

Eye on weather stations' accuracy amid new records

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NEW DELHI: The Union ministry of earth sciences directed the India Meteorological Department (IMD) to ensure that all automated weather stations (AWS) are calibrated and maintained to ensure accuracy of weather data, a missive sent after a string of weather records were broken across the country — mostly via readings on automatic monitoring stations.

Senior officials of the ministry of earth sciences said that AWS are key for expansion of weather monitoring, especially in remote parts of the country, and the government wants to ensure the data being released from these are accurate. "In case, any record-breaking data is reported from any such automated stations, we have asked IMD to verify its accuracy before releasing the data. This will ensure unnecessary panic is not created among the public and an accurate picture is presented," said a senior official of the ministry.

M Mohapatra, director general (meteorology) at IMD, said that over the years, the Met department has significantly improved the accuracy of its data and forecasts. They are also taking steps to widen the reach of data collection in remote parts of the country. "We are ensuring that these sensors are maintained properly and the data collected through these stations are accurate. Over the last five years, we have managed to set up stations even in the most remote parts," said Mohapatra.

Many AWS and Agromet weather stations — the latter are stations meant for weather information for farmers — have recorded extreme readings in Delhi and NCR. For instance, on Tuesday, southwest Delhi's Ujwa recorded -0.8°C , the lowest minimum temperature to be recorded in any station in the national capital in at least two decades.

On Monday, the station had recorded a minimum temperature of -0.5°C . Similarly, on May 15, 2022, when Delhi's representational weather station, Safdarjung, where temperatures are recorded manually, logged a maximum temperature of 45.6°C , northwest Delhi's Mungeshpur and southeast Delhi's Najafgarh — both AWS, tipped past 49°C , a number never before clocked on any of the city's weather gauges.

To be sure, the immediate vicinity of these three areas are different and these could influence regional temperatures, and

THE CENTRE HAS WRITTEN TO THE WEATHER OFFICE TO ENSURE THAT ALL AUTOMATED WEATHER STATIONS ARE CALIBRATED TO MAINTAIN DATA ACCURACY

IMD set the two AWS only a year ago, therefore past trends were unavailable. Delhi has five manual weather stations — at Safdarjung, Palam, Lodhi Road, Ridge and Ayanagar — where readings are collected manually, with a Met official using several instruments to note recordings at various intervals through the day.

The remaining — Najafgarh, Mayur Vihar, Sports Complex, Mungeshpur, Jafarpur and Pitampura — are automatic stations, where data is automatically recorded and transmitted through servers by pre-calibrated weather instruments.

IMD officials said the automatic stations were installed across the city from 2010 since the weather department required better coverage during the Commonwealth Games (CWG). These stations require minimal space in comparison to a full-fledged observatory.

IMD has also recently set up agromet weather stations in rural pockets of the Capital to help make forecasts for agriculture. These stations have specialised equipment to measure meteorological data such as temperature, rain, air humidity and also have sensors to forecast leaf wetness etc. Till 2020, IMD had a network of over 700 AWS across India.

Mahesh Palawat, vice-president (meteorology and climate change) at Skymet Weather Services, a private weather forecasting company, said a lack of accuracy in IMD's AWS could be due to the lack of maintenance and calibration of machines. In an ideal situation, he said, AWS can be an asset as it improves data collection and gives a clearer picture of how microclimates behave within a state. "In AWS, sensors are set up in the open so it becomes imperative that the equipment is properly maintained and calibrated. We (Skymet) have a network of over 6,000 automated weather stations across the country and it becomes a great asset to us because it increases data points and improves forecasting," he said.

Hindustan Times - 18- January-2023

{ ARUNACHAL PRADESH } FOREST ADVISORY COMMITTEE

Respite for local communities as Etalin hydro project scrapped in current form

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NEW DELHI: The controversial Etalin hydroelectric power project in Arunachal Pradesh has been scrapped in its present form in a temporary respite to local communities and conservationists who were objecting to it.

The Forest Advisory Committee (FAC) of the Union environment ministry has asked the Arunachal Pradesh government to go back to the drawing board

THE PLAN, WHICH INVOLVED FELLING OF 280,000 TREES, AND DIVERSION OF 1,166 HA OF FOREST LAND IS MIRED IN CONTROVERSY

on the 3097 MW project in Dibang Valley, a biodiversity hotspot. FAC said the proposal cannot be considered in its present

form and a revised proposal may be submitted for further consideration.

