The Morning Standard- 03- November-2023

Union cabinet to take final call on Polavaram project, says Shekhawat

EXPRESS NEWS SERVICE @ Visakhapatnam

ACKNOWLEDGING that the Central government has received the revised estimates for the Polavaram Irrigation Project on October 19, Union Jal Shakti minister Gajendra Singh Shekhawat on Thursday said the Union cabinet will take a decision on the same.

Shekhawat was speaking to reporters on the sidelines of the International Congress on Irrigation and Drainage (ICID) and the 74th International Executive Council (IEC) held in Visakhapatnam on Thursday.

Asserting that there was no dearth of funds to execute the Polavaram project, he emphasised that the R&R (Rehabilitation and Resettlement)aspect of the project comes under the purview of state government.

Further, he said the BJP was seeing progress under the leadership of Narendra Modi in all States, including the ones



where the party did not have much foothold earlier.

Exuding confidence, he added, "The day is not so far when the BJP's flag will fly high in Andhra Pradesh due to the party leaders' efforts."

Pointing out that 16% houses in rural areas of the state were getting piped water in 2019, Shekhawat said in the last four years, the Union government was able to supply water to 69% households through pipes despite two years of pandemic."

'69% households served despite pandemic'

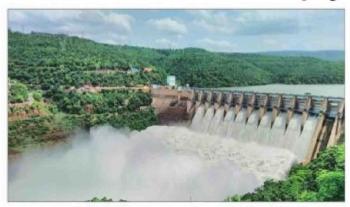
Shekhawat said in the last four years, the Central government was able to supply water to 69% households through pipes despite two years of the pandemic." He highlighted that under the PM Krishi Yojana, almost two million hectares of new land was brought under irrigation command, benefitting millions of farmers.

"Developed and developing countries see India as a winner in resolving water and sanitation issues. At the Stockholm conference in 2019, representatives and ministers of 48 countries visited the Indian pavillion and sought India's support in achieving ODF (Open Defecation Free) status," the Union minister said.

He added, "In the post-Covid era, India has created a new benchmark, under the leadership of PM Modi."

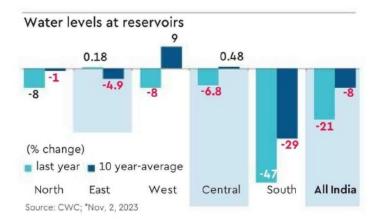
Financial Express- 03- November-2023

21% less water in dams; those in south half-empty



Water levels in India's 150 key reservoirs have fallen sharply to 21% below last year's level due to deficient southwest monsoon rainfall and sluggish progress of north-eastern monsoon, reports **Sandip Das**. The water levels in these dams were 8% below the last 10-year average. Forty two reservoirs in southern

states currently hold water only up to 47% of their capacity as per the Central Water
Commission data on Thursday. The northeast monsoon, which brings vital rain to several parts of southern India, has been the 'sixth lowest' since 1901 at 60% below the benchmark – long period average.



File No. J. 74074/30/2019 WSE -DTE

Cleaning our rivers

Namami Gange initiative can work for the rest

SK Sarkar Niyati Seth

ith 14 major river systems and more than 600 rivers, almost 80 per cent of the subcontinent's population is dependent on these water resources for their sustenance – both in terms of food and occupation. According to a report by Central Pollution Control Board (CPCB) in 2022, there are about 311 Polluted River Stretches (PRS – stretches in rivers where BOD-3mg/L) in 279 rivers (out of 603 rivers assessed).

Although, the percentage of PRS has reduced from 70 per cent in 2015 to 46 per cent in 2022 indicating effective implementation of the initiatives such as setting up of Sewage Treatment Plants (STPs), management of industrial effluent through charters, enforcement of regulations related to prevention and control of pollution, etc, there still exist immense scope for improving the condition of the rivers.

As estimated by CPCB (2021), the sewage generation from the urban cities is about 72,368 million litres per day (MLD) while from the rural areas is about 39,604 MLD. There are about 1,631 Sewage Treatment Plants (STPs) with a total capacity of 36,668 MLD to treat the sewage generated.

Currently, only 20,236 MLD of installed capacity is actually utilised to treat sewage, while the rest is directly discharged into the rivers due to several issues such as lack of sewerage network, high operating cost, etc.

Besides this, industries generate about 13,468 MLD of wastewater of which only 60 per cent is treated at CETPs and the rest is discharged untreated in the rivers.

