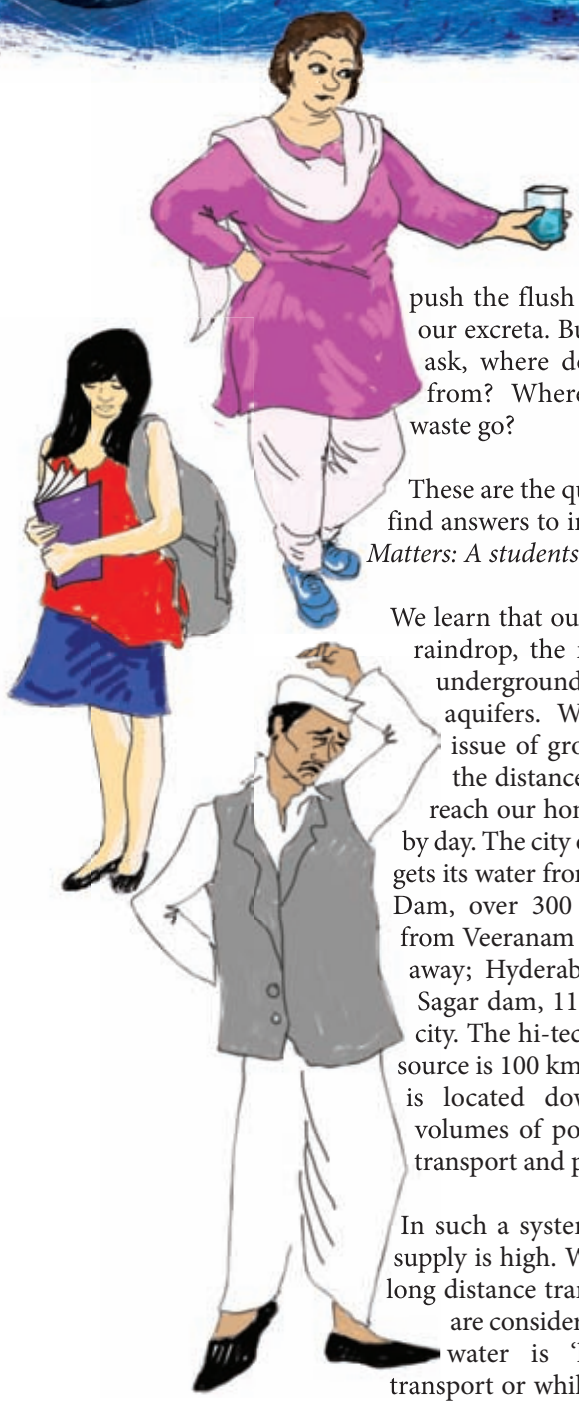
Foreword



We open a tap for water. We push the flush handle to get rid of our excreta. But do we ever stop to ask, where does the water come from? Where does the flushed waste go?

These are the questions we raise and find answers to in our report, *Excreta Matters: A students' special edition*.

We learn that our tap is joined to the raindrop, the river, and the water underground, in shallow and deep aquifers. We also confront an issue of growing concern. That the distance our water travels to reach our homes is increasing day by day. The city of Delhi, for instance, gets its water from the Ganga at Tehri Dam, over 300 km away; Chennai from Veeranam lake, located 235 km away; Hyderabad from Nagarjuna Sagar dam, 116 km away from the city. The hi-tech city of Bengaluru's source is 100 km away. And the river is located downstream, so huge volumes of power is used daily to transport and pump up the water.

In such a system, the cost of water supply is high. Worse, because of the long distance transfer, the losses, too, are considerable. Over half of the water is 'lost' either during transport or while getting distributed within the city. Then because the cost is so high, the authorities can provide for some, not all. If you check you are bound to discover that in the city you live in, a few receive plenty while most do not get any at all. Why is our source getting further and further away? Simple. Because we have destroyed all the local sources of water. Just think of your city's river. In most cases, rivers – sources of water – have been so badly polluted that they are really dead – just not officially cremated. They are full of excrement and chemical waste. Not of fresh water that gives life.

We have also destroyed the many lakes that were once the lifeline of Indian cities. They were the sponges that would harvest rain, store it and recharge groundwater. But we forgot how important they were for our supply of water. We built houses and shops and malls where these waterbodies once existed. We valued land, not water.

Now when it rains we cry, because it floods our homes. But worse, because the waterbody has been destroyed, rain no longer recharges groundwater aquifers. The bounty of freshwater simply goes waste. Meanwhile, we continue to pull from the ground the water we need for our consumption. Tubewells, today, provide the bulk of the water that we use in cities. But tubewell water, which feeds the tankers and even the bottled water industry, is not accounted for in the city's supply register. So, nobody cares. Nobody plans for it. Nobody plans for its recharge. As a result, groundwater levels are plummeting in all cities.

We dig deeper for water. We grow more water insecure.

In all this, what we forget is that water leads to waste. Of all the water which reaches our homes, 80 per cent leaves as wastewater. So, the math is simple. The more water we use, the more waste we

generate. But we do not think about this waste – about the sewage that our cities need to clean before it is disposed.

No, we do not think of this sewage when we flush. We do not consider if our city has the underground sewage network needed to carry our flushed waste to the sewage treatment plant. We do not think if a sewage treatment plant exists at all in our city to clean this waste. And if it exists, does it even work.

But because we do not care to think or to know, we are a generation which is losing its most precious treasure–the gift of rivers.

Have you and your city lost a river? Delhi, for instance, had the Sahibi, which flowed from the Aravalli hills to the Yamuna. Today, the river is a drain. It has even been officially declared as one, the Najafgarh nallah. Mithi was Mumbai's freshwater river, not very long ago. It is now a drain, as per official records. Budha Nallah was once called a darya (freshwater river), but now it is only worthy of being called a dirty drain of the city of Ludhiana.

Clearly, we must not allow this to continue.

But to make the change we must first learn more about our city; its water footprint and its waste management system. We must make it our business. We must learn more, because only then can we start being part of the change. We can demand better answers and we can practice better solutions.

And these solutions do exist. Here are some for you to mull over. One, we need to minimize our use of water so that we can discharge less. We must cut down on waste. Two, we must learn to harvest the raindrop – practice rainwater harvesting in homes and institutions so that we can recharge groundwater. We must also demand that the lakes or the ponds not be desecrated with waste or destroyed for construction. Three, we must understand the business of waste management in our cities – track where our sewage goes. Once we understand this, we can and must demand that waste be reused and recycled. From water to waste back to water.

We can do this. It is with this hope we bring you this special edition of our report, *Excreta Matters*. Read it because it matters.

— Sunita Narain