The proposal, which involved diversion of 1165.66 hectares of forest land and felling of over 280,000 trees in dense subtropical, evergreen, broadleaved, and subtropical rainforest, according to a fact sheet submitted to FAC (which has to sign off on the project) on April 21, 2020, is mired in controversy mainly because of environmental and biodiversity loss related con-

cerns raised by experts.

FAC said in its December 27 meeting, the minutes of which were published on Monday, that the present proposal faces a large number of representations voicing concerns against the project. The original proposal was sent by Arunachal Pradesh back in 2014 and it is imperative to review the facts and figures presented by the state government especially with regard to the number of trees required to

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HYDRO PROJECT JUNKED

be felled, FAC observed.

"FAC opined that the instant proposal cannot be considered in the present form and the revised proposal may be submitted for further consideration by the state government," the minutes, available on the Parivesh website, stated.

"Our concerns remain the same. We believe this dam, if built, will affect our ecology and culture. Why do we need more dams. Already some construction work related to Dibang Multipurpose Project is causing havoc. We should be very careful," said Anoko Mega, environmentalist and member of Idu Mishmi community.

HT reported on May 5, 2020 that in the 58-page peer review of Wildlife Institute of India's report titled "Wildlife Conservation Plan for Impact Zone of Etalin HEP", 24 scientists from 14 scientific institutions in India said the report doesn't reflect a true picture of biodiversity in Dibang Valley where the Etalin project will come up. The proposed hydropower development is likely to impact the habitat and the survival of several endemic and threatened terrestrial species such as the Snow Leopard, Red Panda, Clouded Leopard, Tiger, Arunachal Macaque, Black-necked crane, and the rare Mishmi Wren Babbler, among many others, the review said.

HT again reported on July 7, 2020 that after the environment

ministry asked the Arunachal Pradesh government to conduct a cost-benefit analysis of the controversial project, the government submitted the analysis — done, not by the state or an independent agency but by the developer of the project, Etalin Hydro Electric Power Company Limited.

Several discrepancies have come to light since. For example, HT reported on January 2, 2023 that indigenous communities living downstream of the Dibang Multipurpose Project and proposed Etalin Hydropower Project in Arunachal Pradesh have raised concerns with a 2016 cumulative impacts assessment study of the Dibang sub-basin in the Brahmaputra Valley, saying it has omitted assessment of impacts on areas immediately downstream of these projects. Communities living downstream of the Etalin project pointed out that the study has not assessed the impacts on Lower Dibang Valley district at all. The Cumulative Impact and Carrying Capacity Study, which was published in July 2016 and accepted by the environment ministry, is the basis for the Centre to take a call on the 3,097 MW Etalin Hydropower Project and 16 smaller hydro projects planned in the region.

The Etalin proposal was earlier considered by FAC on January 28, 2015, February 28, 2017, October 17, 2019, April 24, 2020 and May 11, 2022. The ministry of power and the impact assessment division of the environment ministry

recommended the project for clearance. Wildlife Institute of India (WII) and National Tiger Conservation Authority (NTCA) suggested certain safeguards and mitigating measures for the better conservation and protection of wildlife in the area while considering the approval of the project.

In the FAC meeting held on May 11, 2022 two committees were constituted by FAC to review various aspects of the proposal. One committee was constituted under the chairmanship of FAC expert member, Sanjay Deshmukh to examine the content of all the representations made by conservationists and local communities against the proposal. The second committee was constituted under the chairmanship of Regional Officer, Integrated Regional Office, Guwahati and Nodal Officer (FCA), Govt. of Arunachal Pradesh as a member to visit and monitor the compliance of conditions of various forest clearance approvals for hydroelectric projects in the past. The second committee is yet to submit its report.

Deshmukh's panel said a project mitigation and wildlife management plan based on the recommendations of Wildlife Institute of India, with endorsement of the Wildlife Division of the environment ministry and FAC should be implemented by the project proponent. It also recommended an increase in the ambit of economic and social benefits to project-affected families and inclusion of

affected areas of Lower Dibang district as beneficiaries.

