Millennium post -13 January 2021

IMD issues cold wave alert for north Indian plains

Similar alert sounded for TN & Puducherry with a forecast of rains

OUR CORRESPONDENT

NEW DELHI: With temperatures falling, an orange alert was issued by the India Meteorological Department on Tuesday for the northern plains with a forecast of a cold wave for the next four days.

A similar alert has been sounded for Tamil Nadu and Puducherry with a forecast of heavy rains.

The IMD said that the minimum temperature over the north Indian plains is likely to be below normal during this period. "Due to the prevalence of dry north/northwesterly winds, the minimum temperature is very likely to be below normal over most parts of northwest India during next 4-5 days which are very likely to cause cold day/severe cold day conditions at some parts of Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Uttarakhand during next three days.

"Cold wave/severe cold wave conditions at some parts are also very likely over Punjab, Haryana, Chandigarh and Delhi and in isolated parts over Uttar Pradesh, north Madhya Pradesh and Rajasthan during next three days," the IMD said.

Ground frost is also very likely in isolated pockets over south Punjab, Haryana, Chandigarh and north Rajasthan during the next two days.

The IMD said that dense to very dense fog conditions at isolated places are very likely over northwest India during the next 4-5 days.

It has issued an orange colour coded alert for Punjab, Haryana, Uttar Pradesh from January 13 to 16. It has also sounded an orange alert for Rajasthan for January 13.

The IMD has four colour codes signifying the intensity of weather events. While an orange alert is an indication to be prepared for likely extreme conditions, red is a warning to take action to protect life and property from extremely bad weather. Green indicates normal conditions and yellow is for keeping a watch for a deterioration in the weather.

Due to a cyclonic circulation over the Comorin area, fairly widespread to widespread rainfall, with isolated heavy falls and moderate thunderstorms and lightning are very likely over Tamil Nadu Puducherry, Karaikal, Kerala, Mahe and Lakshadweep during next 2-3 days, the IMD said.

Hans India -13 January 2021

SANKRANTHI KANUKA

20kl free water promise fulfilled

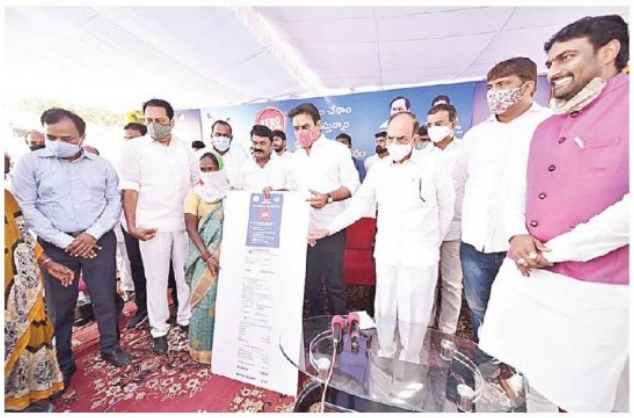
The scheme will benefit about 97% of poor and middle-class families living in the city

HANS NEWS SERVICE
RAHMATH NAGAR

HYDERABAD has become the second city after Delhi to provide free drinking water supply scheme for the people. "we have created a history and it's a big day for Hyderabad," said a proud MA&UD Minister KTRama Raowhile launching the free drinking water supply scheme here on Tuesday.

Under this scheme, the residential connections in Hyderabad will be provided with free drinking water supply up to 20000 litres. The scheme is expected to benefit nine lakh families, who use less than 20,000 litres of water every month.

"It's a big day for Hyderabad which witnessed drinking water scarcity and people protesting with empty pots. At a time when other metro cities such as Chennai are suffering from the scarcity of drinking water, it is due to the farsightedness of the CM that Hyderabad is not facing such problems," said KTR and remarked Sankranti has come two days in advance for people in Hyderabad.

