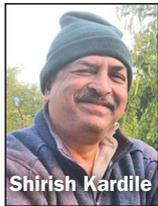


# From the Board

## Changing Mindsets in the Drinking Water Sector



Shirish Kardile

In India, where the overall drinking water market is many times larger than the industrial water market, the speed of adopting new and appropriate techniques is relatively slow. The industrial sector's mantra is "a rupee saved is a rupee gained," and it's quick to realize potentially significant savings in capital expenditures and operating expenses. The government and municipal sector is lagging behind, as there's a lack of accountability in the quantity and quality of drinking water supplied to the masses. Maintaining the "status quo" is still a preferred practice.

### LEARN FROM OTHERS

By learning from its past failures, even when the launch of the first Polar Satellite Launch Vehicle ended up in the Bay of Bengal, the Indian Space Research Organisation (ISRO) achieved glory in landing the Mars orbiter in its first attempt. In the water industry, failures are neither that drastic nor dramatic, and mistakes can be rectified on terra firma itself. But the process of changing the mindset of water professionals takes time. Today's water customers are less patient to oblige the water industry's old mindset, slow pace, monopolistic suppliers, and other excuses.

The state of Maharashtra is one of the first to realize this change in public perspective. It's the first state in India to deregulate and decentralize drinking water supply schemes, which is laudable. However, the local bodies lack adequate guidelines. Although many plants have been constructed, few operate satisfactorily.

The United States was in the same position decades ago. The U.S. Environmental Protection Agency then created two path-breaking regulations: the Clean

Water Act to deal with water pollution and the Safe Drinking Water Act to ensure the right of every consumer to safe, clean, and sufficient drinking water by law. Because of the Safe Drinking Water Act, the country's water is devoid of all contaminants or pollutants that are detrimental to human health in particular and to the country's quality of life and economy in general. Interestingly, the law was enacted around the same time when Neil Armstrong landed on the moon. To draw a parallel, it's a good time for Indian water professionals to give Indian consumers the "right" to safe drinking water, even before ISRO lands an Indian on the moon.

In the last decade, rapid urbanization of India's cities and towns (and even rural areas) has severely stressed the country's water infrastructure. As soon as a water treatment facility is created it faces ever-increasing demand. Water supply and sanitation concerns are also expanding at an unprecedented pace.

Most of India's drinking water supply schemes aren't self-sustaining, as there's a wide gap between the need for expansive expenditures and shrinking revenues. The fiscal deficit whirlpool is slowly sucking local water bodies through the spiral, further deteriorating services. New water supply infrastructure can only be provided by borrowing funds or through donations from the government or international banking institutions, and those funding sources are diminishing quickly.

One of the ways to arrest this free fall is to take advantage of modern technology to repair, rehabilitate, augment, upgrade, optimize, and maximize the efficiency of existing facilities. Dr. Parvinder Singh Pasricha, who was head of the Mumbai traffic police, offers a brilliant example. During the morning rush hours, he opened an additional lane from the opposite side for traffic toward the city.

During evening rush hours, he did the opposite toward the suburbs. That simple change sped up traffic and reduced bottlenecks. Such unconventional thinking is exactly what's needed to help solve today's water supply challenges.

### BE OPEN TO CHANGE

This great nation is a land of extreme disparity. A few rich people can afford Himalayan spring mineral water, and many in the average middle class can afford bottled water. However, the poor majority still depend on "available water." Such disparities make our knowledge professionals seek greener pastures abroad. Only a few water professionals are concerned with such challenges here, but many more in the developed world are obsessed with supplying safe drinking water. The answer to all these issues is to achieve our ultimate goal, which is to improve and enrich our lifestyle.

Change is the only constant. The definition of "appropriateness" itself is always in transition. A few decades ago, slow sand filters were common. Today's water treatment plants combine advanced technologies like ballasted flocculation and submersible membranes. Between these two ends of the spectrum lie a wide range of appropriate technologies. One needs to adapt according to technological, economic, and social scenarios with respect to time. The key is to pay more attention to operational, maintenance, and training concerns, as the stakes are high. Otherwise, many new relevant and appropriate technologies may hit the ground prematurely rather than taking off. Water doesn't reveal its secrets unless you spend enough time with it. Such rational optimism will lead to tomorrow's azure-blue sparkling water.

—Shirish Kardile,  
AWWAINdia Past Board Chair