The minutes also pointed to Arunachal's "poor compliance" in meeting "conditions stipulated by FAC in the approval accorded for the earlier projects".

"It was highlighted that in the earlier approved projects where in Forest Clearance has been accorded there is poor record of compliance w.r.t. conditions stipulated by FAC while according to the forest clearance. Further, FAC took note of the submission made by the State Nodal Officer that there are a lot of representations objecting to the present proposal and with regard to already approved projects as well. Due to this, already approved projects have not yet started and certain projects are not yet being completed. In view of the above, the FAC requested the State Govt. to review the status of all approved projects (operationalization/execution of the projects, commencing and completion of the project) and submit a status report to this Ministry at the earliest," the minutes said.

"The minutes reflect the thorough consideration that the committee has given to various technical aspects and public response that has been brought to their notice. The precautionary approach in the present case can set an important precedent in how science and society can inform regulatory decisions," said Kanchi Kohli, legal researcher at Centre for Policy Research.

More houses develop cracks in Joshimath; total count nears 850

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MUSOORIE/DEHRADUN: Over 250 houses have developed cracks in Uttarakhand's Joshimath town since January 4, taking the overall number of affected houses in the city to 849 on Tuesday.

On January 4, two days after local residents heard a deep rumble and woke up to see long,

deep cracks running down their homes, the number of affected houses was 561.

In its latest bulletin on Tuesday, the Chamoli district administration said the number of unsafe houses in four wards of Joshimath stood at 167 — more than double the figure (86) that was reported on January 10.

On Tuesday, state disaster management secretary Ranjit Kumar Sinha said a timeframe

has been fixed by the Centre's technical institutions to complete studies on various aspects of land subsidence in Joshimath.

Local residents, environmentalists and geologists alleged a hydropower project of the National Thermal Power Corporation is the key reason behind land subsidence in Joshimath due to its "non-stop digging and underground blasting" — a claim dismissed by the Centre. →P8

{ **GLACIAL LAKE OUTBURST** } OVER 200 KILLED

2 yrs on, rehabilitation still eludes villagers in Chamoli

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RAINI (CHAMOLI): Almost two years after Raini village in Uttarakhand's Chamoli district faced the brunt of a glacial lake outburst in February 2021, leaving over 204 people dead, the promise of rehabilitation has remained a pipe dream for residents of the sinking village with officials attributing the delay to "non-availability" of land.

On February 7, 2021, the slope on which Raini village stands suffered great damage on account of flash floods that damaged two under-construction hydel power projects, Rishi Ganga and NTPC's Tapovan Dam. The administration declared 204 people dead in the worst tragedy to impact Raini village, famed for Gaura Devi's act of leading a group of women to prevent the felling of trees, the genesis of the Chipko movement.

The land subsidence in Joshimath, around 20 km from Raini village, residents of the former claim, is connected with the 2021 tragedy. Atul Sati, a local activist and convener of Joshimath Bachao Sangharsh Samiti, claimed, "It's after the 2021 floods that cracks started appearing in people's homes in Joshimath." There's an NTPC connection too. It's only after "NTPC started blasting in the tunnel to remove its tunnel boring machine" that the cracks and fissures deepened, he added.

After the 2021 tragedy, the government commissioned a study by geologists on the safety of Raini village. The team submitted a report in July 2021 to the Chamoli district magistrate, declaring the village "uninhabitable" and recommended immediate rehabilitation of the villagers.

Raini and its residents have not had it easy since. On June 13 and 17, 2021, Raini was hit by flash floods in which 14 houses in the lower part of the village were washed away. A part of the Joshimath-Malari highway, which connects the mainland to the international border and is strategically important, also caved in. In October 2021, the slope, which had already weakened by the flash floods, showed signs of subsidence and residents claimed their homes developed fresh cracks.



The Tapovan hydel project was affected due to the glacial lake outburst in 2021. PTI

Raini village is divided by the Rishiganga. One side of the village is called Pala Raini and the other side Wala Raini. Gaura Devi was born on Pala side in 1925 and came to live on the Wala side early in her life. The Pala side of the village was more affected by the 2021 glacial burst. Yashoda Devi (70), who lives on the Pala side, recalled the horrific 2021 tragedy with tears. Devi lost her 32-year-old son Yashpal in the floods. "Yashpal was standing near the river bank, with his sheep grazing in the field. He could not run and the gushing waters swept him away," she said.

