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Thirsty city tantrums: How Bengaluru's thirst for water is felt 400 km away | | Citizen Matters, Bengaluru

About Kedar Koushik 16 Articles

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There have been proposals to supply Sharavathi river water to Bengaluru. Pic: Wikimedia

"Tiddalick the frog awoke one morning with a great thirst and decided to drink. He drank all the water in the rivers, the creeks, the lakes and the billabongs and there was no water left for other animals. It was only a matter of time before all the animals died."

This aboriginal children's story from Australia might sound funny

and childish. But replace Tiddalick the frog with any of the major cities in the world, and you will get a glimpse of the bleak reality we live in, where we either scramble for a drop of water, or waste it unmindful of the impending doom.

Bengaluru has become the Tiddalick of our times, and there seems to be no stopping of its thirst. Reports about Bengaluru becoming the next Cape Town with no drinking water, has been making rounds in the mediascape for almost a decade. After the recent Chennai water debacle and a delay in monsoon, Bengaluru is bracing itself for its turn to go dry. The government and the BWSSB seem to have no idea how to tackle the situation.

With no rains in the catchment areas of the four Cauvery basin dams – the KRS, Hemavathi, Kabini and Harangi – and with just enough water to supply for another month or so, the authorities were planning to <u>ration water</u> in the city, but no concrete decisions were taken.

The water crisis in Bengaluru has not only affected its citizens, but also large numbers of people, flora and fauna in the pristine Western Ghats, about 400 km north-west to the city. Water from these regions are being diverted to Bengaluru and nearby districts, through projects such as Yettinahole.

Most recently, this June, the Kumaraswamy government proposed drawing water for Bengaluru from Sharavathi river. The proposal involved drawing 30 TMC of water (over 2300 MLD – million litres per day) from the Linganamakki reservoir, built across the Sharavathi river in Shivamogga district, around 450 km from Bengaluru. The then-Deputy Chief Minister G Parameshwara had said that the project would solve at least 50 percent of Bengaluru's

water crisis, and had <u>directed</u> officials to prepare a detailed project report (DPR).

A thirsting city

Activists are vehemently opposing the Sharavathi project, citing potential ecological hazards such as large-scale deforestation and the increasing water woes of the local population. Their opposition gained momentum when several business establishments and educational institutions in Shivamoga and Uttar Kannada districts supported a bandh called by the Sharavathi Nadi Ulisi Horata Okkuta. The Okkuta is a collective of organisations, environmentalists and local residents formed on June 22nd, headed by Kannada writer Norbert D'Souza, popularly known as Na D'Souza.

On July 14th, the Okkuta organised a conference, 'A Thirsting, Monstrous City' in Bengaluru, along with Grama Seva Sangha, Environment Support Group and Pashchima Ghatta Jagruti Vedike, to stand against the city's excessive growth and water use.





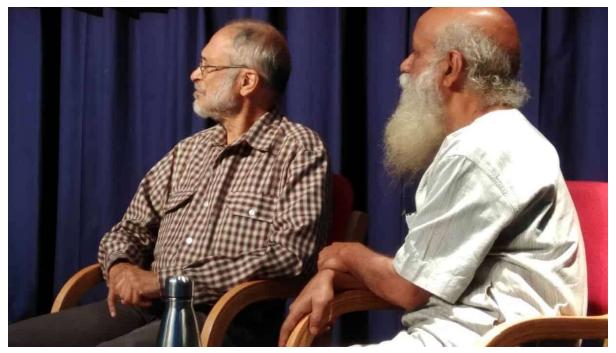
Activists stage a play at the convention co-organised by Sharavati Nadi Ulisi Horata Okkuta in Bengaluru. Pic: Kedar Koushik

At the conference, environmentalist K N Somashekar said Bengaluru was so "thirsty" that it consumed around 19 TMC (1474 MLD) of Cauvery water from its four reservoirs – KRS, Kabini, Harangi and Hemavathi – and another 400 MLD from its four lakh bore wells, everyday. Yet it eyed 30 TMC from the Sharavathi project, and another 18 TMC (close to 1400 MLD) from the Upper Bhadra project, he said. The Rs 12,500-crore Upper Bhadra project draws water from Tunga and Bhadra rivers, and supplies to Bengaluru Rural, Chikkamagalur, Chitradurga, Tumkur and Davangere districts.