The Ganga basin is one of the most polluted basins and home to about 2,500 species of flora and fauna. There are about 49 PRS in the whole basin. As per the estimations, the five States Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal through which the river courses, generates about 11,765 MLD of sewage, of which only 20 per cent is treated currently. Moreover, the wastewater from industries is also a source of pollution apart from the agriculture runoff.

Respective States/UTs within the country, local bodies and industries within each State are responsible for preventing and controlling the river pollution as



RIVER ECOSYSTEM. Curbing effluents RANJEST KUMAR

water is a State subject. To enhance the efforts by States/UTs, the Centre has been providing financial and technical assistance to address river pollution through several initiatives such as the National River Conservation Plan (NRCP) in 1995 for major rivers and the National Mission for Clean Ganga (NMCG) in 2014 specifically for river Ganga. Under the NRCP, several PRS on 36 rivers across 16 States have been covered with a sanctioned cost of ₹6,248.16 crore.

Further, STPs with capacity of about 2,745.7 MLD have been created to address the pollution entering into the rivers.

Under the initiative of Namami Gange programme being implemented by NMCG, Integrated River Basin Management (IBRM) approachis being followed. The mission also includes promotion of sustainable agriculture, river hazard management, basin protection against disasters, etc. Further, CPCB has also implemented several charters aimed at water recycling and pollution prevention for industrial sectors such as textile, pulp and paper, sugar, etc.

AGENDA FOR ACTION

According to NMCG, plans exist to set up STPs of about 7000 MLD capacity by 2026 out of 11,765 MLD of sewage being generated by the five States. But for the remaining capacity, States need to take responsibility for setting up of infrastructure by either drawing funds from various initiatives such as AMRUT Mission, Smart City Mission, JNNURM, Swachh Bharat Mission, etc. or on their own. There should be online monitoring of STPs by regulators for better compliance by industrial units. NMCG-type activities should be extended to other rivers.

Sarkar is Distinguished Fellow, TERI and former Secretary, Ministry of Water Resources; Seth, Associate Fellow, TERI

DEFICIENT RAINFALL

Reservoir storage levels drop to 71% of capacity



Chennai: The water level in India's 150 major reservoirs dropped further this week to 71 per cent of capacity as over 60 per cent of the districts from where data were received reported deficient or no rainfall. According to the weekly bulletin on live storage issued by the Central Water Commission, storage in the reservoirs dropped to 126.120 billion cubic metres (BCM), or 71 per cent of the 178.784 BCM full capacity. This is lower than the 127.591 BCM last week. p10

Storage level drops to 71% of capacity

FAST DEPLETING. As over 60% of country receives poor rains in Oct, water level in South dips below 45%

Subramani Ra Mancombu

The water level in 150 major reservoirs dropped further this week to 71 per cent of the capacity as over 60 per cent of the districts from where data were received received deficient rainfall.

According to the weekly bulletin on live storage issued by Central Water Commission (CWC), storage in the reservoirs dropped to 71 per cent or 126.120 billion cubic metres (BCM) of the 178.784 BCM capacity. This is lower than the 127.591 BCM last week. The level is 8 percentage points lower than last year and 20 percentage points lower than the last 10 years' average. Barring the Central region, the level dropped in all other regions this week.

The situation in South India has turned grim with the level dropping below 45 per cent. The bulletin said water



in the southern region dipped to 23.732 BCM or 44 per cent of the 53.334 BCM capacity.

The storage improved in Tamil Nadu to 51 per cent lower than normal (-52 per cent last week) and remained at last week's level of 22 per cent below normal in Kerala. However, the water level dropped in Karnataka to 37 per cent below normal (-35 per cent), in Andhra Pradesh to 57 per cent below normal (-56 per cent) and in Telangana to 34 per cent above normal (40 per cent).

Dipping levels, rising concerns#

Live storage	Last week**	This week**
19.66	79.96	79.00
20.43	76.00	73.82
48.23	81.00	82.18
32.58	88.00	87.00
53.33	46.00	44.00
	19.66 20.43 48.23 32.58	19.66 79.96 20.43 76.00 48.23 81.00 32.58 88.00 53.33 46.00

Source: CWC Weekly Bulletin #In 150 major reservoirs: 'In billion cubic metres ** Storage as %age to casacity

But the good news is that the India Meteorological Department on Thursday said the North-East Monsoon has gained momentum and it may last a week. This may help increase the storage.

