

The Times of India- 25- September-2023

'Lake Man' relies on ancient methods to ease water crisis

Bengaluru: After Anand Malligavad tumbled into a lake, he thought he might die — not from drowning, but the stench.

Like hundreds of other lakes in Bengaluru, the one Malligavad suddenly found himself in was a receptacle for sewage, plastic debris and construction waste. His unplanned dip happened in 2017, when Malligavad, a mechanical engineer, was on a stroll near his office.

Walking back home, he smelled so bad that a guard refused him entry into his own residential enclave. The next day, Malligavad made an unlikely pitch to his company: He would restore the 36-acre lake if it funded the project.

To his bosses at Sansera Engineering, an automotive components manufacturers in India, the proposal seemed miscalculated, even foolish. That Malligavad, 43, had no knowledge of lake management made it only more unconvincing. But



Malligavad stands in the clean waters of Kyalasanahalli lake, his first reclamation project in Bengaluru. He aims to reclaim 45 lakes by 2025

he persisted, and his efforts spurred a career transition for Malligavad, who is now one of the foremost authorities on lake conservation in India.

As he began his project, Malligavad turned to the knowledge left behind in records from the Chola dynasty that, starting 1,500 years ago, ruled the Deccan Plateau for five centuries and built a sprawling, self-sustaining network of irrigation lakes. After four months

of studying the methods — including how to trap silt and sludge using carved stones, which need no maintenance — he won a \$100,000 corporate social responsibility grant from his company for the project.

In 45 days, using a dozen excavators and hundreds of workers, Malligavad removed enormous amounts of muck, waste and plastic from Kyalasanahalli lake. He opened its blocked channels, created five

islands with the excavated mud and waited for the rains. Six months later, after the monsoon season, he was boating in the clean water of the lake.

In seven years since the first success, Malligavad has restored 35 lakes in Bengaluru with a water-holding capacity of 106 million gallons. The groundwater level in the region has also increased by about 8 feet, according to the Groundwater Directorate.

Out of the historical 1,850 lakes in Bengaluru, Malligavad said, only about 465 are left, and just 10% of those have clean water, with the rest choked with litter. Bengaluru is facing a water shortage of 172 million gallons per day, a figure likely to double by the end of 2030.

But Malligavad is determined to do what he can, aided by Chola techniques like creating separate lagoons along the lakes, where silt and garbage can be separated from sewage,

with human waste later used as fertilizer. And using a Chola method called "ridges to river," he constructs mud walls in a cascading shape that transport excess water during rain to lakes in lower areas before it ends up in a river. Along the way, the flow supports agriculture.

Malligavad had set a target of reclaiming 45 Bengaluru lakes by 2025 but expects to reach that target early next year. His success has made him a much-in-demand conservation expert across India. The UP government has given him responsibility for reviving hundreds of lakes, as has the government in Odisha, where he has already revived a dozen lakes.

On a recent evening, Malligavad was walking on Church Street, when some college students recognised him. "Lake man, you are doing an amazing job," Kartika, a college student, told Malligavad. "We want all our lakes back." NYT

The Times of India- 25- September-2023

Joshimath went far beyond its carrying capacity: NDMA

► Continued from P 1

In January this year, the eight institutions — Central Building Research Institute, Geological Survey of India, Wadia Institute of Himalayan Geology, National Geophysical Research Institute, Central Ground Water Board, Indian Institute of Remote Sensing, National Institute of Hydrology and IIT Roorkee — were given the mandate to ascertain the causes of ground subsidence in the area in and around Joshimath and to carry out remedial measures.

They submitted their preliminary reports to the National Disaster Management Authority towards January-end. The reports were subsequently shared with the state government but were never made public. Last week, copies of the reports were placed in a sealed cover by the state government for the Uttarakhand HC's consideration.

Among several observations and recommendations made by experts of the premier institutions, the important ones focused on the town's carrying capacity and poor construction design and soil bearing capacity. Notably, the town has come up on moraine or loose soil deposited by landslides.

The National Disaster Management Authority



High density of building construction seen at the land subsidence affected area in Joshimath, in this January 2023 photo

(NDMA), in its report said, "Joshimath exceeded its carrying capacity, far beyond its capacity, and the area must be declared as a no-new construction zone."

As per 2011 census, Joshimath's population was 16,709, with a density of 1,454 per sq km. The fragile town's estimated population now stands somewhere between 25,000 and 26,000, as per the district administration. In its 180-page report, the Central Building Research Institute (CBRI) questioned the current construction practices in Joshimath and recommended reviewing the principles of town planning for development of towns here and in similar hilly parts of the Himalayas.

The CBRI concluded that good construction typology, practice, material, regulato-

ry mechanism and awareness were a must among stakeholders based on geo-technical and geo-climatic conditions. In a significant recommendation, the Roorkee-based institution also sought a plan for "phased de-densification of Joshimath and similar locations."

