

Times of India 07-February-2021

Check Dams To Help Asola Animals

Forest Dept To Ready 85 By March To Stop Soil Erosion & Boost Water Levels

Priyangi Agarwal
@timesgroup.com

New Delhi: The forest department of Delhi government has built 45 check dams in Asola Bhatti Wildlife Sanctuary to prevent soil erosion, conserve rainwater and raise groundwater table to help wildlife and improve plantation. Forest officials said nearly 40 additional check dams would be constructed in the sanctuary by March-end. When Delhi receives rains in monsoon, around 85 check dams would be ready that would act as perennial pools for wild animals, they added.

Eight rain-fed streams ranging from six kilometres to 11 kilometres length have been identified on which check dams are being constructed.

"During monsoon, rain washes and takes away water and top soil to city drains. The purpose of building check dams is to ensure that runoff does not take place. The water, which will be collected on the side of check dams, will slowly



► Check dams are small dams constructed on water channels or drainage to reduce the velocity of water

45 check dams have been built. Construction of around **40** check dams is underway

Nearly **85** check dams are expected to be ready for rains

► They will help in prevention of soil erosion, conserving rainwater and recharging groundwater

► Check dams have been built on stretches that pass through wildlife habitats or migration routes

THREE TYPES OF CHECK DAMS HAVE BEEN BUILT

- 1 Gabions are stone and wire mesh structures
- 2 Sand dams are made up of sandstone and soil
- 3 Under-grass dams are where water is stopped with wooden planks and local grass is planted to create a wetland

turn into perennial pools. The check dams are being made manually without any disturbance in the forest and no machinery has been used," said

Sohail Madan, head, Conservation Education Centre, Bombay Natural History Society, which has been helping the forest department in the project.

A forest official said the check dams would help in improving soil quality which would further assist in improving vegetation and replenishing the groundwater.

Three types of check dams—gabions, sand dams and grass dams—have been made. Gabions are stone and wire mesh structures, sand dams are made up of sandstone and soil and under grass dams, water is stopped with the help of wooden planks and local grasses are planted to create a wetland.

"The location of check dams has been strategically chosen as they run through important wildlife habitats and migration routes. It will help birds and animals, including nilgai, leopards, monkeys and golden jackals, in terms of their water requirement," said Madan.

The construction of check dams began in August last year. "We have built 45 check dams so far and nearly 40 additional check dams will be ready by March-end. When Delhi receives monsoon rains, they would be functional," said Amit Anand, deputy conservator of forests (South).

Grasses are being planted to improve the habitat of wildlife, he added.

No waste plant for industries meets water quality norms, reports DPCC

Priyangi Agarwal
@timesgroup.com

New Delhi: All operational common effluent treatment plants (CETPs) in the capital do not meet the permissible water quality standards, a report prepared by Delhi Pollution Control Committee has revealed.

The report, which is based on samples collected in December last year, stated that 13 CETPs in the city do not comply with the requisite standards with respect to biochemical oxygen demand, total dissolved solid, sulphide and chloride.

The report was recently submitted to the secretary of the Union ministry of Jal Shakti. DPCC also wrote to "CETPs societies and operators for taking rectification measures to meet the prescribed standards."

The report, based on samples collected in December last year, stated that 13 CETPs in the city don't comply with the requisite standards with respect to biochemical oxygen demand, dissolved solids, sulphide and chloride

According to the report submitted, a copy of which is with TOI, Nangloi CETP — which caters to Nangloi and Udyog Nagar industrial areas — did not meet the prescribed standard for TDS, sulphide and chloride.

The effluent outlet at Bawana CETP — which has a maximum capacity of treating toxic effluent of 35 MLD for chloride — was more than the double the prescribed standard. Similarly, effluent outlet at Bawana CETP for sulphide was 6mg/l, against the prescribed standard of 2mg/l. This CETP at

Bawana failed to meet the requisite standard for TDS too.

An official from the environment department said: "CETPs in Delhi are not complying with the prescribed standard of water quality mainly due to presence of old solid sludge."

Experts claimed the work of CETPs was to treat toxic industrial effluents before it entered Yamuna, but since all CETPs in Delhi have failed to meet the water quality standard, harmful effluents are passing into the river. "The problem of CETPs not complying to standard wo-

uld be resolved when all industrial units reuse water discharged by them and the units achieve zero liquid discharge. The focus of DPCC should be on achieving zero liquid discharge," Manoj Mishra, convenor of Yamuna Jiye Abhiyaan, said.

"Besides, there are many illegal industries located in non-conforming areas, which are not connected to effluent treatment plants and are discharging toxic waste directly into the river through drains," Mishra added.