Many other women from the village of Gaura Devi, whose statue was also damaged in the tragedy, recalled the horror of those hours. "The flood happened without any warning and damaged our village. Some of us managed to save ourselves by running to higher points," said Omki Devi.

Bhawan Singh, the headman of Raini village, said that while the tragedy brought the focus on the village, residents have faced an existential crisis ever since. "When it rains heavily, it brings back memories of the tragedy. The cracks that developed in our houses gets wider. The river has been eroding the river bank and moving closer to village with every incident. There have been reports of land subsidence in the entire Niti Valley since the 2021 tragedy," Singh said. A senior official of the Chamoli district administration confirmed the headman's claim and said the report submitted to the district magistrate by geologists spoke about the village facing serious slope instability.

The official said the geologists advised the state to rehabilitate the residents of Raini village to a safer location. He added that the report

also mentioned the impact of hydroelectric projects on Raini's stability. The work on projects being built on Rishiganga river started in 2005, which led to widespread deforestation. "It disturbed the area's fragile ecology," he said.

In July 2021, the Uttarakhand high court dismissed a PIL filed by five residents of Raini village, seeking revocation of forest and environmental clearances to Rishiganga and Tapovan-Vishnugad hydropower projects and seeking rehabilitation of Raini villages. The court imposed a cost of ₹10,000 on each of the five petitioners.

Raini residents said that in 2019, the high court had asked authorities to check the claim of subsidence but nothing happened. Sangram Singh, one of the petitioners in the July 2021 case, said, "The nearby villages are sinking due to blasting for construction of an underground tunnel for the project. We have been fighting against these projects but authorities are not willing to act against them," he said. His reference is to the NTPC Tapovan project, which has been blamed by residents of Joshimath and some experts for the crisis in the holy town.

NTPC has refuted the claims and said no blasts were conducted for building the underground tunnel and described subsidence as "natural" process in the Himalayas. At Raini, despite their fear, many residents continue to live in the homes having cracks.

The Chamoli district administration said there has been a delay in the rehabilitation of the village due to limited availability of land.

NK Joshi, district disaster management officer, said, "There are around 50 families living in Raini. We had earlier identified two nearby areas for the rehabilitation. The plan couldn't materialise due to limited availability of land."

Prof YP Sundriyal, head of department, Geology, Hemvati Nandan Bahuguna Garhwal University, said Raini's residents "should be rehabilitated quickly since it (the village) falls in the fragile region and has been reported land subsidence. It's risky." But what's happened is inevitable, suggested Chandra Singh, Gaura Devi's son. "If they assault nature, it will take revenge."

The Pioneer- 18- January-2023

Greed, not nature behind Joshimath



ASHWANI MAHAJAN

Unbridled construction in the name of development is becoming the a recipe for environmental mishaps

Adi Shankaracharya had founded the city in the eighth century where the holy Jyotirlinga is located, which is known as Joshimath (Jyotirmath). The news of the sinking of Joshimath has shaken not only Uttarakhand but the whole country.

While on the one hand a large number of people are going to be displaced due to the sinking of Joshimath, on the other hand, no political party is coming out with solutions. They are only engaged in blaming each other. Meanwhile, the works at the National Thermal Power Corporation (NTPC) has been stopped as per the order of the district administration to stop the construction of the Tapovan Vishnugarh Hydro Power Project, which also includes the Helang bypass road, due to the movement of 'Joshi Math Bachao Sangharsh Samiti'. The work of Asia's longest ropeways has also been stopped.

Even though these steps have been taken in view of this crisis, experts believe that the sinking of Joshimath cannot be stopped. That is, the downfall of this first Jyotir Math established by Adi Shankaracharya cannot be stopped now. This is not the first time that such a tragedy has happened in the Himalayan region. Earlier in the year 2021 also, 200 people, including the laborers of Tapovan dam had died in the Chamoli flood.