The Geological Survey of India (GSI) report mentions that the density of the recent ground cracks was more in areas which are densely populated and dotted with multi-storey buildings. This has been the case with areas like Manohar Bagh and Singhdhar where a maximum number of ground cracks and damage to civil structures seem to have occurred.

The GSI report said: "The heavy load exerted by a dense construction of towering structures over the heter-

ogenous colluvium debris mass, which is saturated with shallow subsurface water, only accentuated the shear stress on the slope, thus increasing subsidence in these areas." The cracks that appeared early this year and forced many families to leave their homes, were mostly aligned along a 50-60m wide linear array trending north west-south east of the town covering Sunil village, Manohar Bagh, Singhdhar and Marwari wards—all densely populated.

After the detailed safety assessment of 2,364 buildings in Joshimath, scientists from CBRI had found 20% of the houses "unusable", 42% requiring "further assessment", 37% "usable" and 1% as "needs to be demolished".

The PDNA report prepared by the NDMA-led team, meanwhile, pointed to possible negative impact on the environment from large-scale future reconstruction activities in Joshimath. "It is important that these reconstruction programmes focus on the use of green design, appropriate technologies and confined masonry," the report added.

The Union government had recently given in-principle approval to a Rs 1,465-crore package for the rehabilitation and reconstruction of Joshimath.

Telangana Today- 25- September-2023

PRLIS turns envy of its opponents

Decks cleared for resuming works on the project

STATE BUREAU

HYDERABAD

With the Krishna Water Disputes Tribunal (KWDT-II) rejecting the interlocutory application filed by Andhra Pradesh seeking a stay on the utilisation of 90 TMC from the 75 per cent dependable flows into the Srisailem reservoir by Telangana, decks have been cleared for resuming works on the Palamuru-Rangareddy Lift Irrigation project.

The State is firm on taking up the works only with the concurrence of the agencies concerned. The irrigation component of the project is awaiting environmental clearance from the Ministry of Environment. The Expert Appraisal Committee (EAC) has already given its recommendations with the State coming forward with readiness to fulfil all the conditionalities.

The progress of works on the drinking water component of the project has become the envy of parties that challenged the project in the courts of law and the



The irrigation component of the project is awaiting clearance from the Ministry of Environment.

Krishna Water Disputes Tribunal. The tribunal has made it clear to Andhra Pradesh that it does not have the jurisdiction to entertain its application and that it was free to approach any other forum for relief as permissible under the law. The first stage reservoir of the project at Narlapur, which

was built with a gross storage capacity of 6.4 TMC, has received about 1.75 TMC so far. The reservoir cannot be filled in one go.

It needs to be filled in a phased manner taking all precautionary measures, according to project Chief Engineer MA Hameed Khan. "We want to fill it only up to

two TMC for now," he said. The canal work connecting the Stage I reservoir and the Stage II reservoir would be completed in a time-bound manner. Water would be pumped into the Stage II reservoir very soon after completing the dry run and wet run of the high-power pumping stations.

The Hindu- 25- September-2023

CWMA urged to find lasting solution to Cauvery water issue

The Hindu Bureau

MYSURU

Dinesh Gooligowda, MLC, has urged the Cauvery Water Management Authority (CWMA) to find a lasting solution to the sharing of the Cauvery water in times of distress. He has also sought an “impartial” report from hydrology experts drawn from outside the four riparian States.

In a letter to the CWMA chairman, Mr. Gooligowda, who was elected from the Local Bodies’ constituency from Mandya district, went into the details of the dispute and said that ever since the Supreme Court’s order in 2018, the

CWMA had not faced any difficulties for the release of Cauvery water from Karnataka following copious rainfall.

His letter drew attention to the drought in 2023 and said that people of Karnataka in the Cauvery basin were facing severe shortage of water as the monsoon had failed and pointed out that the rainfall deficiency in the Cauvery basin was 54%.

Mr. Gooligowda said while people of Karnataka are facing a difficult time, Tamil Nadu was putting pressure to ensure the release of Cauvery water as was being done in the normal-water years.

Deccan Herald- 25- September-2023

Cup of miseries brims over for farmers in state's 'sugar bowl'

Crops wither due to poor rains, river inflow; trigger exodus

SHRINIDHI R
DHARWAD, DHNS

**State of
Drought**

The undivided Vijayapura and Belagavi districts which boast of having five rivers — Krishna, Bheema, Doni, Ghataprabha and Malaprabha — flowing through them are in the clutches of a severe drought this season.

Of the total 40 taluks in Vijayapura, Bagalkot and Belagavi districts, 34 have been declared severely drought-hit by the government.

Scanty rainfall during the kharif season coupled with faulty water and power supply systems have compounded the farmers' problems.

Farmers who had borrowed money from banks and private moneylenders incurred massive losses as crops started to wither during the germination and flowering stage.

In Vijayapura district, which is known for its major crops tur and sugarcane, sowing was completed on 6.1 lakh hectares against the target of 7.1 lakh hectares.

No rain in Aug

This season, sowing com-

menced in July as the district did not receive any rain in June. Anticipating good rain in August and September first week, farmers took up sowing. However, the district did not receive any rain in August.