Delhi has 13 CETPs for management of industrial effluent generated from 17 approved industrial areas. They have a total treatment capacity of 212.3 million litres per day. A total of 33,690 industrial units are connected to CETPs in 17 approved industrial areas.

Deccan Chronicle 07-February-2021

All dams have enough water for summer

Good storage due to heavy rains during monsoon last year

L. VENKAT RAM
REDDY | DC
HYDERABAD, FEB. 6

Most reservoirs in the Krishna and Godavari basins in Telangana state have more water than previous years, just before the onset of summer. At others, the water is close to the levels seen in 2020.

The government is confident it can sail through this summer without facing drinking water shortage either in the city or in the districts.

The good storage is the result of heavy rains received during the southwest monsoon that lasted till October. The state received 1,259.7 mm of rainfall from June 1, 2020, against the norm of 852.8 mm, an increase of 48 per cent. In the GHMC limits, the total was 1221.1 mm against 723.5 mm usually, which is higher by 68.8 per cent.

Nagarjunasagar in the Krishna basin remains the major source of drinking water for the GHMC limits and south Telangana districts. As on Saturday, the water level at Nagarjunasagar dam stood at 559.50 ft against the full reservoir level (FRL) of 590 ft. It has 231.22 tmc ft against gross storage of 312.05 tmc. The same day last year, it had 551.30 ft and 212.43 tmc ft.

In Srisaillam dam, water stood at 867.30 ft against 868.8 ft last year (FRL 885 ft) and the storage was 130.96 tmc ft against 138.93 tmc last year (total capacity 215.81 tmc ft).

Same is the case with the major dams in Godavari basin.

Sriramsagar had water at 1083.30 ft on Saturday (last year 1,084.4 ft, FRL 1,091 ft) and storage of 61.77 tmc (last year 64.99 tmc, gross capacity 90.31 tmc).

The Mid-Manair dam is brimming with water at 1040.72 (last 1,039.93 ft, FRL 1043.31 ft) and storage

Malkapet reservoir work gathers momentum

DC CORRESPONDENT
SIRCILLA, FEB. 6

Smitha Sabarwal, secretary to the Chief Minister's Office, on Saturday inspected the construction work at the Malkapet reservoir of Malkapeta of Konaraopet mandal in Rajanna Sircilla district. The work is part of package-9 of the Kaleshwaram Lift Irrigation Scheme (KLIS).

After inspecting the underground surgepool, tunnel, pump house, ventilation shaft, delivery cis-

terns on Bund-5 works, the official inquired with the officials about the progress of work and ordered them to speed up the works and to complete lining of the tunnel for at least 80 metres every day.

Speaking at a review meeting held with the officials and contractors, Smitha Sabarwal said that as per the orders issued by Chief Minister K. Chandrasekhar Rao, work should go on round the clock in shifts to meet the deadline.

"By maintaining quality,

complete stone pitching works of all the bunds," she said and wanted a dry run of the second pump by April and a trial run of the project in May.

The senior official said that the Chief Minister was very keen to complete Package-9 as early as possible and was tracking its progress.

She further asked the collector D. Krishna Bhaskar to resolve land acquisition and revenue issues and bring to her notice if they face any major problem.



Secretary in the Chief Minister Office Smitha Sabarwal inspects the construction work of Malkapet reservoir on Saturday.

of 25.52 tmc ft (last year 24.92 tmc ft gross capacity 27.50 tmc ft).

The Yellampally project, which also supplies the city, had water at 484.25 ft (last year 477.13 ft, FRL 485.56 ft) and storage of 19.06 tmc ft (13.60 tmc ft last year against gross capacity of 20.18 tmc ft).

As per the latest reservoir storage bulletin

issued by the Central Water Commission (CWC), live storage available in the reservoirs in the southern region is 33.12 billion cubic metres (BCM), which is 63 per cent of the total capacity.

The storage during corresponding period of last year was 61 per cent at this time of the year. The average storage in the last 10

years during the corresponding period was 42 per cent.

The southern region includes the states of Andhra Pradesh, Telangana, Karnataka, Kerala and Tamil Nadu. There are 36 reservoirs under the Central Water Commission (CWC) monitoring having total capacity of 52.81 BCM.

Morning Standard 07-February-2021

CRISIS MANAGEMENT

Jharkhand water conservation effort bearing fruit

MUKESH RANJAN @ Ranchi

TO deal with rising water crisis, people in 35 villages of interior Jharkhand have found a solution. Villagers of Ichak Block in Hazaribagh have succeeded in increasing the water level by digging 31,000 trenches, leading to conservation of over 400 crore litres of water and directing it to 52 small and big water bodies. Under normal circumstances, it is believed that 70 trenches on one hectare of land helps conserve one crore litres of

water every year.