Earlier in 2013 too, a large number of bridges, roads and buildings had collapsed due to floods in the Ganga, Yamuna and its tributaries in the region after heavy rains. There has been a huge increase in the number of such disasters in the Himalayan region in recent years. These natural calamities cannot be taken lightly. It is believed that indiscriminate construction work in the name of development is behind the increasing number of disasters. This means that these disasters are not natural but are man-made.

In view of this type of rapid destruction in the past, it has become necessary to consider that the so-called development driven by human greed cannot be continued in this way. Uncontrolled construction work on such dilapidated and fragile mountains is the reason for the collapse of Joshi Math. It is worth mentioning that the way the mountain was cut at the foothills of Joshimath for the construction of Char Dham Marg and NTPC dug a tunnel in the middle of the mountain for its hydro project, due to which this fragile mountain was destroyed.

The question is not only about Joshimath. In the name of development, construction work and tampering with nature is going on continuously all over Uttarakhand. Due to the cutting of trees, there is hardly any greenery left on the mountains; and due to this, landslides have become a common feature in these dilapidated mountains. The whole of Uttarakhand and especially the centers of tourist attractions



like Nainital and Mussoorie are also standing on the verge of sinking.

Some people believe that a situation like Joshi Math may be repeated in Nainital as well. Indiscriminate and mindless construction is seen significantly in Uttarakhand. The work of widening of roads, construction of tunnels, railway lines, construction of dams, etc., and in addition large-scale building construction, which mostly includes hotel construction, has increased rapidly in the last two decades.

It is a scientific fact that the Himalayas are comparatively new mountains and hence they are very fragile. Big tampering in the Himalayas, more than its holding capacity, causes landslides and land sinking there. Due to such a situation, new constructions in this area cannot sustain and in the present situation it is seen that disastrous accidents are taking place during the construction itself, due to which the construction works are forcedly stopped midway.

NTPC's 520 MW hydro power project, which was started in the year 2006, and was initially estimated to cost nearly Rs 3000 crores, has seen its construction work repeatedly stopped due to landslides and other natural hindrances and this is the fifth time that its work has to be stopped. It is believed that its cost has reached around Rs 12,000 crore, and there is no sign of its completion. The same thing applies to the expansion works of the roads. The cost of electricity generated from this hydro project is estimated to be around Rs 25 per unit, while the

current cost of solar energy is only Rs 2 and 50 paise per unit. Therefore, building of hydro power project is actually senseless.

WHAT IS THE SOLUTION?

Unbridled construction in the name of development without assessing the expected impact is becoming the cause of today's and later tragedies. This crisis can be avoided only by curbing this indiscriminate construction. But the construction works at different places cannot be stopped without making a law. Legislation is a long process and it is a difficult task to create a consensus of opinion among various stakeholders. The state government can make efforts for this by showing sensitivity that due to the current crisis, the district administration has stopped all the construction activities, but if long-term measures are not thought of, then these construction works will restart again sooner or later.

Therefore, it is necessary that long-term measures are taken to deal with this problem. We know that most of the rivers in the country originate from the Himalayan Mountains. Whereas glaciers are located on the top of the Himalayas, due to global warming in the world, they are melting and because of this not only are the sources of drinking water depleting due to excess flow of water, but the water level of the sea is also increasing.

ECO-SENSITIVE ZONES

Various rivers originate under the glaciers. In the past there had been

opposition to the obstruction of continuous flow of the Ganga by tampering with nature in the name of building dams on the river Ganga. After protests and agitations and fast unto death by many people, including Prof. GD Agrawal, in the year 2010, the central government declared the area of Bhagirathi as eco-sensitive zone. The experience after that is that natural calamities have remained almost non-existent in that area. Similarly, parallel to Bhagirathi area, if Yamunotri, Alaknanda, Mandakini and Kali River and Dhaul Ganga areas are also declared eco-sensitive zones, then only it will be possible to prevent future disasters.

Since the Bhagirathi region had already been declared an eco-sensitive region in the past, similar treatment should be given to the rest of the sensitive regions on similar lines, so that the Himalayas, or in other words, the country's lifeline for thousands of years, can be saved.