GRIM IN EAST INDIA

The sharpest drop in storage was in the eastern region with the level declining to 73.82 per cent of the capacity from 76 per cent a week ago. It was still higher than last year's level.

The storage in Odisha dropped to 7 per cent below normal (1 per cent), to nor-mal in West Bengal (8 per cent), to 6 per cent below normal in Tripura (11 per cent) but it improved to 5 per cent above normal in Assam (2 per cent)

In the central region, the storage increased to 82.18 per cent or 39.632 BCM of the capacity against 81 per cent last week. The level in Madhya Pradesh increased to 6 per cent above normal (2 per cent), but dropped to 32 per cent below normal in Uttar Pradesh (-31 per cent). In Uttarakhand, it dropped to 10 per cent above normal (10 per cent) and in Chattisgarh to 14 per cent below normal (-12 per

KEY TO RABI SOWING

In the western region comprising Maharashtra and Gujarat, the water level was 32.192 BCM or 87 per cent of the capacity. Storage in Maharashtra dipped further to 5 per cent below normal (-4 per cent) and in Gujarat

to 30 per cent above normal (36 per cent). The storage dropped a tad in the northern region with the level remaining at last week's 8 per cent below normal in Punjab and 3 per cent above normal in Rajasthan. In Himachal, it dropped to 3 per cent below normal (0 per cent).

The storage level is the key to rabi crops sowing and production. A low water level will likely affect irrigation of the season's crop. Such a situation could further compound the woes of the agriculture sector, particularly after kharif crops output has been affected by a deficient south-west

monsoon.

Warm ocean water phenomenon El Nino impacted the south-west monsoon and it is likely to continue through to June 2024. El Nino led to August receiving a 32 per cent deficient rain-- the lowest in 110 while October received the sixth-lowest rainfall since 1901.

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



गंभीर जल संकट की चेतावनी

ल ही में संयुक्त राष्ट्र विश्वविद्यालय-पर्यावरण और मानव सुरक्षा संस्थान द्वारा प्रकाशित 'अंतरसंबद्ध आपदा जोखिम रपट 2023' में एक बार फिर जल संकट की चेतावनी दी गई है। रपट में बताया गया है कि 2025 तक उत्तर-पश्चिमी क्षेत्र में भूजल का गंभीर संकट पैदा हो सकता है। इस क्षेत्र में हरियाणा और पंजाब का क्षेत्र भी शामिल है। यह क्षेत्र बड़ी मात्रा में खाद्यान्न पैदा करता है। इस अध्ययन में यह जानकारी भी दी गई है कि पंजाब के अठहत्तर फीसद कुएं अतिदोहन का शिकार हैं। इस दौर में जल संकट लगातार गहराता जा रहा है, हम जागरूक रहकर काफी मात्रा में पानी बचा सकते हैं। पिछले दिनों संयुक्त राष्ट्र द्वारा जारी विश्व जल रिपोर्ट में जल संकट को लेकर चिन्ता व्यक्त की गई थी। इस रिपोर्ट में कहा गया था कि कृषि की बढ़ती जरूरतों ,खाद्यान उत्पादन ,ऊर्जा उपभोग ,प्रदूषण और जल प्रबन्धन की कमजोरियों की वजह से स्वच्छ जल पर दबाव बढ़ रहा है। रिपोर्ट के अनुसार विश्व के कई देश गंभीर जल संकट से जुझ रहे हैं। ऐसी स्थिति में यदि पानी की बर्बादी नहीं रोकी गई तो यह समस्या विकराल रूप ले सकती है। हमारे देश में भी वैज्ञानिकों ने घोषणा की है कि भुजल स्तर घटने के कारण जल्दी ही देश को गम्भीर जल संकट का सामना करना पड़ेगा