Besides increasing the water level, this initiative of the Jharkhand State Water Shed Mission in association with local NGO Jan Jagaran Kendra has enabled farmers to do multiple cropping and make barren land cultivable.

According to Sanjay Kumar Singh of Jan Jagaran Kendra, a campaign called '*khet ka pani khet me, gaaon ka pani gaaon me*' (farm water in farms, village water in villages) was



launched under which trenches were dug to conserve water.

It was decided that trenches would be dug to check the unrestricted flow of water. "Under this technique, 70 trenches on one hectare of land are dug. In Ichak Block, around 31,000 trenches on 440 hectares in 35 villages have been dug which conserves 400 crore liters of water," said Singh.

After digging trenches, it was found that the water table in the

region has increased and barren land has become cultivable. Singh said the water flowing through these trenches are directed to 52 ponds and water bodies which were created. These ponds have also helped people increase their income through fish farming.

"The Kendra is doing a commendable job and has brought about a revolution in water conservation in the region. They have succeeded in replenishing water table," said Deputy Development Commissioner Abhay Singh.



The Pioneer 07-February-2021

Up to 50% reduction in heavy metal pollution in Ganga possible: Study

ARCHANA JYOTI ■ NEW DELHI

A team of scientists from the Indian Institute of Technology (IIT) Kanpur has found that Ganga river can get rid of the heavy metal pollution by a minimum of 50 per cent in a short time span of a few months if industrial wastewater discharge is cut down for 51 days.

In contrast, inputs from agricultural runoff and domestic sewage like nitrate and phosphate remained almost the same as these sources were not impacted by the nationwide confinement.

Based on these observation, they dismissed the general perception that the Covid-19 pandemic induced lockdown improved all water quality parameters of the Ganga river and instead asserted that the different pollutants should be considered individually.

Researchers in their article,



titled "A Time-Series Record during COVID-19 Lockdown Shows the High Resilience of Dissolved Heavy Metals in the Ganga River," said that they could quantify the impact of restricted anthropogenic activities on the water chemistry resilience of large rivers following Covid-19 induced lockdown with minimal human action.

In the normal times, it is

estimated that industrial wastewater contributes nearly 20 per cent of the total volume of wastewater generated in the Ganga Basin.

The research was supported by the Indo-U.S. Science and Technology Forum (IUSSTF), a bilateral organization under the Department of Science and Technology (DST) and U.S. Department of States. It is published in 'Environmental

Science and Technology Letters.

"We therefore conclude that the Ganga river has a high resilience toward dissolved heavy metal concentrations and that the river system would revert toward pristine dissolved heavy metal concentrations in a short time span of a few months following reductions of industrial wastewater discharge," said the team of scientists comprising Tanuj Shukla, Indra S Sen, Soumita Boral and Sanjeet Sharma.

"We further emphasise that Covid-19 lockdown improved only the dissolved heavy metal load of the Ganga river, and not all the vital parameters of river water quality, as claimed previously," they added.

"Therefore, the statement that the Covid-19 pandemic improved all water quality parameters of the Ganga river is incorrect, and the different pollutants should be considered individually," the scientists asserted.

[Connecting with Nature]

Preserving lakes a 'parampara'

Madhulika Choudhary explains the importance of saving water bodies through dance and other art forms

SARADA GAYATHRI

HYDERABAD

Madhulika Choudhary believes in the message of self-change for a better environment and that is what she wants to imbibe in the people of the city. Having taken up the cause of several lakes in the city from 2016, she is still fighting to keep the lake ecosystem here in place.

One such attempt is the 'Back to Roots campaign - Parampara series', where she explains the importance of preserving lakes through dance and other art forms. On every first Sunday of the month, the Dhruvansh NGO founder plans to gather people near her 'groomed baby', the Nekkampur Lake.

"Our 'parampara' (tradition) and mythology have always asked us to protect the environment. So we will be depicting stories from Hindu mythology clubbed with the message we want to deliver to the public through Kuchipudi," shares Madhulika.

"We will be depicting the story of Krishna and Govardhan Parvat this Sunday. If you observe, every lake was surrounded by hills or mountains, which are now vanishing, leading to no source for freshwater. So, mountains and lakes are interlinked. Through the dance, we will narrate the story of Krishna asking the public to worship Govardhan Parvat and not only



The first episode of the 'Back to Roots campaign-Parampara series' will be held from 8 am to 11 am at Nekkampur Lake on Sunday.



