Telangana Today- 08- November-2021

Oct rains highest in 120 years

THIRUVANANTHAPURAM

In the last 120 years, the month of October has received heavy rainfall — as it did this year — on three other occasions, the weather department has said and added that the downpour in 2021 was the highest since then. According to data released by the India Meteorological Department (IMD), Kerala received 589.9 mm rainfall in October this year, the highest since the year 1901 and more than double what the state got last year during this month.

Commuters wade through a waterlogged area following heavy rain in Chennai on Sunday. — Photo: PTI

The heavy rainfall in October this year was due to remnants of the south west monsoon which were prevalent till October 25, after which the north-east monsoons commenced an official said. PTI

Telangana Today- 08- November-2021

After six years, heavy rains hit Chennai

CHENNAI

After a hiatus of six years, heavy to very heavy overnight rains pounded Chennai and its suburbs, leading to water-logging everywhere, with the deluge entering houses in low lying areas on Sunday and the sluice gates of three reservoirs here being opened to release surplus water.

Vehicular traffic, bus and train services were hit. Though there was some delay in respect of a couple of flights, there was no major disruption in services, airport sources here said adding even passengers who arrived late due to showers were allowed to board.

Rain water -on runways- was pumped out by workers using heavy equipment and authorities are overseeing work aimed at ensuring normal services, sources added. Metrorail services were also not affected, an official said here.

There was a visible dip in State-run bus services, only fewer buses were operated in suburbs and train services were also affected.

Railway sources said the Basin Bridge yard here was flooded which led to disruption in routing trains, in and out of the Chennai Central Railway Station and a long distance train from Tiruvananthapuram had to be halted at Tirunindravur in the northern suburb.

Suburban train services in the Tambaram-Beach line was affected for sometime as railway tracks were covered by sheets of water.

Rainwater is being pumped out in affected areas, railway sources said.

Chennai recorded the highest rainfall since 2015. The Public Works Department opened the shutters of the Chembarambakkam reservoir in Chennai, and water is being released at the rate of 500 cusecs.

Commuters wade through a waterlogged area following heavy rain in Chennai on Sunday. — Photo: PTI

File No.T-74074/10/2019-WSE DTE

The Tribune- 08- November-2021

Offer incentives for climate-resilient farming

Farming in both irrigated and dryland areas needs a substantial change in the approach for the adoption of new technologies to achieve the national goal of doubling farmers' income. Climate-resilient technologies can play a crucial role to sustain gains, which are also in line with India's international commitments like Land Degradation Neutrality. Incentives are vital for the adoption of these technologies to reclaim degraded lands and increase yield.

A Amarender Reddy

THE ongoing climate talks at COP26 have recognised the interlinkage between agriculture and climate change. Climate change and higher temperatures eventually reduce yields of some crops, while encouraging weed and pest proliferation. The high frequency of droughts increases the likelihood of crop failures and loss of incomes from livestock. If timely action is not taken, the natural resource degradation can further reduce crop yields in India, which are already low compared to global averages. For instance, the productivity of rice in India is 13% lower than the global average.

