



The flooded Yamuna Bazar area on Monday. SANCHIT KHANNA/HT PHOTO

Encroachments led to Yamuna's flooding: Experts

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NEW DELHI: With the Yamuna flowing above its evacuation mark of 206m for the second day in a row on Monday, experts urged authorities to demarcate the river's active floodplain zone and remove major encroachments falling within it, noting that the mushrooming of encroachments had led to the path of the river becoming narrow in Delhi.

Looking at this year's unprecedented flooding of the Yamuna, after the river touched an all-time high of 208.66m on July 13, the experts also suggested better utilisation of the canals which adjoin the barrages on the river.

The observations were made at a panel discussion organised by the citizens' group Yamuna Sansad. The water level of the Yamuna was 205.94 metres on Monday.

AK Gosain from Indian Institute of Technology (IIT) Delhi, who worked on the Capital's drainage master plan 2018, said two factors worked against the city — the poor design of its drains, and the increasing encroachments.

"Our drains are built wrong, as their escape levels are far lower than Yamuna's water level during the monsoon season. The stop gates at these drains have to be closed, and this not only allows the drain water to go into the river, but also leads to inundation if it rains, as there is no way for the water to escape," he said, adding that the drainage master plan prepared in 2018 was not accepted by the Delhi government, despite flaws in the existing plan.

"The long-term solution is to fix our drains and ensure the stormwater and sewage flows separately. Along the floodplains, we need to actively remove encroachments," he said.



Until we remove encroachments, flooding will only become worse.

SHASHANK SHEKHAR,
department of geology, Delhi University

Conservationist Rajendra Singh, who is called the "waterman of India", said rampant construction and encroachments in the Yamuna has gradually eaten away at the natural path of the river. "If there are a number of bridges in the river's path, the silt that the river brings will get accumulated when it comes in contact with these structures. Once the riverbed starts to rise, such high levels will become more frequent," said Singh, adding that dredging and not desilting was the solution for this high silt, but the long-term solution remains to remove major encroachments.

He further pointed to better usage of canals, stating the eastern and western canals adjoining the Hathnikund barrage in Yamunanagar district in Haryana can handle 27,000 cusecs of water combined, while the Gurugram canal — adjoining the Okhla barrage and capable of handling 50,000 cusecs — was also not used during this flood.

"If we plan better, water can be released into these canals before it crosses 100,000 cusecs. If the Gurugram canal was used, the situation could have been a lot better too," he said.

Faiyaz Khudsar, scientist-in-charge of the Biodiversity Parks Programme of the Delhi Development Authority, said, "In order to maintain the health of the river and its flow, it is important to plant native grasses in the floodplain as part of ecological restoration."

The Times of India- 25- July-2023

Keep Polavaram gates open all yr round: Telangana

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Hyderabad: Fearing flooding in Bhadrachalam town and surrounding villages, the Telangana government has asked the Polavaram Project Authority (PPA) to take protection measures to avoid submergence of areas in the state. It has also asked the authority to ensure that all 48 gates of Polavaram, including the river sluices, remain open all through the year.

In a letter Telangana's irrigation engineer-in-chief C Muralidhar on Monday said the effects of Polavaram's backwaters are felt at Bhadrachalam and other areas. The Telangana government has been demanding that the Ministry of Jal Shakti and PPA undertake a survey and bring in protective measures as Bhadrachalam, the heavy water plant at Manuguru and other areas facing flooding for the past few years.

The letter states that this is especially true for the past year at Bhadrachalam, resulting in property loss apart from relocation of people, costing crores of rupees.

Bhadrachalam and surrounding areas had witnessed submergence of 28,000 acres in last year's monsoon. Officials are fearing a similar situation this year as well as the Godavari river is in spate for the past week.

Although the ministry of Jal Shakti held a string of secretary-level and coordination meetings and decided to fix the extent of submergence in Telangana, no concrete steps have been taken so far, officials told TOI.

"The Central Water Commission (CWC) chairman also

Pic: Tharun A

RAIN: REQUESTS FLOOD TWITTER

@sk729 | @KTRBRS KTR garu kindly arrange shelter homes for the homeless in Hyderabad. In this heavy rains I can see many people under flyovers, footpaths

@BhongirMK | Traffic crawling at a snail's pace in this rain! If it's not absolutely necessary, consider staying home for now. Safety first!



