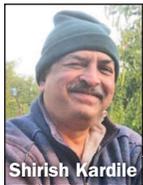


A Day in the Life of Our Rural Workforce



The monsoon in Maharashtra lasts from June to September. The state has the most small-capacity water supply schemes in India. The typical small-capacity plant (up to 5 million L/d) consists of a cascade aerator, mixing weir, flocculator with slow agitator, tube settling tank with hopper bottom (for desludging), and rapid sand gravity filters.

Most of the villages or local bodies (population below 20,000) have one operator and one valve man to maintain the water supply. There are one or two elevated reservoirs in the community, and the operator has to fill them by pumping pure water through the plant.

A typical day begins early, opening or closing the supply. By noon the operator is manually backwashing filters and desludging the hoppers. Typical monsoon duty involves him carrying alum slabs to the mixing channel and dumping them into the raw water. Depending on the clarity of the settled water, he either adds or removes the alum lumps. In the “control room,” he glances in the filter outlet chamber. If he can see a white glaze at the bottom, this part of his job is done.

Then he checks the bleaching powder. With the help of a test tube, he performs an orthotoluidine test. If he’s happy with the amber color, he starts making tea and opens his tobacco pouch. Along with the operator’s meagre salary of Rs 5000–7000 (USD 80–100) per month, the local body provides him a cot and an electrical kettle at the plant. Shuffling through an old newspaper, he’s happy there were no complaints that day. He dozes off, too tired to worry about the next day.

—Shirish Kardile,
AWWAIndia Strategic Board Chair

GANGA REJUVENATION

Namami Ganga Projects Launched in Large-Scale Cleanup Initiative

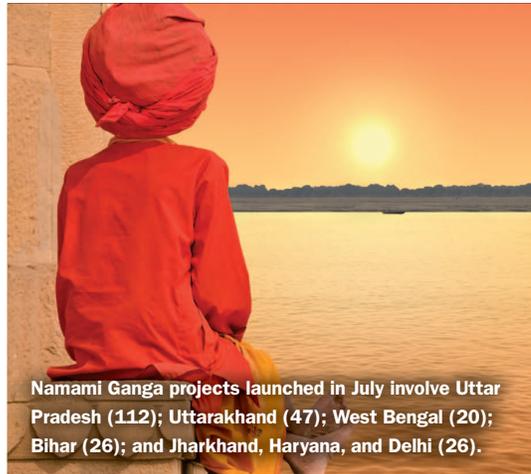
One of the world’s foremost rivers, the Ganges, or Ganga, is revered by millions of Hindu faithful; it’s also the lifeblood for hundreds of millions in northern India and Bangladesh. Flowing from its Himalayan source to the Bay of Bengal, Ganga has also been identified as one of the world’s most polluted rivers. According to an *Economic Times* (<http://bit.ly/2a4fC1e>) report, more than 1.5 million liters of raw sewage is discharged into the river each day, along with 500 million liters of industrial waste from 700 highly polluting industries, such as tanneries, and thousands of metric tons of nonbiodegradable solid waste.

Efforts to clean up the 2,525-m waterway and its tributaries have been proposed but also impeded during the last several decades. With this troubled legacy, India’s central government, led by Narendra Modi, launched the Namami Ganga river cleanup program in 2014. In a major development on July 7, 2016, the minister of Water Resources, River Development, and Ganga Rejuvenation, Sushri Uma Bharti, announced the launch of 231 projects worth ₹1,500 crore at multiple locations in Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, West Bengal, Haryana, and Delhi states.

Bharti told assembled press in Delhi that the projects involve modernization and redevelopment of ghats and crematoria, development of sewage infrastructure and treatment, afforestation of riverbanks, medicinal-tree plantings, use of trash skimmers, biodiversity conservation, and pilot- and interceptor-drain projects. According to Bharti, eight biodiversity centers will be developed along the Ganga to restore priority species such as the Ganga river dolphin.

Also under Namami Ganga, the government plans to develop villages along the main river with historical, cultural, religious, and/or tourist importance. Ganga Gram (model village) improvement goals will address comprehensive rural sanitation, water-body and river ghat development, and construction and modernization of crematoria. Specifically, objectives include making villages free of open defecation, abating direct discharge into the Ganga of untreated liquid wastewater from such villages, facilitating adequate infrastructure for crematoria, developing proper solid waste disposal facilities to avoid river pollution, and promoting better sanitation practices in the villages. The first phase will develop 206 villages, including all 78 villages in Sahebganj district, Jharkhand, and 128 villages throughout Uttarakhand, Uttar Pradesh, West Bengal, and Bihar.

“The Ganga has not been polluted because of untreated water as much as because of wrong planning,” Bharti said, as reported in the *Business Standard* (<http://bit.ly/29PCKDS>). “Projects being launched under Namami Ganga are corrective steps to atone for what has been done over the years to dirty the river.”



Namami Ganga projects launched in July involve Uttar Pradesh (112); Uttarakhand (47); West Bengal (20); Bihar (26); and Jharkhand, Haryana, and Delhi (26).