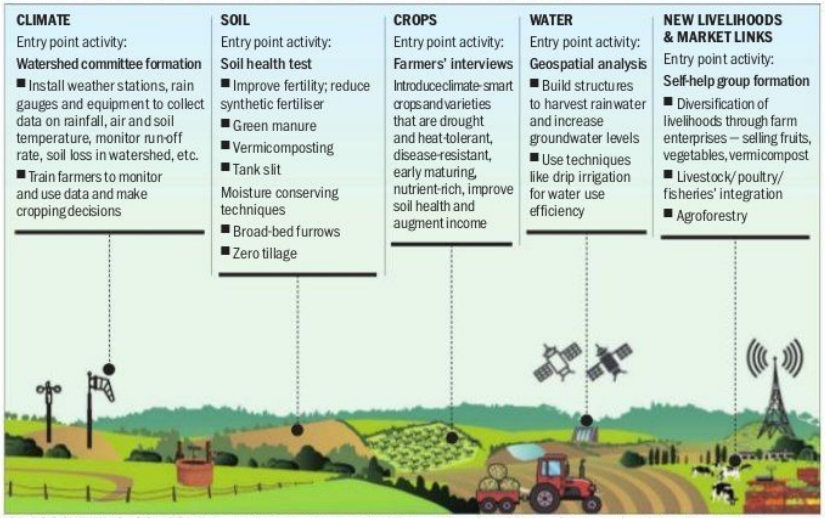
Problems

Land and water resources are already overexploited in many parts of India. India's share in the total land area of the world is just 2.4%, but it supports 18% of the global population. The average size of operational landholding has declined from nearly 3 acres in 2010-11 to 2.08 acres in 2018-19. The latest NSS data shows that of the 9.3 crore agricultural households in India, 70.4% hold less than 2.5 acres. The average monthly income of agricultural households is just Rs 10,218 from all sources, with income from wages (Rs 4,063) being higher than income from crop production (Rs 3,798) and income from livestock (Rs 1,582).

Opportunities

There is overwhelming evidence that if farmers follow integrated farming systems with a mixture of crops and livestock along with the wider adoption of modern technology like precision farming, they can double their income and make farming climate-resilient at the same time.

CLIMATE-SMART VILLAGE: WATERSHED MANAGEMENT APPROACH



SOURCE: ICRISAT

In the near future, India needs to increase its agricultural production at least by 30% not only to meet its growing domestic demand and exports and also to boost farmers' income and employment. Given the limited scope for increasing domestic demand, farmers have to focus on export-oriented crops such as plantations, horticultural crops, commercial crops like cotton and chillies with precision farming technologies to meet export quality standards.

The predominantly irrigated areas and dryland areas are different in their agricultural practices and opportunities. For example, in general, crops yields are more than twice in irrigated areas than drylands.

Irrigated lands

Successive governments built medium to large irrigation projects for irrigating the crops. However, since the past 30 years, the importance of tubewells increased to tap groundwater, with many states implementing free electricity for agriculture. Now, the irrigated area constitutes about 40-50% of the cropped area. The rapid increase in the number of tubewells, even in water-scarce zones, resulted in the expansion of area under water-guzzling crops like paddy, wheat and sugarcane. This halted the adoption of water-saving technologies like drip and sprinkler systems and crop diversification towards less-water-intensive and higher-value crops like plantations, horticulture, cotton, oilseeds and pulses which fetch high income to farmers.

This resulted in lowering of the water table in many states, including Punjab, Haryana and Telangana. Nearly 80% of groundwater reservoirs in Punjab and 60% in Haryana are over-exploited. It is time for wider adoption of technologies which maximise farmers' income for each drop of water by using modern methods like precision farming. Remote monitor-and-track systems are available to assess soil moisture levels and make timely irrigations decisions. This not only helps eliminate over/under-watering but ultimately helps conserve water and maximise farmers' income.

Hence, governments have to promote these technologies with subsidies and technological back-up with private partnerships. The pricing of natural resources such as water also encourages farmers to adopt water-saving technologies which are 70-80% more efficient than conventional irrigation and also increase yield by 30-40%.

Farmers are over-using urea and underusing micro-nutrients, leading to imbalanced use of nutrients and less yield. Although the use of fertilisers has contributed to agricultural productivity, their imbalanced use not only reduces yield, but also pollutes soil and water, making them less sustainable for agricultural and human use. Farmers have to use fertilisers based on soil health card recommendations for maximum crop yields.

Drylands

Indian farmers are monsoon-dependent, especially dryland farmers who constitute 50-60% of the farming community. Dryland farmers depends on monsoon rains from June to September; the rest of the year, they have to depend on the moisture available in soils or use stored water from farm ponds to grow crops in the post-rainy season. In drylands, soil and water conservation technologies like farm ponds are crucial. With the adoption of these technologies, the possibility of growing two crops in a year will increase, in addition to a substantial increase in grain yield.

With the increase in pressure on land due to the rise in population, there has been a significant increase in land degradation over the past years, especially in drylands. According to the UN Convention to Combat Desertification, land degradation is the "reduction or loss of biological or economic productivity of the land due to climatic factors and also due to human intervention". About 30% of India's geographical area is classified as degraded land. The adoption of integrated farming systems (an approach to maximise the yield of a mix of crops and livestock to provide steady and stable income at higher levels), investments in soil and water conservation technologies, and incentives for the adoption of these technologies are vital to reclaim these degraded lands and increase yield.

The marginal and degraded lands are inhabited mostly by the poorest of the poor and used as grazing lands for animals. These technologies not only increase agricultural production, but also give livelihood options to these people. However, these technologies will require social engineering and better watershed management, which are hard to achieve without community participation.