The crops have started to wither and agriculture officials estimate that there will be a 50% crop loss.

All the nine taluks in Bagalkot district have been listed as drought-hit. The district has a deficit of 34% rainfall and it has affected sunflower, tur, chilli and sugarcane cultivation.

Since the district gets the backwaters of Almatti dam built across River Krishna, farmers in the district depend mainly on Ghataprabha and Malaprabha rivers for the water needs of their crops.

50% less water

Both these rivers have 50% less water due to insufficient rains in the catchment area and the sugarcane growers are feeling the pinch.

Ramappa Bandiwad of



The stunted growth of tur crop in Bagalkot district, owing to scanty rains. DH PHOTO

Shirol village in Mudhol taluk said that the sugarcane growers, after being ignored by sugar factories last crushing season, are in for trouble again as the sugarcane output is likely to be poor and the juice content in the produce is likely to be less.

With agricultural activities coming to a standstill, farm labourers from Hungund, Ilkal and Badami, which are drylands, are migrating to Mangaluru, Udipi and Goa in search of jobs.

This is not a new phenomenon as every year, farm labourers leave their villages in search of employment soon after the festival season is over. This time it is a little early, said Karnataka Rajya Raitha Sangha leader Shivaraj Patil.

Hope fading

He said farmers are incurring almost 60% crop loss during the kharif season and if the situation continues, their

hope of getting a good harvest during rabi will be dashed. The situation is no different in the Belagavi district. As many as 13 of the 18 taluks in the district figure in the list of severely drought-hit.

Important crops namely green gram, black gram, maize, paddy and sugarcane are bearing the brunt of the failure of monsoon.

The scanty monsoon has made life difficult for sugarcane growers in the region, known as the 'sugar bowl' of Karnataka.

Inflow into the Malaprabha and Ghataprabha rivers from Maharashtra is poor this year.

While the Malaprabha has 21 tmcft of water against its capacity of 37 tmcft, Ghataprabha has only 42 tmcft against a capacity of 51 tmcft.

Tough guidelines

Tough guidelines by the Centre for deciding areas hit by drought have deprived sev-

eral taluks of the drought-hit tag.

The central teams are likely to tour the state to assess the situation and submit a report to the Centre.

Based on the report, the Centre announces compensation as per National Disaster Relief Fund (NDRF) norms.

Revenue Minister Krishna Byre Gowda recently said that the compensation will be according to NDRF norms, which means farmers will get a meagre amount.

Onus on govt

"The state government has its task cut out to rescue farmers from the jaws of drought. Meagre compensation as per NDRF norms will not help in any way. The state government should walk the extra mile to compensate farmers by paying them a reasonable amount in addition to what they get under NDRF norms," said Basangouda Malipatil, a farmer.

Drinking water

The only saving grace is that the region is facing no shortage of drinking water as water from the Almatti reservoir has been released to fill tanks in the area. If any town or village is facing a shortage of drinking water, it is due to a faulty supply system.

Erratic power supply is blamed for drinking water woes in Vijayapura city and other towns.

The Economic Times- 25- September-2023

KARNATAKA GOVT ON BACKFOOT

Cauvery Water Row: A United BJP-JDS Makes it Tougher for Congress

Kumar.Anshuman
@timesgroup.com

New Delhi: A united BJP and JDS, armed with the SC judgement on the Cauvery water dispute, has put the Congress government in Karnataka on a back foot.

The Supreme Court on Thursday refused to interfere in the order issued by the Cauvery Water Management Authority (CWMA), the body which handles the water dispute among the two states, to release 5,000 cusecs of Cauvery water to Tamil Nadu till September 26.

This led to protests by farmers in different parts of the state. On Saturday, farmers in Mandya had called for a bandh which was supported by both the BJP and JDS. Mandya is part of the Old Mysuru region where the Congress did fairly well in the recently-held assembly elections.

The SC judgement has come as a boost for the newly-formed BJP-JDS alliance. In fact, on the very same day that the judgement was delivered, JDS leader Kumaraswamy had met BJP leaders Amit Shah and JP Nadda in Delhi.

On Saturday, the entire BJP state leadership, including BS Yeddyurappa, protested in Bengaluru. Yed-

dyurappa even demanded the resignation of the Congress government for not being able to handle the Cauvery water crisis.

Kumaraswamy visited the KRS dam in Mandya to see the actual water situation. The water from this dam fulfils 70% of the water needs of Bengaluru. JDS has a presence among the farming community mostly in the Old Mysuru region.

BJP and JDS leaders have been ac-

PLEASING ALLIES



BJP and JDS leaders have been accusing the Congress govt of pleasing Tamil Nadu by releasing water

cusing the Congress government of pleasing Tamil Nadu by releasing the water.

"People of Karnataka are paying the price for the 'INDI' Alliance. Karnataka Congress is overlooking the interests of its own state to benefit Tamil Nadu and the INDI Alliance," BJP leader CT Ravi, told ET.