@priyathedentico | Madam @SabithaindraTRS please declare holiday in advance if these incessant rains will continue for tomorrow too before the kids leave for school

gave a nod for verification of the submergence level in the area extending up to Dummagudem anicut upstream covering the local streams. The impact is felt on important structures like Sarpaka ITC, Manuguru Heavy Water Plant and Bhadrachalam town, including the historical temple," the irrigation chief said.

"In view of the flood situation the PPA is once again requested to ensure immediate action by taking into cognizance of the Supreme Court order issued in September 2022 and take protective measures," he urged.

Clean Yamuna: DJB Has Got ₹1.2k Crore

Funds Received From Centre Since 2015: RTI

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New Delhi: To complete the projects related to the cleaning of the Yamuna, Delhi Jal Board has received over Rs 1,200 crore since 2015 through central schemes, an RTI reply has revealed.

According to the reply to an RTI application filed by Delhi-based environment activist Amit Gupta, DJB received over Rs 1,000 crore under the National Mission for Clean Ganga (NMCG) for Yamuna Action Plan III and over Rs 200 crore between 2018 and 2023 under the same mission.

DJB, a department under Delhi government, has stated that over 10 Yamuna projects and works on which this amount was used includes the construction of the 318 million litres per day wastewater treatment plant at Coronation Pillar. "This plant is constructed to treat wastewater generated by the Coronation Pillar Drainage Zone. The plant has been completed and commissioned," said a DJB official.

For the Yamuna Action Plan III, DJB received Rs 4.9 crore in 2015-16, Rs 2.2 crore in 2016-17, Rs 36.4 crore in 2017-18, Rs 190 crore in 2018-19, Rs 160 crore in 2019-20, Rs 225 crore in 2020-21, Rs 390 crore in 2021-22 and Rs 70 crore in 2022-23.

Meanwhile, the water utility received Rs 120 crore under NMCG in 2018-19, Rs 55 crore in 2019-20, Rs 10 crore in 2020-21, Rs 15 crore in 2021-22 and Rs 5.5 crore in 2022-23.

DJB is one of the several agencies in Delhi managing the river Yamuna. According to a government document released in April 2023, a total of Rs 6,856.9 crore has been spent between 2017-18 and 2020-21 by different depart-

RIVER RESTORATION

CENTRAL FUNDS RECEIVED TO CLEAN THE YAMUNA



ACTIVIST SAYS

There is no shortage of funds specially from the central government and thousands of crores have been spent, but the Yamuna continues to be in a poor condition. It seems there is no sincere will to clean the Yamuna

ments to reduce pollution in the river through its stretch in Delhi.

"There is no shortage of funds specially from the central government and thousands of crores have been spent, but the Yamuna continues to be in a poor condition. It seems there is no sincere will to clean the Yamuna," said activist Gupta.

While there has been some improvement in the river water quality over time, the level of contamination has remained high. According to Delhi Pollution Control Committee's latest report on pollution in the Yamuna, the river continues to have

elevated levels in some categories. The faecal coliform level, which depicts the presence of untreated sewage in the river, is over 100 times the permissible limit even as there has been some improvement since last year. The faecal coliform level, with a standard norm of 2500 units, has oscillated between 550 and 4,30,000 units in June this year, while in the previous years, the count was 1300-8,30,000 units during the month in 2022, 10-1,40,000 units in 2021 and between 210 and 70,00,000 units in 2020, making the river unfit for bathing or irrigation in the non-monsoon months.

The Tribune- 25- July-2023

At 134%, state third worst in groundwater extraction

IN PARLIAMENT



TRIBUNE NEWS SERVICE

CHANDIGARH, JULY 24

The status of groundwater extraction in Haryana at 134.14% in the assessment year 2022 was the third-worst in the country. The percentage implies gross groundwater extraction for all uses on average to available groundwater resources.

As per a reply of the Jal Shakti Ministry in the Rajya Sabha to a question from the Nationalist Congress Party MP, Dr Fauzia Khan today, Punjab is the worst in groundwater extraction at 165.99%, followed by Rajasthan at 151.07% in

assessment year 2022.

Out of these three states, only in Haryana, the groundwater extraction improved, though marginally, as it was 136.91% in 2017. In the case of Punjab, the groundwater extraction was 165.77% in 2017 while Rajasthan had 139.88% usage.