Overall, farming in irrigated and dryland areas needs a substantial change in the approach for the adoption of new technologies to achieve the national goal of doubling farmers' income. Climate-resilient technologies can play a crucial role to sustain gains, which are also in line with India's international commitments like Land Degradation Neutrality (balancing loss due to land degradation with land restoration and sustainable land management) at COP26.

The author is Principal Scientist, ICAR-Central Research Institute for Dryland Agriculture, Hyderabad

Deccan Chronicle- 08- November-2021

Water released from Chennai reservoirs

Chennai, Nov. 7: In view of increase in showers in catchment areas, surplus water was released from Poondi reservoir, which was raised up to 3,376 cusecs of water, the Tamil Nadu State Disaster Management Authority said in a tweet. Similarly, Chembarambakkam and Puzhal reservoirs, two other important sources of drinking water to Chennai city were opened to let out surplus rain water, water resources authorities here said adding the initial release — from both the facilities — was to the tune of about 500 cusecs.

Sounding a preliminary flood alert, the state water resources authorities earlier advised district collectors of Kancheepuram and Tiruvallur to evacuate people living in low-lying areas and house them in safe locations.

The India Meteorological Department put out red alerts indicating heavy rain in Tamil Nadu and neighbouring Puducherry during the day on Sunday. The fear is the last two weeks or so are just the start of the northeast monsoon for the state and more heavy rain for the capital and the state is forecast with a system forming in the Bay of Bengal that is expected to bring more rain from Nov. 9. "Tonight to Monday morning to the same convergence is persisting and we will see another round of heavy rains in Chennai," posted popular 'TN Weatherman' John.

Water released from Chembarambakkam lake.

Inspecting inundated localities here, health minister Ma Subramanian said, "The present scenario is not like what was witnessed in 2015 in Chennai. CM Stalin has directed officials to monitor water level in reservoirs and take necessary steps according to the situation. Civic personnel are on the job to tackle the situation."

From Saturday morning, Chennai and several suburbs in Kancheepuram and Tiruvallur districts witnessed intermittent rains and showers became non-stop since night.

Health secretary J. Radhakrishnan and principal secretary and commissioner of Greater Chennai Corporation Gagandeep Singh Bedi were among the officials who inspected several localities and also monitored draining water out from roads and residential areas. — *PTI*

The Hindu- 08- November-2021

Surplus water released

People living on the banks of the Kosasthalaiayar alerted

STAFF REPORTER
CHENNAI

The incessant rain in the city resulted in reservoirs filling up fast and surplus water had to be released causing anxiety among residents in the city, with the memories of the 2015 Chennai floods still fresh. However, this time, the release of water was gradual and planned, the officials pointed out.

Copious flow: About 2,000 cusecs of water was released from Puzhal Lake on Sunday. ▪ B. JOTHI RAMALINGAM

Water Resources Department increased the release of excess water in Poondi reservoir to 974 cubic feet per second (cusecs) on Sunday morning initially after it got huge inflow of the Krishna water from Andhra Pradesh and then by the evening, the discharge had to be increased to 4,873 cusecs; this reservoir's storage is 2,864 million cubic feet. Those residing near the Kosasthalaiyar river through which the excess water from Poondi will flow were advised to shift to safe places in the city. Many people living in places such as Nandambakkam, Krishnapuram, Seemavaram and Pandikavanoor could be affected by the release of surplus water.

At 1 p.m., the flood gates of Chembarambakkam were opened with 500 cusecs of surplus water released and as the day progressed with the catchment areas receiving inflow, the discharge into the Adyar river had to be increased to 2,000 cusecs by 6 p.m. While the storage of Chembarambakkam is 2,934 mcft on Sunday, the inflow touched 2,095 cusecs and the discharge was 2,000 cusecs in the evening.

In Puzhal lake, whose storage is 2,872 mcft. as the inflow went up, 2,000 cusecs of water was released.

The Indian Express- 08- November-2021

HARDLOOK

WHY TAPS RAN DRY

For the fourth time this year, water supply has been hit in the capital due to an increase in ammonia levels in the Yamuna. The solution may lie in two states working together

ABHINAYA HARIGOVIND
NEW DELHI, NOVEMBER 7

On Saturday and Sunday, water supply was hit across several parts of the capital. *Praveen Khanna*

DESPITE IT being a recurrent problem that leaves Delhi grappling with a water crisis multiple times in a year, solutions to increased ammonia levels in the Yamuna are still quite a way off.