Somashekar also claimed that the state government had been trying to supply around 90 TMC (close to 7000 MLD) water to Bengaluru overall, through several projects proposed since 2003. And that works worth Rs 46,000 crore has been going on for this, for over a decade. Even then, there has been no relief for water scarcity in Bengaluru.

Theatre personality and activist R P Prasanna Kumar said, "To quench the thirst of the rich and the rich-owned industries, the government is planning to pump Sharavathi water to the height of 1500 feet and send it 400 km away. Is this the progress of human beings or just the progress of a few rich?"

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From left: S G Vombatkere and R P Prasanna Kumar at the convention in Bengaluru. Pic: Kedar Koushik

Activists from the city and across the state participated in the conference. They resolved to:

- Demand a white paper on the enormous resources consumed by Bengaluru
- Make sure rivers are allowed to take their natural course
- Rejuvenate the lakes and lake system of Bengaluru
- Reverse migration to Bengaluru through rural development
- Restrict industries from polluting water sources
- Push for a holistic water policy that includes regulations on water usage, distribution and supply

Panelists discussed how to conserve water in an urban landscape like Bengaluru, focusing on methods like rainwater harvesting. But there was little discussion on what was happening 400 kms away from the thirsty city.

How do river diversion projects affect local populations?

Some activists at the conference said Bengaluru was stuck in the colonial mindset, treating the rest of the state as its colonies and expecting them to supplement its progress. But seldom does the city know what the people and ecosystem 400 kms away face, when water is drawn from there to quench its thirst.

Sharavati is not the first project wherein the Karnataka government proposed to divert a west-flowing river eastwards. The Netravati river diversion project is another ambitious project that promised drinking water to Bengaluru and other districts like Kolar and Chikkaballapur.

Environmentalists and activists had strongly opposed the project before it was slightly modified and renamed the Yettinahole river diversion project. Speaking to Citizen Matters on terms of anonymity, a filmmaker and activist from Mangalore, who's making a film on the adverse effects of the Yettinahole project, said, "All scientific data till now, either from government-appointed task force groups or from the Indian Institute of Science (IISc), have proved that there is no water in the Netravati river basin belt. And that if the remaining water is diverted to the plains (Bengaluru and Kolar), the whole of Mangalore, Udupi, and many taluks around will go dry."

Already, these regions face severe water shortage due to poor rainfall. He said, "Downstream, in ports like Malpe in Udupi, there are around 4000 fishing boats, with 10-15 families depending on each boat. Almost eighty percent of the fish they catch are inedible, as there is not enough water to help the fish breed. Many common fishes are seldom found in this region now; they have become extinct."

Many species in the Western Ghats have been affected too. "We are on the verge of making 200-odd species of frogs and rare animals extinct. Another aspect is agriculture – there is no water to grow paddy, and lakhs of farmers are finding it difficult to make ends meet. This will also have sociological repercussions." It's in this scenario that water is drawn from here to serve Bengaluru.

"We already have water wars between Karnataka and Tamil Nadu, Karnataka and Goa etc. In future, we will have such wars within the state," the filmmaker cautioned.

Also, roads are being built on either side of the Yettinahole project pipelines, to facilitate maintenance. This would give the timber lobby easy access to remote forests in the ghats and to a well-connected road network, the filmmaker pointed out.

Debate over the Yettinahole diversion project has been raging in Karnataka for more than a decade. While activists across the state have raised concerns about the project's unassessed sociological and ecological impacts, an IISc study has found that the project developers' claims about water availability is absolutely false.

In a report titled "Environmental Flow Assessment in Yettinaholé' published by The Centre for Ecological Sciences (CES) of the Indian Institute of Sciences (IISc) in April 2015, authors Dr T V Ramachandran, Vinay S and Bharath Aithal found the following:

- Yield of the entire Yettinahole catchment is just 9.5 TMC, and not 24.01 TMC as claimed by Karnataka Neeravari Nigam Limited, the government body implementing the project. That is, the actual yield is 60 percent lesser than what was claimed.
- The existing water demand in the catchment for drinking and domestic water, irrigation, plantations, fisheries and ecological

purposes leaves no surplus.

