

# Raichur, a thirsty land between two rivers

Northern Karnataka is in the grip of a severe water shortage. As wells dry up, **Serish Nanisetti** reports on the struggle of the people in the region



Despite being located between two rivers, the Krishna and the Tungabhadra, Raichur is a dust bowl. (Above and below) Braving the heat, villagers go in search of water in Raichur, Karnataka. ■ NAGARA GOPAL

Every morning, Simalamma, 35, and her eight-year-old son, Ganesh, trek half a kilometre from their home in Janakiramnagar Camp on the outskirts of Raichur in northern Karnataka in search of water. The land is cracked and the sun is harsh. Their destination is a pond owned by a wealthy farmer, Anil Gouda, who sometimes uses the water to irrigate his fields. Unlike borewell water, which is laced with arsenic, the water from Gouda's pond, though muddy, is free of arsenic.

Raichur is the land that the medieval Persian rulers of the region called Doab. Despite being located between two rivers, the Krishna and the Tungabhadra, it is a dust bowl in the first week of May.

## In search of water

"I do this thrice a day," says Simalamma. Ganesh pushes a two-wheeled cart, which has space for six empty plastic pots, to the edge of the small fenced pond. His mother walks down to the edge of the pond and fills each pot with about 10 litres of water. Other women from the surrounding area do the same.

The people from the shanty town have to go further afield to get their drinking water when Gouda irrigates his lands. Janakiramnagar Camp has three water tanks, or ponds. Of these, the community of about 150 families that live in this area owns one. The muddy brown water is used for drinking. Sometimes cattle reach the edge of the pond to drink water, and the villagers shoo them away. "We have no choice. If we use the borewell water for cooking, the rice turns brownish yellow. It tastes different. If we have a bath, the water sticks to our hair. This water may look dirty but it is better than the borewell water," says A. Narsappa, a farm hand, while collecting water for domestic use. Multiple studies have found arsenic contamination of groundwater in the region. A study in the *Journal of Neurosciences in Rural Practice* in 2017 even linked the low intelligence quotient of children in the Huttu region of Raichur to groundwater contamination.

However, water was not an election issue during either the Karnataka Assembly election in 2018 or the Lok Sabha election this year. Voter turnout in Raichur was below 60%, perhaps an indication of the indifference of the voters. A week after polling for the general election, not a single poster can be spotted in the town. It appears as if the election fever bypassed the city and its surrounding areas.

"The MLA from Raichur, Shivaraj Patil [who was first with the JD(S) and then joined the BJP], got us the overhead water tank here. In his first term, a foundation stone was laid. In his second term, a tank has been built. Just before these elections, it was painted. By the next Assembly elections we hope the pipes will be connected and we will get water sup-



ply from this tank," says K. Srinivas, a farmer. "Nobody came here for campaigning. We have 750 votes in this area but the candidates didn't want to face us."

## Failure of programme

The Comptroller and Auditor General (CAG) has tracked the systemic failure of supplying drinking water across the country in its performance audit. Karnataka lost the share of funds it received as part of the National Rural Drinking Water Programme (NRDWP) because of mismanagement and not spending the money allocated to it. The Central government stipulation is that States must maintain two accounts for managing fund disbursement for the various projects under the NRDWP. But between 2010 and 2017, Karnataka was found to be operating 108 accounts. Citing inflated bills and unauthorised parking of funds, the monies were sent back to the Central treasury.

The NRDWP guidelines were modified in 2013 to focus on piped water supply, increasing household tap connections and improving drinking water supply norms. The objective of the programme was to provide safe and adequate water for drinking, cooking and other domestic needs to every rural person on a sustainable basis.

But implementation of the NRDWP has been disastrous over the past five years. The programme used ₹81,168 crore in five years to improve rural water supply but, according to the CAG audit, only an additional 5.5% rural habitations have been impacted. At the end of five years, 82% of the rural population and 83% of rural households did not have access to the adequate water supply of 55 litres per capita per day as envisaged. At least 15% of rural schools did not have access to safe drinking water. The audit shows failure at every stage of

the programme from planning, fund management, monitoring and grievance redress.

The failure of the NRDWP has also hit the Swachh Bharat Abhiyan. "Only 25% of people who have borewells use toilets at home. All the others go out in the open fields," says Narsappa. Between 1971 and 2017, Raichur had deficit rainfall. So struggle for water has become a part of the residents' daily life. In a good year, the area gets 450 mm rain with south-west monsoons. In 46 years, only 18 have been good years.

## Wells without water

A hundred years ago, a suspected El Niño event led to one of the biggest famines in the region that killed thousands and displaced lakhs of people. The Nizam of Hyderabad, Mir Osman Ali Khan, drafted a British mining engineer, Leonard Munn, to bring succour to the region. Munn was appointed Special Officer in charge of Well Sinking and Geological Survey Departments. Till his death in 1935, Munn and his staff dug 1,200 wells in Raichur. Munn thought that the hexagonal concrete wells were a cheaper solution than hand-pumps and borewells. Most of these wells, with their six fixed pulley systems, exist till today. "The water from these wells is sweet unlike borewell water. We can draw this water whenever we want. But this is the first time there is no water in the well," says Laxamma, a villager from Wandali near the Huttu Gold Mines. In Chinchergu, a few kilometres away, another Munn well is still being used. There is water, but not enough to be drawn out. Two women sit near the well washing clothes with water drawn from a tap. The women guide us to another 'Munn sahib bawri'. Only clumps of leaves and stones are at the bottom of the dry well.