On Saturday and Sunday, water supply across several parts of East, Northeast, and South Delhi, and parts of the New Delhi Municipal Council area, was disrupted with the functioning of five water treatment plants (WTPs) being affected by rising ammonia levels in the Yamuna. The five plants have a combined capacity of 486 million gallons per day (out of the total production of around 950 MGD).

This is the fourth such instance reported this year.

The Chandrawal and Wazirabad plants, which draw water from the Wazirabad pond fed by the Yamuna, and the Okhla WTP were affected by the increase in pollutant levels. Since the Ganga canal, which feeds the Sonia Vihar and Bhagirathi WTPs, was closed for annual maintenance, these plants, which were temporarily drawing water from the Yamuna and supplying to East Delhi, were also hit.

To control the increased water pollution, Delhi Jal Board's water quality management team has increased coagulants and disinfectant dosing in raw Yamuna water, and water supply was likely to return to normal levels on Sunday evening, said DJB vice-chairman Raghav Chadha in the afternoon. The maintenance of the Ganga canal is also complete and supply will resume normally on Sunday.

WHERE DELHI GETS ITS WATER FROM

TOTAL WATER PRODUCTION IN DELHI: 950 MGD

Around 825 MGD	30 MGD	95 MGD
Water from raw water treatment plants	From recycling plants	From wells

FROM YAMUNA

- **Chandrawal WTP:** 98 MGD capacity, draws water from Wazirabad pond
- **Wazirabad WTP:** 124 MGD capacity, draws water from Wazirabad pond
- **Okhla WTP:** 20 MGD capacity
- Dwarka, Bawana, Nangloi and Haiderpur WTPs draw water from the Western Yamuna Canal

FROM GANGA

- **Bhagirathi WTP:** 100 MGD capacity, draws water from Upper Ganga Canal
- **Sonia Vihar WTP:** 144 MGD capacity, draws water from Upper Ganga Canal

The problem

According to Chadha, water coming from Haryana was polluted with ammonia, with levels having risen to around 3 ppm (parts per million) on Saturday. The BIS standard for ammonia in drinking water is 0.5 ppm, while the DJB can handle around 0.9 ppm in water.

A senior DJB official said the Jal Board has no specific technology to handle ammonia levels for now, and chlorine, which is used to disinfect the water, is also used to neutralise ammonia. "But if high doses of chlorine are used, the byproducts of chloramines and trihalomethanes are carcinogenic, which explains the limit of ammonia that we can treat," he said.

Another DJB official said clearing excess ammonia from the water depends on release of more water from Wazirabad to flush it out, and that there is no specific infrastructure in place to deal with the recurrent problem.

The senior official maintained that industrial effluents from Haryana, mainly Panipat, were to blame for increase in ammonia.

Manoj Misra, convenor of the Yamuna Jiye Abhiyan, concurred that effluents released upstream of Wazirabad were a source of the ammonia. "Since this is a recurring phenomenon every winter for more than a decade and a half, the DJB should be in touch with Haryana authorities well in advance to ensure regular inspections of drains near the Panipat area, not when things get bad. This is very much the DJB's problem since it must supply the water. With past experiences, they should have adopted better technology at water treatment plants," he said.

A source at the Haryana government pointed out that the standard for ammoniacal nitrogen is 50 mg/litre when discharged from effluents, and 5 mg/litre for free ammonia, as per the Environment (Protection) Rules. But the Delhi government does not have the technology to handle these levels, he said.

S Narayanan, Member Secretary, Haryana State Pollution Control Board, said officials in the Panipat and Sonepat areas have been asked to keep a vigil.

The erstwhile Yamuna Monitoring Committee, appointed by the NGT, had also written to the Chief Secretary of Haryana in January this year saying that the ammonia in the water reaching Delhi at Wazirabad has been found by experts from the CPCB and the National Environmental Engineering Research Institute to be "largely attributable to heavy pollution emanating from specific drains in Haryana. The root causes of the pollution resulting in high ammoniacal content are well known but the action taken is not commensurate with the seriousness of the situation".

The letter notes that the four common effluent treatment plants (CETPs) at Sonepat are not functioning properly and partially treated or untreated industrial effluents are being released into the Yamuna.