Highlights of the IISc analysis	
Water yield in Yettinhole catchment	9.55 TMC
Domestic, crop water and livestock water demand	5.84 TMC
Environmental flow to be maintained (to sustain ecosystems)	2.86 TMC

The report concluded that the project would not help either the residents of Yettinahole catchment or the supposed beneficiaries in the plains. The former would be deprived of their right to water while the latter would only get to see dry canals. "Implementation of Yettinaholé project would lead to water scarcity in Hassan and Mangalore, and will not benefit Chikkballapur, Kolar, etc. The project, if implemented, deprives the local people their right to water under Article 21 of the constitution of India," the report said.

What would be the impact of Sharavathi project?

The Sharavathi project was recommended by a 10-member committee headed by former BWSSB chairman B N Thayagaraja in 2014. The plan was to pump water from the Linganamakki reservoir to Yagachi dam in Hassan district, from where the water would be brought to Bengaluru through pipelines.

When we asked activist and journalist Harsha Kumar Kugwe how the project would affect the towns and districts around the river, he said, "Sharavati is not as big a river as the Cauvery, Krishna or Tungabhadra. It is only about 130 km long. The Thayagaraja committee had exaggerated the projections; it had said that the storage capacity of the Linganamakki dam was 150 TMC, and hence drawing 30 TMC would have no impact on the surrounding districts. But the dam was full only two times in the last decade. Over the years, water levels have reduced due to the lack of rainfall."

Kugwe said that the capacity of the dam itself had reduced due to silt sedimentation caused by excessive deforestation. "The dam's actual capacity itself is only around 100 TMC, and it's estimated to hold only 50 TMC of water on average. Now, in this scenario, if 30 TMC is drawn from Sharavati, the river will go dry and die. The Okkuta is bringing out a report with these details soon."

He further said that if 30 TMC had to be drawn from the river at all, it should go to taluks around the river basin that suffered worse water crisis than Bengaluru. These include Sagara and Soraba in Shivamoga district, and Siddapura in Uttar Kannada district. "The priority should be to fulfill the drinking water needs of the people there, who are at risk of facing severe drought," he said, adding that irrigation was another problem which has to be addressed, as farmers were moving to Bengaluru in search of livelihood, leaving behind fertile land that yielded them no crop during summer. "If Sharavati water is tapped for irrigation instead, these farmers who are migrating to cities will come back, reducing the water crisis in cities too."





A file picture of the spillway section of the 1.5-mile-long Linganamakki dam which has total storage capacity of 1,56,000 million cubic feet. This dam is part of the Sharavathi Hydroelectric Project, one of the largest in the world.

Further, Kugwe said, there were around eight dams within 100-km radius of the Sharavathi and Varahi rivers in Sagara and Hosanagar taluks. Since 1940s, when Hirebhaskar – the first dam here – was built, thousands of people have been displaced from their land. Everytime a new dam was built, many families were displaced without compensation. These people feel the government has neglected them, and have been fighting for their land and livelihood rights for several decades, and now against the Sharavathi project, Kugwe said.

"The mangrove forests near the mouth of Sharavathi have already been affected. Diverting water will affect these mangrove forests further, and will disrupt the ecological balance of that region. The repercussions of such a blunder need not be explained," Kugwe said. He also added that tremendous amount of electricity will be needed to pump water from the Liganamakki dam up by 1500 feet to send it to Bengaluru. This would adversely affect the overall electricity generation at the dam.

Some activists hope things would change with the BJP coming to power, since they are, at least for the time being, against the Sharavathi project. "But you just don't know when it comes to our politicians. They change colours if they smell money," an activist, who did not wished to be named, said.

Future at stake

The Karnataka government has not abandoned such ambitious water supply projects in spite of several protests and reports. A task force on Western Ghats appointed by the state government too has strongly recommended dropping the Sharavathi project.

Only time and the collective will of the people will tell what the future might hold for the now-abundant natural resources of the state.