The ministry replied that for the country as a whole, the groundwater extraction on average worked out to be 60.08% in 2022 as compared to 63.33% in 2017, indicating overall improvement.

The assessment is made by the Central Ground Water Board, along with the respective state governments.

Among the overexploited blocks where water extraction is above 100%, Haryana used to have 78 blocks out of 128 assessed units in 2017, but in 2022, there are now 88

blocks (61.54%) of 143 assessed. In 2017, Punjab reported 109 overexploited blocks of 138 assessed. In 2022, there are now 117 blocks out of 153 assessed.

In Rajasthan, there used to be 185 blocks out of 295 assessed that were overexploited in 2017. After five years, the number was 219 out of 302 assessed.

In the decadal water-level fluctuation, a comparison of the mean of November 2012 to 2021 with November 2022, 114 wells (44.2%) of 258 reported a fall in the water level in Haryana. As many as 65 wells reported a fall of 0-2 m, 22 wells registered a fall of 2-4 m and 27 wells reported a fall of over 4 m in water level.

In the case of Punjab, 230 wells were assessed. Of them, 172 (74.8 per cent) reported a fall in water level.

Atpadi's Watershed Water Solution



Anand Datla

When you cross Solapur on your way to Mumbai, vast swathes of dry land on either side of the highway are punctuated by parcels of cultivated land. The monsoons tend to arrive here in late June to early July. But, this year, agriculturists of this region in Maharashtra's Satara district are waiting for the vital resource from another source: Tembhu Lift Irrigation Project (TLIP).

The story behind the commissioning of TLIP is unique. Every year on July 26, Shetmajoor Kashtakari Shetkari Sanghatana (SKSS), a local farmers' and farm labourers' association, holds its annual meeting. In 2002, nearly 70,000 people from drought-hit Sangli, Solapur and Satara districts gathered at Sangli's Atpadi taluka.

Fed up with their daily water woes threatening their livelihood opportunities and growth prospects, they

began a watershed water movement. They did not relent till the state government sanctioned funds for TLIP, which aims to lift water from the Krishna Basin in five stages and provide water to drought-affected regions of the three districts.

The community's battles ran parallel to the work of the Chitale committee, which estimated an annual demand of 1,000 m³ of water per individual for reasonable livelihood. Even though a study by the NGO, Society for Promoting Participative Ecosystem Management (SOPPECOM), estimated a higher demand, Shramik Mukti Dal (SMD), a civil society organisation, agreed to accept the committee's recommendation. The compromise led to the construction of canals that brought water to the region.

SOPPECOM's studies estimated an annual demand of 6,000 m³ of water for adequate irrigation and 400 m³ for domestic use and livestock. But after careful consideration, the NGO decided it was in

the people's best interests to accept the Chitale committee's recommendation and move on.

The movement negotiated with the government to redistribute water equitably in Atpadi, ensuring that every home, regardless of land ownership, received at least 5,000 m³ of water annually. But the open-canal system suffered significant losses due to the hot climate. Evaporation, pollution and other open-canal losses consumed much of the water.

Activists and the local community realised they needed to address the evaporation problem.

Eventually, the pipelines were covered, enabling extended coverage in Atpadi from an initial 16,000 hectares to around 55,000 hectares. All households at the Atpadi taluka are dependent on land and water for their livelihoods, irrespective of landholding, and are expected to get water access. 70-80% of the infrastructure is ready in the taluka, and the work is expected to be fully commissioned in 18-24 months.

But the real work begins now. Atpadi's 48 clusters must form water-user associations and plan for sharing the resource equitably. The plan is to provide 5,000 m³ per family a

year. The administration of the piped water system will be transferred to water-user associations.

Every person with a gat (survey) number will become a member of the association. Since farmers need to manage this complex system, capacity building will be crucial to enable them to manage the waters in an informed manner.

In May, SMD and SOPPECOM organised meetings among community members, activists, officials and panchayat leaders. The discussions were intense, with extensive debates and deliberation. The draft plans for water-user associations include piped water connections to strategic locations in each cluster. The aim is to provision access points to water for every gat number in the cluster.

TLIP is a complex project, the first of its kind in India. It breaks the silos of surface and groundwater; and local and exogenous water; and aims to ensure equity and participation. The project holds key lessons on community water management and equitable distribution of water not just for Maharashtra but also for other drought-prone regions across India.

