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# Crisis swells in state as water level in dams and reservoirs drops to 37.52%

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**MUMBAI:** The water levels in reservoirs and dams across the state have dropped to 37.52%. With 66% of the revenue circles in the state facing a drought, the administration has deployed 1,417 tankers in hundreds of villages and hamlets as against 61 tankers on the same day last year.

Owing to deficient rainfall and water shortage, the state government on October 31 last year had declared a drought in 40 of the state's 356 tehsils. This included 287 revenue circles that received rainfall below the 75% threshold. Later, the government added 1,532 of 2,292 revenue circles as drought-hit owing to the severe water shortage in rural areas.

Shahapur tehsil, which provides water to Mumbai through dams such as Bhatsa, Vaitarna and Tansa, is facing an acute water crisis, with villages getting water only once in two to three days. Around 25 villages and 118 hamlets in Shahapur are now getting water through 23 tankers but many villages are still parched.

The water crunch in villages from Thane and Palghar district has resulted in the pro-tribal outfit 'Shramjeevi Sanghatana' organising a march with villagers to 39 gram panchayats. "As per a government decision in 2020, all the villages in the vicinity of dams were to get tap water,

and schemes were designed for this," said Prakash Khoda, the Shahapur tehsil chief of Shramjeevi Sanghatana. "But because of the corrupt administration and contractors, crores of rupees were not utilised properly. We will carry out protest marches till April 10."

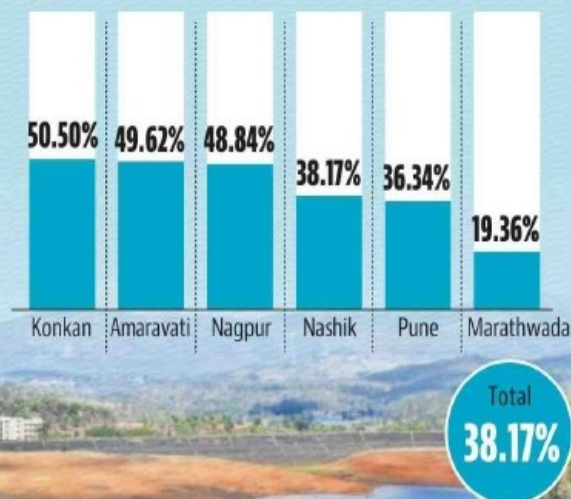
Maharashtra has around 2,994 small, medium and major dams across the state with a total live storage capacity of 40,485 mcum (million cubic metres). According to the daily water availability report released by the water resources department, as of April 1, live storage has reduced to 15,189.42 mcum, which is 37.52% of capacity. Last year, during this period, the water availability was 45.52%.

Water availability in Marathwada region, which includes Chhatrapati Sambhaji Nagar, Jalana, Beed, Parbhani, Hingoli, Nanded, Latur and Dharashiv, is the lowest at 19.36% compared to 45.44% this time last year. Even the rain-blessed Konkan, which has the highest water availability, has only 50.50% water.

Due to the water crisis, 1,153 villages and 2,581 hamlets have been getting water through 1,417 tankers as per the weekly report of water supply department. Marathwada region has the highest number of tankers at 720. In water-starved North Maharashtra, there are 345 tankers supplying potable water, 207 of these to Nashik district, which is the worst hit.

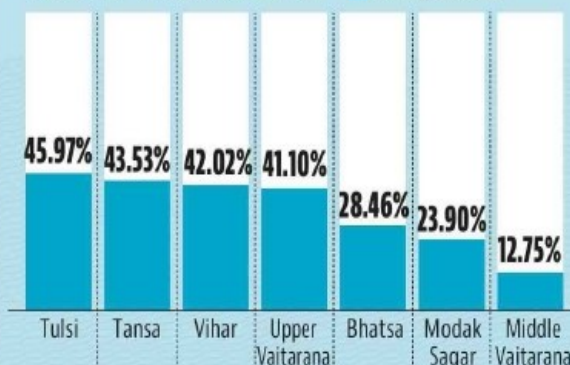
## Water availability in state

Region-wise water availability in %



## Storage in dams supplying water to Mumbai

Storage in dams



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## The Hindu Business Line - 2 April-2024

## Water use revolution

Farming now ought to be about conserving water

PVS Suryakumar

India has achieved considerable success in managing water in recent years. Irrigated area has increased from 47 per cent to 55 per cent in the last six years in our net cropped area of 140 mh.

But sustainability is becoming a concern, as population is likely to increase to about 165 crore by 2047 (from 140 crore), raising requirement of food and water. There is also the uncertainty of climate change to deal with.

India has about 3 per cent of the world's landmass, 4 per cent of water resources and 18 per cent of humanity. It receives about 4,000 billion cubic meters of precipitation. With the onset of climate change, number of rainy days are reducing and rain intensity is increasing. Land bereft of vegetation cannot hold and absorb the running rain water. Therefore, a good portion of precipitation runs off to the ocean taking along with it valuable top soil, a *sine qua non* for agriculture.

Civilisations developed along flowing rivers and open wells of yesteryears provided drinking water and protective irrigation. That changed as technology developed and populations grew. A key ingredient of our Green Revolution and the resultant food security is 'irrigation water' from medium/major irrigation projects.

Now, these projects are on the wane because of their capital expenditure and operational expenditure requirements, water use inefficiency, issues of water equity, water charges that do not cover O&M costs, salinisation, soil degradation and other environmental issues. Urban habitations, and growing industry too have been demanding water from these projects.

Agriculture, industry and domestic users consume about 84 per cent, 12 per cent and 4 per cent of our water resources, respectively. Our societal thinking on water use, is built on the idea of copious flood irrigation. Green Revolution furthered it, thanks to canal (flood) irrigation from irrigation projects.

Hence, whenever farmers see and get more water, they switch to flood irrigation and water intensive crops. On the demand side, the cultivation of fruit and vegetables outside of their seasons too has added to water demand. Free power plays spoilsport, notwithstanding the fact that micro irrigation is picking up.

As agriculture and urban agglomerations grew, our public



**WATER TABLE.** India is a top groundwater extractor. MUSTAFAH IK

policy tilted towards tapping groundwater aquifers. About 65 per cent of our crop irrigation and 85 per cent of drinking water comes from groundwater aquifers. Now, only one-third of our blocks are considered as 'safe' for groundwater extraction. China, India, the US are the top groundwater extractors.

#### FOR A 'WATER-PROOF' INDIA

How do we 'water-proof' our country?

First, frugality must be the mantra in every aspect of water — technology, irrigation design, delivery and usage.

Second, prioritise decentralised planning and execution.

Third, usage of technology like SCADA in our canal-based irrigation and importantly reducing SCADA costs through domestic research is a must.

Fourth, 'rice and wheat thinking' must change. Farmers and consumers must adapt crops which suit local environment.

Fifth, while millets are celebrated as environmentally friendly, their consumption is by the elite and poor, that too in some geographies.

Sixth, watershed development delivered results in isolated patches, but as groundwater improved, so did its excessive use. Agroecology embedded on watersheds is the way forward.

Seventh, technology at all water discharge point(s) has to change, making it efficient. We can learn from our LED Lighting transformation.

Eighth, sustained campaigns to ensure communities rewrite their "water thinking" is a must.

Ninth, an empowered mission can bring about this paradigm shift in ideation, coordination and delivery.

Tenth, every religion reveres water and policy must tap into that.

The writer is former Deputy Managing Director, Nabad. Views are personal