This is needed, not only to save the Himalayan region, but also to save about 60 crore people dependent on water flowing from rivers originating in Himalayan. It has to be understood that the present generation and the government have the responsibility of not only protection of the Himalayan region, but also the future of all the people living on this land, who are dependent on the rivers coming out of this region. The present governments, both at centre and the state, will have to demonstrate utmost sensitivity, otherwise the future generations will never forgive us.



THE COST OF ELECTRICITY GENERATED FROM THIS HYDRO PROJECT IS ESTIMATED TO BE AROUND RS 25 PER UNIT, WHILE THE CURRENT COST OF SOLAR ENERGY IS ONLY RS 2.50 PER UNIT

(The author is Professor, PGDAV College, University of Delhi)

The Morning Standard- 18- January-2023

Land stabilising, situation will soon return to normal in Joshimath, say scientists

NARENDRA SETHI @ Joshimath

SCIENTISTS, who returned to the capital after studying the Joshimath land subsidence case, have made a new revelation with the news of comfort. These scientists say that this situation has arisen in Joshimath due to hydrostatic pressure as well as continuous base-erosion in the Alaknanda river after the 'Raini' disaster. However, the positive aspect is that most of the water from the sinking land has flowed into the Alaknanda River.

The soil of this area has also started to dry. In such a situation, this land submergence will decrease to a great extent. "The land of the land submergence area in Joshimath is trying to stabilise," the scientists believe. However, it will take some more time.

As soon as the summer starts, there will be a positive change in the situation. "The flow of water in JP Colony of Joshimath, which was happening at a speed of 10 litres per second, is now happening at 1.9 litres per second, which is comforting," said scientists, who didn't want to be named.

Scientists believe that the 'Raini' disaster in 2021 is also largely responsible for the Joshimath landslide. According to scientists, during the disaster, there was a large flow of water in Dhauri Ganga and



Research team checks the bearing capacity of soil in Joshimath | PTI

Alaknanda rivers, which led river-bed erosion in the Alaknanda river.

Scientists have also brought some soil, water samples from the land subsidence area with them, which are being examined in the institute to find the amount of water in the soil, if the water from an unknown natural source or if it is coming out of the houses.

A team of scientists from Wadia Institute of Himalayan Geology, National Institute of Hydrology, IIT Roorkee, Geological Survey of India, IIRS and other institutes in the country are carrying out research about sinking.

Scientists say, "There is no proper drainage system here, so water mostly gets absorbed into the ground, leading to constant hydrostatic pressure."

The Tribune- 18- January-2023

In 8 years, massive rise in Yamuna's pollution in Delhi

KARAM PRAKASH
TRIBUNE NEWS SERVICE

NEW DELHI, JANUARY 17

The Yamuna river has become almost twice as much polluted in the capital during the past eight years.

In 2014, pollution marker Biological Oxygen Demand (BOD) at Palla — where the Yamuna enters Delhi — was well within acceptable limits at two. At its exit in Delhi at Okhla Barrage, BOD load was 32 then.

In 2023, the BOD load at Palla remains at 2 but at Okhla, it has risen to a staggering 56.

These facts came to the fore during a presentation by the Environment Department of Delhi and Delhi Jal Board at a meeting chaired by Delhi L-G

VK Saxena on Saturday.

The meeting was called to take stock of the ground situation before the first meeting of a high-level committee constituted by the National Green Tribunal (NGT) to ensure the cleaning of the Yamuna. The NGT in its order had requested the Delhi L-G to head the committee.

It has been learnt that the rise in pollution has been consistent since 2014 with the only exception being 2019.

This deadly increase in pollution is purportedly owing to the failure of the Delhi Government in putting a check on incoming pollution through the Najafgarh drain despite the persistent directions and



Toxic foam floats on the Yamuna near ITO in New Delhi. TRIBUNE FILE PHOTO

monitoring of the Supreme Court and National Green Tribunal.

Notably, Najafgarh drain accounts for 68.71 per cent of the waste water being discharged into the Yamuna. The other main polluter

is the Shahdara drain that accounts for 10.9 per cent of the discharge.

The Delhi Government obviously fell short of addressing the cleaning of both drains the way those should have been cleaned.

This was evident from the fact that the BOD load discharged into the Yamuna by Najafgarh drain amounts to 70 per cent and of the Shahdara drain is 13.95 per cent.