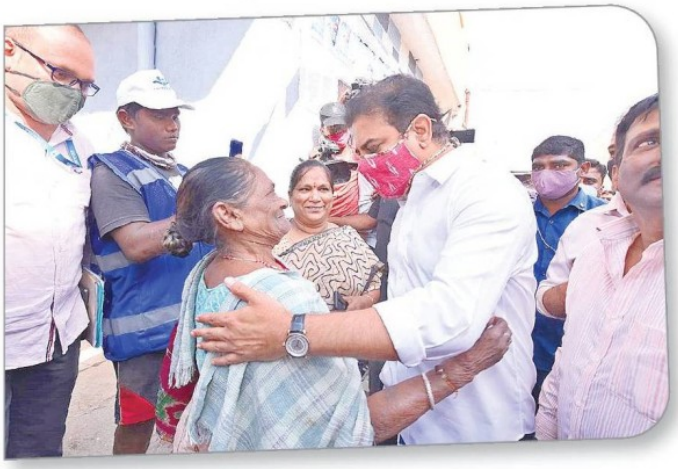


Domestic consumers need not pay water bill for using less than 20,000 litres water per month

- For water use above 20,000 litres, consumers have to pay a tariff as per meter reading
- All eligible customers of the scheme are required to link their Aadhaar card to their CAN numbers

This plan is applicable for domestic users only. The remaining categories will have to pay the bill

Those living in slums do not need to install any meters



As a part of the Free Drinking Water scheme, Minister KTR handed over Zero Bills to the beneficiaries of Rahmath Nagar at their doorstep today.

Even though it started on Tuesday, the free scheme will come into effect from the December bill issued in January. However, those who consume over 20,000 litres of water will have to pay black bills to that extent. In order for consumers to get this free drinking water facility,people have to set up meters properly to their respective connections. However, those living in slums do not need to install any meters and the scheme is applicable for domestic users only.

Ministers Talasani Srinivas Yadav, Mahmood Ali, CH Malla Reddy, MP Dr Ranjith Reddy, MLAs Maganti Gopinath, Danam Nagender, KP Vivekananda, Muta Gopal, MLC Yegge Mallesham, Mayor Bonthu Rammohan & Chief Secretary Somesh Kumar, Principal Secretary Arvind Kumar, HMWS MD Dana Kishore participated.

FESTIVAL HAS COME 2 DAYS EARLY

"It's a big day for Hyderabad which witnessed drinking water scarcity and people protesting with empty pots. At a time when other metro cities such as Chennai are suffering from the scarcity of drinking water, it is due to the farsightedness of the CM that Hyderabad is not facing such problems

- MAUD Minister K T Rama Rao

The Statesman -13 January 2021

FOR RECHARGING GROUNDWATER

Permeability is an important property of soil investigation as an ongoing research project has found

MOHAMMAD KAFI

The excessive use and wastage of water in our country has landed us in a water-deficient zone. The scarcity is assuming such dimensions that more than 50 per cent of the population has no access to safe drinking water. Around 200,000 people die every year due to this reason. The present-day water crisis is the worst in history and India is considered at the centre of the global water calamity and sanitation.

Due to low rainfall and increasing pollution, surface sources are not dependable anymore. Thus, groundwater is the only option left to feed the demand of the population. According to Unesco, India is the largest extractor of groundwater. Fifty-four per cent wells in the country have gone dry and 21 major cities are going to be devoid of groundwater by the end of this year. Therefore, replenishment of groundwater sources by recharge of aquifers is the greatest need of the day.

Permeability is an important parameter of soil that governs seepage or infiltration -- it is the ease with which water travels in the soil through interconnecting voids. It warrants mention here that the seepage of rainwater not only takes place in a vertical direction but also horizontally. Thus, the determination of permeability in both directions becomes imperative.

Permeability plays a key role not only in groundwater recharge but also in estimation of seepage under hydraulic structures, such as dams and weirs. Seepage of water through the body of earthen dams has also been a cause of concern to hydraulic engineers. Many failures of dams have been reported in the past due to excessive seepage. Permeability is also a material property and differs from one material to another. The accurate estimation of soil permeability is of utmost importance for the selection of materials for the construction of hydraulic structures and their foundations.

The foundations of such structures are usually composed of porous media which allows the seepage of water into the foundation on the upstream side of the structure. This water, after entering the foundation, tries to escape on the downstream side. Thus, a pressure is created by the trapped water for its escape. This pressure is known as uplift pressure. Sometimes the uplift pressure escalates, and water escapes suddenly from the foundation with large amounts of bed material. This creates a blast-like situation and causes the failure of the structure. The phenomenon is known as "heave piping".