In his lifetime Munn became known as 'Saavira Bhavigala Saradara' (master of thousand wells) in the region. Munn's

belief that community wells were better than hand-pumps has helped generations of water hunters. The logic is being followed now too. The Public Works Department in Atanur is building a drinking water tank that is 1,400 ft long and 700 ft wide. "We have dug up to 17 ft. We plan to dig up to 20 ft. This tank will get filled up when water from the Bangarappa reservoir is released through the canal," says Khaja Hussain, who is executing the work on the tank at Atanur on the Raichur-Bagalgot Road. At the centre of the tank is a pulley system which the villagers can use to draw water without contaminating the water body, just as they did with the wells dug by Munn. Villagers stop and watch the progress of the work and chat with the workers while they eat lunch.

Sitting near a shrub that gives no shade, three women, Sivamma, Malamma and Kupamma, open their food bags that contain three paper-thin *bajra* rotis each, a small bowl of boiled string beans and a slice of onion. The women pick stones from the area; they are preparing to grow millets there. They sell the stones and get ₹100 a day. "It's been five months since we have had any work. If a couple has grown-up children, they emigrate to big cities and send money to their families. Since we have small children we have to stay home and find work in the village," says Sivamma of Chinchergu. She says she struggles to get water home before rushing for work as a daily wage labourer every morning.

A few metres ahead, a tractor tills a rolling hillock covered with small stones. The soil is barely visible between the stones. "I am preparing the ground for the monsoon. I am planning to grow millets here. Last year there was no rain. But this year, I am expecting a better crop," says Erramma. Tilling a rocky terrain for a single crop of millets is possible for her as her son lives and works in Bengaluru and sends money home.



## The man who built countless wells

Lingsugur is a small village between Raichur and Bagalkot. A plaque on a small building on the main road of the village reads, 'Captain Leonard Munn Memorial Hall'. Behind it is a British-era cemetery where Munn is buried under a flat pink granite with an inscription that reads: "April 1928 to October 1935, Director Geological Survey and Special Officer Well Sinking Department. He and his staff sank or remodelled more than 1,200 wells in the Famine Zone of this Rai-

chur District where his name is a household word. Blessed is the man who passing through the valley of weeping make it a well". The inscription records that Munn passed away on October 21, 1935. The area known as the Christian cemetery is mostly unknown to outsiders. But the countless wells that dot the region keep alive the name of the man who was born in Madresfield, Worcestershire, in 1878 and came to finally rest on dry, dusty land.

It doesn't help that the quality of soil is rated poor in the district. "We issue a soil health survey card which shows what agricultural inputs are needed for a good crop. All the key minerals like nitrogen, phosphorus, potassium and iron are low in this region. A good crop can be harvested only if agricultural inputs like fertilizers are used on a big scale and the monsoon is normal," says Rahman, a scientist at the Soil Research Centre in Raichur. The borewell water is of limited use for agricultural purposes as the groundwater is 'moderately alkaline'. "This is a land of two rivers but there is no water. This has been the case from my childhood," says Laxamma Gouda, a farmer and an agricultural activist from Raichur.

In 1993, the Karnataka government took up work on the Ganekal balancing reservoir (locals call it the Bangarappa tank) on the Tungabhadra left bank canal. The 0.75 TMC reservoir was a lifeline for the residents of Lingsugur and Raichur during drought years. Water from the reservoir is released every two days through canals to fill small water ponds used for drinking purposes.

Gouda pins hope on the proposed national river-linking project to help make a living out of his 13-acre land. "When all the rivers are linked there will be no water shortage in the country. Now a lot of water flows into the sea while farmers are left high and dry. We have become single crop farmers. My grandfather used to tell us how they used to grow two crops. But due to mismanagement of water, we have been reduced to this state," says Gouda. On a smaller scale, there is a project to link the Gugal barrage on the Krishna river with the Bangarappa tank on the Tungabhadra river. This will supply water to 120 villages. "Yes, there is a plan to link the two water bodies. We have done a preliminary survey but work is yet to begin as clearances have to be secured," says an executive engineer of Krishna Bhagya Jala Nigam Limited, which manages the water resource.

"Raichur and other areas of Karnataka have many traditional systems of wa-

ter harvesting and storage which replenish the water table. Big water projects are unsustainable. Before a river-linking project is planned, we need to think about the people and the potential of the rivers. Both the Krishna and the Tungabhadra are non-perennial rain-fed systems that emerge out of the Western Ghats. There is no way to assess the water supply or find out when there will be extra supply," says V.G. Govindankutty, a geographer who has studied water bodies and their use in the region. He says only community water management can help the villagers. Munn too favoured a community-based approach to solve the water crisis in Raichur. He calculated that one well is sufficient for 500 people and one pulley for 100 people. But his proposal has few takers in the age of big multi-crore projects.

## A subject of conflict

Linking the water bodies is easier said than done as the Krishna river water has been a subject of conflict among the four States through which it passes. Starting as a small stream in the upper reaches of the Western Ghats in Mahabaleshwar, the river flows through Maharashtra, Karnataka, Telangana and into the Bay of Bengal through Andhra Pradesh. It traverses a journey of about 1,400 km. In Karnataka, it flows for about 480 km before entering Telangana. Almatti is one of the biggest dams on the river with a gross storage capacity of 123.08 TMC. Only after water is released from this dam does it reach the Narayanpur project. A hundred kilometres downstream is the Gugal barrage in Raichur, and then it travels another 20 km to Girjapur, before reaching the Jurala project in Telangana. The parched land soaks up the water. And then there are a series of dams and reservoirs that hold the key to water security to the region. But they are also potential triggers for water wars as the lower riparian States get inadequate flows.

As its thirst remains unquenched, Raichur may well be the battleground for water wars in the region.