Delhi Jal Board (DJB) Vice-Chairman Saurabh

Bhardwaj said, "Delhi Jal Board is already working on these legacy problems of Delhi. We have awarded work for the upgrade of almost all the major sewage treatment plants.

"We have issued show-cause notices to the private operators running the STPs as well the Executive Engineers in case of the DJB-operated plant wherever deficiencies have been found," he added.

"The projects are also facing difficulty because all payments were stopped in the DJB for six months due to obstacles created by the Finance Department. We request the L-G to take action against the erring officers of the Department of Finance," Bhardwaj said.

Dainik Jagran- 18- January-2023

चीन के 'वाटर वार' के खिलाफ बन रही रणनीति

जयप्रकाश रंजन • नई दिल्ली

एलएसी पर तनातनी के बाद चीन द्वारा ब्रह्मपुत्र नदी के पानी को नियंत्रित करने की कोशिश के खिलाफ भारत अपनी रणनीति बना रहा है। ब्रह्मपुत्र के मूल उद्गम यार्लुंग त्सांगपो नदी पर चीन 60 हजार मेगावाट क्षमता की पनबिजली परियोजना लगा रहा है। इसके लिए वह विशालकाय बांध बना रहा है। आशंका है कि वह इस बांध का इस्तेमाल भारत के खिलाफ 'वाटर वार' के तौर पर कर सकता है। इसकी काट के तौर पर भारत अरुणाचल प्रदेश के अपर सियांग इलाके में 11,200 मेगावाट क्षमता की पनबिजली परियोजना लगाने की सोच रहा है। 1.10 लाख करोड़ रुपये की इस परियोजना की संभाव्यता रिपोर्ट (पीएफआर) तैयार हो गई है। जल्द ही सरकार की तरफ से इसकी विस्तृत प्रोजेक्ट रिपोर्ट (डीपीआर) बनाने की मंजूरी दी जाएगी। यह

● अरुणाचल में एक लाख करोड़ की लागत से 11 हजार मेगावाट का प्रोजेक्ट लगाने की तैयारी

● ब्रह्मपुत्र के स्रोत पर अपने इलाके में 60 हजार मेगावाट की पनबिजली लगा रहा है चीन

परियोजना अरुणाचल में लगाई जा रही 9,380 मेगावाट क्षमता की दूसरी परियोजनाओं से अलग होगी।

सूत्रों का कहना है कि अरुणाचल के पास भारत-चीन सीमा पर मेडोग के पास तैयार हो रहे बांध का भारत की पर्यावरणीय व्यवस्था पर व्यापक असर हो सकता है। चीन न सिर्फ भारत में कृत्रिम बाढ़ ला सकता है बल्कि पानी की किल्लत भी बढ़ा सकता है। यह पूर्वोत्तर भारत की कृषि व्यवस्था तहस-नहस कर सकता है। ब्रह्मपुत्र की कुल लंबाई 2,880 किलोमीटर है जिसमें 1,700 किलोमीटर हिस्सा तिब्बत में स्थित है। अगर चीन अपने इलाके में

ब्रह्मपुत्र को नियंत्रित करता है तो भारत के साथ ही बांग्लादेश को भी प्रभावित कर सकता है। अब जबकि भारत व चीन के रिश्ते लगातार खराब हो रहे हैं तब इस चुनौती से निपटने की ज्यादा गंभीर कोशिश करनी होगी। इसी कोशिश के तहत भारत अपने इलाके में बड़ी पनबिजली परियोजनाओं पर विचार कर रहा है। अभी वहां दो हजार मेगावाट की सुबानसिरी परियोजना पूरी होने वाली है। 2,880 मेगावाट क्षमता की दीबांग परियोजना को सीसीईए से अंतिम मंजूरी का इंतजार है। 6,500 मेगावाट क्षमता की परियोजनाओं के लिए विभिन्न स्तरों पर अध्ययन चल रहा है। इन परियोजनाओं के लिए कुल नौ अरब क्यूबिक मीटर पानी की स्टोरेज की व्यवस्था हो सकती है। इसका इस्तेमाल भविष्य में चीन की तरफ से पानी आपूर्ति में बाधा डालने की स्थिति में किया जा सकता है।