On the other hand, there is a slow process of movement of soil particles along with flowing water on the downstream side. Removal of soil particles from the foundation of the structure forms tube-like hollow spaces, which progresses in the backward direction with the dislodging of soil particles. This phenomenon is known as "backward erosion piping". If this piping reaches the upstream portion of the hydraulic structure, the structure as a whole is detached from the foundation and is washed away under the water pressure or may fail by subsidence.

Permeability was first determined by a French engineer called Henri Darcy in 1856. He conducted his experiments of flow of water on sand beds, which formed the basis of hydrogeology. Determination of permeability of soil in a vertical direction has been attempted by several researchers but its determination in a horizontal direction lags in comparison. For the determination of permeability in a vertical direction, standard procedures and equipment are available but that is not the case in the horizontal direction. This area needs the attention of scientists and researchers.

Moreover, the determination of permeability of layered soil carries great significance as soil in the Earth's crust is found mostly in layers. Thus, the determination of flow characteristics of water and permeability through layered soil, both in vertical and horizontal directions, are essential to effectively plan the schemes of groundwater recharge and seepage through and below hydraulic structures. The soil investigation of a certain area, with reference to permeability, could act as a basis for the determination of feasibility of the groundwater recharge scheme in that area.

With growing urbanisation and conversion of open land to built-up areas, the process of groundwater recharge is dwindling. The lowering of groundwater levels is taking place at such an alarming rate that in some districts of Rajasthan, people have left their dwellings and migrated to other areas. Studies have shown that the recharge of ground water is highly influenced by the permeability of the underlying soil. In case the soil is composed of stiff clays, with low permeability, rainwater is not able to find its way to the underground water strata. In such situations, the construction of recharge wells becomes important.

The Centre and state governments are keenly poised to implement groundwater recharge schemes for the survival of flora and fauna. Keeping in view the importance of the subject, the Council of Science and Technology Uttar Pradesh has sanctioned a project entitled "An Experimental Study on Permeability of Layered Soils Parallel to Bedding Plane" to the department of civil engineering at the Aligarh Muslim University, Aligarh. The amount sanctioned by UPCST is Rs 6.05 lakh for a span of two years.

Work on the project started with effect from 1 February 2019 under the guidance of Professor Javed Alam, the principal investigator. The outcome is expected to be useful for farmers and scientists.

The writer is co-investigator and associate professor, University Polytechnic, Aligarh Muslim University, Aligarh, Uttar Pradesh

Deccan Chronicle -13 January 2021

NGT panel inspects Musi river for restoration work

DC CORRESPONDENT
HYDERABAD, JAN. 12

Justice Vilas Afzalpurkar, a former judge of the High Court, on Tuesday inspected the Musi river as part of a committee set up by the National Green Tribunal (NGT). Sources said Justice Afzalpurkar inspected the restoration work taking place at the river.

According to officials, Justice Afzalpurkar would file a report and submit it to the NGT. "He visited Chaderghat, the High Court area, Bapu Ghat, and other spots where the river flows. The report would be filed by the expert committee member and submitted to the NGT," an official of the Musi Riverfront Development Corporation said. In September last year, the TS Pollution Control Board had filed a report before the NGT on the steps taken for treatment of untreated sewage flowing into the Musi river.

In its report, the PCB had said the HMWS&SB was using treated waste water to water gardens in the city instead of letting it out into the Musi.

Former judge Vilas Afzalpurkar inspects the Musi river near Bapu Ghat on Tuesday. — *R. PAVAN*

