आयोग (सीडब्ल्यूसी) जांच करेगा। इस जांच के दौरान यह संभावना देखी जाएगी कि झील का पानी नियंत्रित विस्फोट के जरिये बाहर निकाला जा सकता है या नहीं। वहीं, एसडीआरएफ की टीम झील के पास पहुंच गई है। टीम ने कहा, झील से पानी धीरे-धीरे रिस रहा है। ऐसे में अचानक बाढ़ आने की संभावना नहीं है।

सीडब्ल्यूसी चेयरमैन सौमित्र हलधर ने शनिवार को कहा कि आयोग ने भारतीय मौसम विभाग (आईएमडी) की तरफ से इस क्षेत्र में 15 और 16 फरवरी को एक सेंटीमीटर बारिश और 10 सेंटीमीटर बर्फबारी की संभावना



जताए जाने के कारण झील टूटने के संभावित खतरे को ध्यान में रखकर यह निर्णय लिया है। हलधर ने कहा, सीडब्ल्यूसी इस संभावना की भी जांच करेगा कि यदि जल स्तर खतरनाक बिंदु से ऊपर चढ़ जाता है तो क्या किया जा सकता है। हम जांच करेंगे कि आईएमडी की भविष्यवाणी के अनुसार बर्फबारी और बारिश होने पर जल स्तर के चढ़ने का क्या प्रभाव हो सकता है। साथ ही यह भी देखा जाएगा कि यदि झील टूटती है तो कितनी मात्रा में पानी बाढ़ के तौर पर बाहर निकलेगा और नीचे तक पहुंचने में

डीएनए सुरक्षित रखने के लिए डीप फ्रीजर नहीं

देहरादून। चमोली हादसे में मृत अज्ञात लोगों के शवों और मानव अंगों की पहचान के लिए डीएनए सैंपलिंग तो हो रही है, लेकिन उन्हें सुरक्षित रखने की समुचित व्यवस्था नहीं बन पा रही। बेहतर परिणाम के लिए सैंपलों को माइनस 20 डिग्री सेंटीग्रेट पर रखना आवश्यक है। इसके लिए ज्यादातर जगहों पर डीप फ्रीजर की व्यवस्था नहीं है। ऐसे में सैंपलों के डीग्रेड (खराब) होने का खतरा बना हुआ है। ब्यूरो

उसे कितना समय लगेगा। उन्होंने कहा, अस्थायी झील 400 मीटर लंबी, 25 मीटर चौड़ी और 60 मीटर गहरी है। यह 10 डिग्री की ढलान पर है। एजेंसी