According to Misra, good flow of water in the river in the monsoon prevents the level of pollutants from reaching critically high levels, but the flow reduces in winter and low temperatures mean that there isn't enough chemical activity for the concentration of ammonia to reduce.

Solutions?

The DJB is in the process of upgrading the Chandrawal and Wazirabad plants. At Chandrawal, the new set up will include an ozonation unit to neutralise ammonia up to 4 ppm with ozone, a Delhi government official said. Work on the plant began three years ago and is yet to be completed. It is likely to be finished by next year, the official said. Work on the Wazirabad plant has not been tendered yet, he added.

The Delhi government has approved a Rs 300 crore project to lay a pipeline from the Western Yamuna Canal to Wazirabad, so that water does not have to be drawn directly from the river, he said. This will work only if the Haryana government releases water into the canal instead of the river.

Rajasthan Patrika- 08- November-2021

बेमौसम बरसात : 2015 की मूसलाधार बारिश व बाढ़ की दिला दी याद

भारी बारिश से 'घुटनों' पर चेन्नई; निचले इलाके जलमग्न, 1 मौत

एक दिन में 21 सेमी से ज्यादा बरस गया पानी

पत्रिका न्यूज नेटवर्क
patrika.com

चेन्नई. तमिलनाडु की राजधानी चेन्नई में शनिवार रात से लेकर रविवार सुबह तक हुई बरसात ने शहर को घुटनों पर ला दिया। इसने 2015 की मूसलाधार बारिश-बाढ़ की याद दिला दी। रविवार को झीलों से पानी नदियों में छोड़ा गया। तटीय इलाकों में बाढ़ की चेतावनी जारी कर दी गई। निचले इलाकों के घरों, सड़कों पर जलजमाव और बिजली कटौती के बीच उत्तरी चेन्नई सर्वाधिक प्रभावित रहा। रायपुरम में बरसात से एक घर की दीवार गिरने से एक व्यक्ति की मौत हो गई। कई जगह पेड़ धराशायी हो गए। नुंगम्बाक्कम इलाके में 21.6 सेमी बरसात दर्ज हुई। इससे पहले दिसंबर 2015 में 29 सेमी बरसात हुई थी। मुख्यमंत्री एमके स्टालिन ने उत्तरी चेन्नई के प्रभावित इलाकों का दौरा किया। पीएम नरेंद्र मोदी ने भी स्टालिन से बात कर केंद्र से हरसंभव मदद का भरोसा दिलाया है। इस बीच, चेन्नई, चेंगलपट्टू, कांचीपुरम व तिरुवल्लूर के स्कूलों में दो दिन की छुट्टी कर दी गई है। एनडीआरएफ की चार टीमें बचाव कार्यों में मदद कर रही हैं।

घर बन गए टापू, सड़कों पर चली नाव

चेन्नई में भारी बारिश के बाद बाढ़ प्रभावित क्षेत्रों से लोगों को निकालते हुए टीएनएफआरएस के सदस्य।

झीलें लबालब

पूझल व चेम्बरमबाक्कम झीलें लबालब हो चुकी हैं। 2015 की बाढ़ से सबक लेते हुए चेम्बरबाक्कम झील से 500 क्यूसेक की दर से अड्यार नदी में पानी छोड़ना शुरू कर दिया है। पूझल झील से 1500 क्यूसेक की दर से पानी छोड़ा जा रहा है।

उत्तर भारत में बढ़ रही ठंडक

आइएमडी ने 11 से 12 नवंबर के बीच उत्तरी तटीय तमिलनाडु में कुछ स्थानों पर भारी से बहुत भारी वर्षा होने की संभावना जताई है। दक्षिण तटीय आंध्र प्रदेश में 11 से 12 नवंबर के बीच कुछ स्थानों पर भारी से बहुत भारी वर्षा होने की संभावना है। वहीं महाराष्ट्र के मुंबई सहित कुछ उपनगरों में भी हल्की से मध्यम बारिश हो सकती है। उधर, उत्तर भारत के अधिकांश राज्यों में ठंडक बढ़ रही है। मौसम विज्ञानियों ने इस साल नवंबर और दिसंबर माह के सामान्य से अधिक ठंडा रहने का अनुमान दिया है। अत्यधिक ठंड के पीछे एक बड़ी वजह मौसम की ला नीना स्थिति भी बताई जा रही है।