Lord Indra as it is the Parvat that brings water to the people," she says, adding that the dance will be presented by 23-year-old Kuchipudi artiste Nihantri and her students.

On why she chose dance as her medium of expression, Madhulika says: "People don't tend to understand if told in a straightforward manner. But if I put the message through dance, they might."

"I don't mind being defamed in any manner if, in the end, the public understands my point. I will not leave Hyderabad till all its lakes are cleaned up and maintained by both the city dwellers and the government," she asserts. The 39-year-old nature-lover is also

Through 'Back to Root' campaigns, I want to bring people back to these lakes and create a connection between humans and the environment



— MADHULIKA CHOUDHARY,
FOUNDER, DHRUVANSH NGO

encouraging the use of Pochampally clothing through the campaign. With the help of a Pochampally weaver couple explaining the emergence and evolution of Telangana's traditional weaving style, Madhulika notes that the use of Pochampally clothes can minimise harm to lakes or environment as the cloth decomposes faster than others.

"If you spend just 15 minutes by a lake, you'll get a sense of everything happening in the locality. One can understand there was a wedding, or some pooja or a death ceremony and so on. All this through the garbage dumped in the lake. So, this is an attempt to make people responsible about their disposals and to educate them," she says. Through her jour-

ney, she had met a few villagers who wanted to take up the charge of these lakes as they grew up swimming in them and had good memories.

"But that connection with the water bodies is missing in today, leading to such practices. Through these campaigns, I want to bring people back to these lakes and create a connection between humans and the environment," she adds.

The first episode of the campaign will be from 8 am to 11 am on Sunday at Nekkampur Lake. Apart from dance and Pochampally garments, the campaign will also have stalls for organic seeds, homemade food and clay pots while one can also create terracotta pottery.

बर्फबारी कम होने से इस साल गर्मी में बढ़ेगा ग्लेशियरों पर दबाव कश्मीर में बर्फबारी करा कजाकिस्तान गए बादल उत्तराखंड-हिमाचल तरसे, गर्मी में बढ़ेगा तापमान

मनमीत | देहरादून

उत्तराखंड के औली में इस साल सीनियर स्कीइंग नेशनल चैंपियनशिप होनी है, मगर एक दिक्कत खड़ी हो गई है। हर साल इस समय बर्फ से ढके रहने वाले औली में बर्फ ही नहीं है। इसके चलते चैंपियनशिप की तिथि घोषित नहीं हो पा रही है। हालांकि मौसम की इस विसंगति का यह सिर्फ छोटा असर है। इस साल कश्मीर में रिकॉर्डतोड़ बर्फबारी के बावजूद उत्तराखंड और हिमाचल के इलाकों में बर्फबारी बहुत कम हुई है।

मौसम वैज्ञानिकों का कहना है पश्चिमी विक्षोभ से बने बारिश के बादल इस बार कश्मीर में तो बरसे

क्या होगा असर | शोध में सामने आया है कि ये हालात अप्रैल तक रहेंगे। इससे ग्लेशियर में कम 'स्नो' गिरेगी और नीचे की 'आइस' ज्यादा पिघलेगी। जिसके दूरगामी गंभीर परिणाम होंगे। वहीं गर्मियों में हिमालय का औसत तापमान ज्यादा रह सकता है। जिससे तेजी से ग्लेशियर पिघलेंगे और जलधाराओं को जल स्तर भी प्रभावित होगा। वहीं मई और जून में सामान्य से तीन डिग्री अधिकतम तापमान और चार डिग्री तक न्यूनतम तापमान रह सकता है।

मगर हिमाचल और उत्तराखंड में बरसने की जगह कजाकिस्तान का रुख कर गए। इसका दूरगामी असर यह होगा कि गर्मी में तापमान औसत से 2 से 3 डिग्री उछाल सकता है।

उत्तराखंड मौसम विज्ञान केंद्र के निदेशक बिक्रम सिंह बताते हैं कि हर तीसरे-चौथे दिन भूमध्य सागर से विक्षोभ उठता है, जो बादल बनकर मध्यपूर्व के देशों और पाकिस्तान के

ऊपर गुजरते हुए भारत पहुंचता है। भारत पहुंचने के लिए विक्षोभ को काफी नीचे रहना होता था, लेकिन इस बार विक्षोभ हायर एल्टीट्यूड में होने से सीधे सेंट्रल एशिया की तरफ मुड़ जा रहे हैं। इसलिए कश्मीर में तो औसत से ज्यादा बारिश और रिकॉर्ड हिमपात हो रहा है, लेकिन उत्तराखंड और हिमाचल में औसत से बेहद कम है।