बुद्धिजीवियों द्वारा जब भी जल संकट की चर्चा की जाती है तो इस चर्चा में वर्षा जल के संग्रहण की सलाह दी जाती है। सरकार जन-जागरण अभियान के तहत सरकारी औपचारिकताओं को निभाने के लिए पत्र-पत्रिकाओं में भी वर्षा जल संग्रहण के विज्ञापन प्रकाशित कराती है। लेकिन इस मामले में अभी तक नतीजा ढाक के तीन पात ही है। गौरतलब है कि भारत में मात्र पन्द्रह प्रतिशत जल का ही उपयोग होता है शेष जल बेकार बहकर समद्र में चला जाता है। इस मामले में इजराइल जैसे देश ने .जहां वर्षा का औसत 25 सेमी से भी कम है .एक अनोखा उदाहरण पेश किया है। वहां जल की एक बुंद भी खराब नहीं जाती है। अतिविकसित जल प्रबन्धन तकनीक के कारण वहां जल की कर्मा नहीं होती है। जल संकट से निपटने के लिए हमें भी अपने देश में ऐसा ही उदाहरण पेश करना होगा। वर्षा के जल को जितना हम जमीन के अन्दर जाने देंगे उतना ही हम जल संकट को दर रखेंगे। इस विधि से मिटटी का कटाव भी रुकेगा और हमारे देश को सुखे और अकाल का सामना भी नहीं करना पड़ेगा। एक आंकडे के अनुसार यदि हम देश के जमीनी क्षेत्रफल में से सिर्फ पांच फीसदी क्षेत्र में होने वाली वर्षा के जल का संग्रहण कर सके तो एक बिलियन लोगों को प्रतिव्यक्ति सौ लीटर पानी प्रतिदिन मिल सकता है। आज हालात यह हैं कि वर्षा का 85 फीसदी जल बरसाती नदियों के माध्यम से समुद्र में बेकार बह जाता है। फलस्वरूप निचले इलाको में बाढ़ आ जाती है। यदि इस जल को जमीन के भीतर पहुंचा दिया जाए तो इससे एक ओर बाढ़ को समस्या काफी हद तक समाप्त हो जाएगी वहीं दूसरी ओर भूजल स्तर भी बढ़ेगा।

जनसंख्या में हुई तीव्र बद्धि से इमारे देश में जल की खपत लगातार बढ़ती जा रही है। हालांकि सतही एवं भूमिगत दोनो ही स्रोतों से जल का उपयोग किया जा रहा है लेकिन भूमिगत जल पर हमारी निर्भरता कछ अधिक ही है। भूमिगत जल की अत्यधिक निकासी से इसका जल स्तर लगातार नीचे खिसकता जा रहा है। गौरतलब है कि दुनिया के क्षेत्रफल का लगभग सत्तर फीसदी भाग जल से भरा हुआ है लेकिन पीने लायक मीठा जल सिर्फ तीन फीसदी ही है। शेष खारा जल है। इसमें से भी हम सिर्फ एक फीसदी मीठे जल का ही उपयोग करते हैं। धरती पर उपलब्ध सम्पूर्ण जल ,जल चक्र मे चक्कर लगाता रहता है। यह दुर्भाग्यपुर्ण ही है कि औद्योगीकरण एवं जनसंख्या विस्फोट के कारण जहां एक और जल प्रदुषण बढ़ रहा है तो वहीं दूसरी ओर जल चक्र भी बिगडता जा रहा है। हालांकि विश्व में उपलब्ध कल जल की मात्रा आज भी उतनी ही है जितनी कि दो हजार साल पहले थी। अन्तर है तो बस इतना कि उस समय पथ्वी की जनसंख्या आज की तुलना में सिर्फ तीन फीसद ही थी। हमारे देश में समस्त उपलब्ध जल के 90 प्रतिशत का उपयोग कृषि उत्पादन में किया जाता है ,जिसमें खाद्य उत्पादन का अनुपात 35 प्रतिशत है। यदि कृषि उत्पादन में समुचित जल निकासी एवं जल उपयोग के वैज्ञानिक तरीकों का इस्तेमाल किया जाए तो बीस फीसद तक जल की बचत हो सकती है। इसी प्रकार दुनिया का लगभग 22 फीसद जल उद्योगों में उपयोग किया जाता है। यदि औद्योगिक क्षेत्र पानी की बचत करना शुरू करें और पानी का दोबारा उपयोग सुनिश्चित करे तो इस संकट से काफी हुँद तक बचा जा सकता है। हालांकि जल संकट से निपटने हेतु जल संग्रहण के प्रति आम जनता जागरूक नहीं है लेकिन कुछ स्थानों पर स्थानीय लोगों ने जल संग्रहण के सराहनीय प्रयास किए है जो अनुकरणीय है।

(लेखक स्वतंत्र पत्रकार हैं, उनके अपने विचार हैं।)