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The first straw



बाढ़ क्षेत्र का अतिक्रमण पैदा कर रहा संकट : प्रो. गोसाई

अमर उजाला ब्यूरो

नई दिल्ली। नदी का बाढ़ क्षेत्र किसी भी तरह की इंसानी दखल से सिकुड़ता है। नदी की अपनी जगह कम होने पर बारिश के दौरान जब पानी का बहाव बढ़ता है तो जलस्तर तेजी से ऊपर उठता है। हथिनी कुंड से पिछले साल की तुलना में कम पानी छोड़े जाने के बावजूद दिल्ली में यमुना नदी की बाढ़ इसका ताजा उदाहरण है। वरिष्ठ वैज्ञानिक व आईआईटी दिल्ली के प्रोफेसर रहे एके गोसाई ने सोमवार एक कार्यक्रम में ये बातें कहीं। उन्होंने इस बात को खारिज किया कि अगर हथिनीकुंड से पूर्वी व पश्चिमी यमुना कैनाल में पानी छोड़ा जाता तो दिल्ली में बाढ़ न आती।

जल पुरुष राजेंद्र सिंह, दिल्ली विश्व विश्वविद्यालय के प्रोफेसर शशांक शेखर, स्वीडन स्थित आईएएएम के जनरल सेक्रेटरी आशुतोष तिवारी, वाइल्ड लाइफ एक्सपर्ट फैयाज खुदसर, इंदिरा गांधी दिल्ली तकनीकी विश्वविद्यालय की वीसी प्रो. अमिता देव की मौजूदगी में यमुना संसद की तरफ से आयोजित कार्यक्रम में प्रोफेसर गोसाई ने दिल्ली के ड्रेनेज सिस्टम की खामियों का जिक्र किया। वहीं, केंद्र व दिल्ली सरकार को आगाह भी किया कि अगर दिल्ली की जल सुरक्षा तय नहीं की गई तो आने वाले वक्त में बड़ा संकट आएगा।

राजेंद्र सिंह ने कहा कि पहले लोग बाढ़ का स्वागत करते थे, बाढ़ बहुत कुछ देती थी। अब बाढ़ उजाड़ती है। इससे कष्ट होता है। यदि सचमुच भारत की नदियों को जीवित रखना चाहते हैं, तो उन्हें

कहा, नहरों में पानी छोड़ना समस्या का नहीं था समाधान

यमुना के फ्लड प्लेन को
अतिक्रमण मुक्त करना जरूरी

मौजूदा स्थिति पर यमुना
संसद लाएगी श्वेत पत्र

यमुना संसद की तकनीकी विशेषज्ञ संजय सिंह ने कहा कि वह जल्द ही इस मसले पर श्वेत पत्र लेकर आएंगे। इससे पहले हथिनी कुंड से कालिंदी कुंज तक तकनीकी विशेषज्ञों के साथ यात्रा होगी। इसमें यमुना, उसके फ्लड प्लेन और उस पर निर्भर समुदायों की हालात का जायजा लिया जाएगा। श्वेत पत्र सरकार और समाज दोनों के लिए होगा।

प्यार देना होगा। अतिक्रमण, प्रदूषण और खनन नदी के लिए खतरा है। यमुना की बाढ़ प्राकृतिक नहीं, मानव जनित है। व्यवस्था की लापरवाही ने इस संकट को खड़ा किया है।

वहीं, प्रो. शशांक शेखर ने कहा है अगर यमुना को स्वस्थ और दिल्ली को बाढ़ से बचाना है कि ओ जौन को पूरी तरह से अतिक्रमण मुक्त करना होगा। फ्लड प्लेन में न्यूनतम अवरोध खड़ा किया जाए। तभी दिल्ली के लिए बाढ़ सुखद अनुभव होगी। डॉ. फैयाज खुदसर ने कहा कि नदी को क्या चाहिए, इसे नदी खुद ही बताती है। बस उसको समझने की जरूरत है। आशुतोष तिवारी ने क्लाइमेट चेंज, नदी और सतत विकास पर बात की और कहा कि एक्स्ट्रीम मौसमी दशाएं आगे और बढ़ेंगी। शहरों को इस दिशा में सतर्क होना पड़ेगा।