From the Board

Let Me Introduce You to a Water ATM


Shirish Kardile

I recently visited a village about 250 km from Mumbai, Maharashtra, where a 2-mld water treatment plant has been operational since last year. Treating water from the Godavari River, the plant consists of conventional processes, including aeration, rapid mix, slow mix, a tube settling tank, rapid sand gravity filters, and disinfection.

A young operator greeted me and escorted me on a tour of the plant's clean campus. The facility's raw water was turbid, but the settled water quality was good (about 10 ntu). Although the operator was new, his knowledge of the plant was commendable. He even insisted on showing me the tube settler's draining operation, and I could sense his pride when thick sludge came gushing out of the hopper. The plant's filtered water turbidity was excellent under the circumstances. He even conducted an orthotoludine test for me. I was delighted and satisfied. I even drank a glass of water.

While on the tour, I observed a steady stream of two wheelers and a few hand-driven carts coming to the plant. Their drivers were filling plastic containers with water from a tin shed-like structure. Finally, I asked the operator, "Is it a stand-post?" In response, he took out a plastic card and showed it to me. On it was written "RO WATER ATM" and below that "Completely Safe for Drinking." Embossed on the card was a rectangular silver circuit, much like one would see on a credit card.

We walked down to the tin shed, where he pressed the card against a sensor in a display kiosk. "Cold water, press red button, Rs 8/20 lit (Rs 400/1000 lit). Normal (ambient) water, press green button, Rs 5/20 lit (Rs 250/1000 lit).* People were filling their containers from a pipe sticking out of the shed. I walked around the shed, which was locked, and once again looked at the plant where I had just had a drink. There was nothing wrong with that water, I thought. Why is there a need for this shed?

The operator told me that about three months before, company people from a nearby city installed some machines inside the shed. He didn't know what the machines were, but soon he discovered local agents were appointed to sell the "RO WATER ATM" cards for Rs 300 each. The cards could be recharged locally, once exhausted, and now the company has 400 customers in the town.

"From where do they get the water" I asked. "From the elevated reservoir (treated water from the adjoining municipal plant)," he said. "Does the local body (*grampanchayat*) charge them for the raw water?" I asked.

He confirmed the company is charged Rs 5000/month for four ATMs. The municipal supply rate was Rs 10/1000 lit (Rs 100/household) per month. The village tariff was barely sufficient to earn 50 percent revenue against the expenditure. The "RO ATM" water is a whopping 25 to 40 times more expensive! The operator also told me there are similar machines mushrooming in nearby towns.

Back in my car, I wondered how the marketing companies had made "RO" a "brand" and not a "process." So complete is their advertising and selling strategies that villagers have started thinking that "RO ATM" is the safest drinking water available.

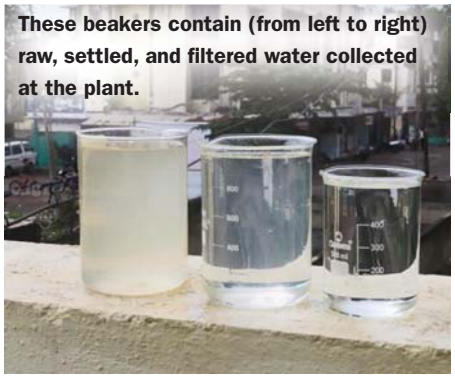
It took several minutes for me to realize it was all "our" fault, India's water industry. Despite our excellence in engineering and technology, we haven't been able to consistently deliver safe goods at the tap. India's intermittent water supply hours add to the unreliability of "safe" drinking water. Such ATM machines are merely a successful strategy in today's open market economy.

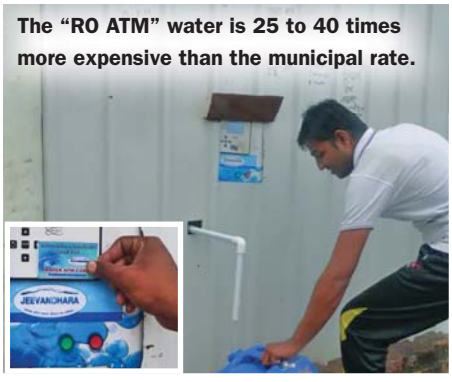
No, our collective consciousness doesn't allow us to sleep well if we don't keep on working for the country's large underprivileged (and uneducated) majority. During the last 50 years, in homes across India, citizens made tap water safe by adding a teaspoonful of bleaching water to municipal water. Fortunately, such measures are no longer needed. Our ability to educate India's masses about the advances made by today's water professionals, through dedicated organizations such as AWWA, is a ray of hope for a brighter future.

—Shirish Kardile,
AWWAIndia Strategic Board Chair

*2016 currency exchange is 1 USD = Rs 70


The Godavari River is one of India's primary water sources.


These beakers contain (from left to right) raw, settled, and filtered water collected at the plant.


The "RO ATM" water is 25 to 40 times more expensive than the municipal rate.