Hari Bhoomi-13 January 2021

मणिपुर में 'हर घर जल' मिशन को जल्द पूरा करने का लक्ष्य

हरिभूमि ब्यूरो ⏭ नई दिल्ली

राष्ट्रीय जल जीवन मिशन की 6 सदस्य टीम मणिपुर में जल जीवन मिशन के कार्यन्वयन में तकनीकी मदद के लिए चार दिवसीय दौरे पर राज्य में पहुंच गई है, जहां ग्रामीण परिवारों के लिए 'हर घर जल' के उद्देश्य को पूरा करने में आ रही परेशानियों को दूर करने के लिए तकनीकी मदद दी जाएगी। केंद्रीय जल शक्ति मंत्रालय ने मंगलवार को यह जानकारी देते हुए बताया कि देश में हर ग्रामीण परिवार को जल कनेक्शन के जरिए पीने का शुद्ध पानी मुहैया कराने के लिए चलाए जा रहे जल जीवन मिशन के कार्यान्वयन में कई राज्यों व और दुर्गम क्षेत्रों में कठिनाईयां आ रही है। इसके लिए राष्ट्रीय जल जीवन मिशन की टीमें ऐसे राज्यों का दौरा करके तकनीकी सहायता मुहैया करा रहा है, ताकि राष्ट्रीय स्तर के इस मिशन को निर्धारित समय में पूरा किया जा सके।

फरवरी से मई के बीच यहां हो जाती है पानी की भारी

मिशन की यह टीम मणिपुर का दौरा करते हुए राज्य में इस कार्यक्रम को लागू करने में आ रही समस्याओं और चुनौतियों की पहचान करेगी और वहीं कार्यक्रम को लागू करने के लिए किए जा रहे बेहतर प्रयोगों को देश के अन्य हिस्सों में लागू करने के लिए उन्हें दर्ज करेगी। हालांकि मणिपुर सघन वर्षा वाले क्षेत्र में आता है लेकिन हर साल फरवरी से मई महीने के बीच यहां पानी की भारी किल्लत हो जाती है। जलापूर्ति की उचित व्यवस्था नहीं होने की वजह से राज्य में जल आपूर्ति और जल की गुणवत्ता दोनों प्रभावित हुई है। राज्य में पानी की किल्लत, अति दोहन और प्रदूषण जल प्रबंधन क्षेत्र की प्रमुख समस्याएं रही हैं। जल प्रबंधन से जुड़ी जरूरी संरचनाओं के विकास से भूजल की स्थिति बेहतर बनाने में मदद मिलेगी।

राज्य में 37 फीसदी नल कनेक्शन

मंत्रालय के अनुसार उत्तरपूर्व के राज्य मणिपुर में 4.51 लाख ग्रामीण परिवार हैं जिनमें से 1.67 लाख (37 प्रतिशत) परिवारों तक ही नल के जरिए घर तक पानी की आपूर्ति होती है। राज्य सरकार ने जल जीवन मिशन के तहत के 2 लाख परिवारों तक और इसके आगे 2021-22 तक 100 प्रतिशत परिवारों तक नल के जरिए जल पहुंचाने का लक्ष्य रखा है। योजना के तहत लगाए गए नलों की संख्या और उनके इस्तेमाल तथा इन पर केंद्र और राज्य द्वारा खर्च की गई राशि के आधार पर केंद्र सरकार राज्यों को आर्थिक मदद उपलब्ध करा रही है।

Jansatta-13 January 2021

यमुना नदी में अमोनिया का स्तर बढ़ा, वीआइपी इलाकों में होगा जल संकट

जनसत्ता संवाददाता
नई दिल्ली, 12 जनवरी।

यमुना नदी में मंगलवार को एकाएक अमोनिया के स्तर में बढ़ोतरी दर्ज की गई है । इस प्रदूषण स्तर की वजह से जल बोर्ड के चंद्रावल, वजीराबाद व ओखला संयंत्र से जल उत्पादन में गिरावट आई है। इस वजह से वीआइपी

राष्ट्रपति भवन, छावनी, दक्षिणी दिल्ली, सिविल लाइन, राजनिवास, बाड़ा हिंदूराव में रहेगी दिक्कत

इलाकों समेत एक तिहाई दिल्ली में पानी का संकट रहेगा। यह असर बुधवार देर शाम अमोनिया स्तर कम होने तक बने रहने के आसार हैं। इस वजह राष्ट्रपति भवन, छावनी, दक्षिणी दिल्ली, सिविल लाइन, बाड़ा हिंदूराव, राजनिवास, कमला नगर, करोलबाग, पहाड़गंज व आसपास के इलाके में रहेगा। बोर्ड ने जनता को आवश्यकता अनुसार पानी भर कर रखने की सलाह दी है। आवश्यकता होने पर जल बोर्ड के केंद्रीय कक्ष पर फोन कर पानी का टेंकर मंगवाया जा सकता है।