Ganga Ecology Getting Better After 8-year Effort
Category : December 1992
Published by Anonymous on Dec. 02, 1992

# Ganga Ecology Getting Better After 8-year Effort

Treatment Plants and Turtles Lessen Pollution

Five thousand years ago the Ganga was not the river of choice in India. The Saraswati was the river, plentifully extolled in the Vedas, whereas the Ganga is mentioned only once. But due to climatic and geological changes the Saraswati river gradually dried up to a stream, then disappeared. The Ganga assumed preeminent sacred stature and the lore of its water's purifying and healing powers waterfalled through Hindu history.

The high country Ganga deep in the granite folds of the Himalayas still runs with its emerald color of purity and cleanliness. But down in the factory-laden and urbanized plains the Ganga runs brownish pea-green with silt and pollution: sewage, industrial waste and corpses. To tackle the pollution, experts are farming giant snapping turtles to eat corpses, building massive sewage treatment plants and sewage diversion systems, and getting tough with polluting businesses. Prime Minister Rajiv Gandhi brewed up the Ganges Action Plan in 1986, pouring US$ 140 million into one of the most demanding river-cleanup projects undertaken in the world. The goal is to make the river's 1,568-mile length visually and chemically clean enough for fearless sacred bathing and other nonpolluting river activity.

Standing on the shore of year 1993, many sewage treatment plants are operational, and the Ganga Directorate claims a significant reduction in the river's bacterial count. By 1994 there are supposed to be 35 plants. It is an urgent endeavor. By the year 2028 India's population is expected 10 have doubled, putting enormous pressure on the waterways.

Taking a dip at the ghats edging the Ganga at Banares - Hinduism's most sacred and oldest city - Dr. Veer Bhadra Mishra jokes that he hasn't been chomped into by

a snapping turtle yet, possibly mistaking his still alive legs for a cadaver. Mishra, a professor of hydrologic engineering at Banares Hindu University and a priest at one of Benares' temples, performs his daily ablution in the Ganga dutifully, but not without squirming a bit at the river's foulness. Two of his disciples wade into the water before him, attempting to clear away foam and debris. He doesn't drink the water. He loves the Ganga dearly, believes in its sanctity, but is also equally committed to its salvation from toxic Hades, Mishra - who received the UNEP's Global 500 award for environmental service - has started his own cleanup-the-cleanup campaign. He disputes the Ganga Directorate's figures of the river project's first-phase purity, and is demanding a new system of pollution evaluation.

Using his own water quality measurements along the 5-mile stretch of bathing ghats at Banares, Mishra gets figures of biochemical oxygen demand (a toxicity scale) that are twice that of the governments. He also urged the government to adopt a bacterial count measurement. Mishra notes that people bathing in the river add to its bacterial count. In an unwitting irony he says. "People should take showers before they bathe in the Ganga for spiritual purification."

North of Banares is another concern of Mishra's: new housing developments. Despite policing of the Ganga shoreline through Banares, dumping of waste still gushes in huge quantities. Banares is a city of 1 million with 1 million pilgrims bustling in each year. Of 655 million gallons of waste water produced every day, only 436 million gallons are treated.

But not all of Banares' citizens or pilgrims are worried about pollution. C.L. Pandey, a priest at the Kashi Vishvanath Temple, says a dip in the Ganga "gets rid of illness and infection. Even the breeze from the Ganga washes sins away." But Pandey does admit the river is dirty.

And one last bit of newer technology - electric crematoriums - is helping to reduce the half-burnt corpse problem. They do a complete job of burning, cost 10% of the wood-fueled pyre and are becoming extremely popular despite fears they would be ignored.

NINJA Turtles

Are there Teenage Mutant Ninja Turtles swashbuckling in the Ganga river or Banares sewers? Or did the Ganga pollution turn turtles into mutant ninjas? Anybody who's seen the movie and seen giant snapping turtles swimming around Banares is going to say, "Cawabunga."

In one of the most snappy and controversial efforts to rid the Ganga of partially cremated bodies (or whole bodies illegally dumped up stream, thousands of 3-foot long snapping turtles have been bred to devour the problem. Out of the original US$ 140 million allocated for Ganga cleanup. US$ 32 million alone have gone into turtle farms outside Banares. There are about 20,000 to 30,000 bodies cremated in Banares every year and thousands more float in from up river.

Since 1990, 24,000 turtles have been released. The assistant manager of the farm says they are raised on a diet of dead fish from infancy, conditioning them to go for rotten flesh in the river, but not for living bodies. When people bring a body in a bag, the turtles charge up to the shore and sometimes drag the bag off. No bitings have been reported. But there are still corpses daily floating on by.

From Ganga Perrier to a New Super Water

Drinking from the down river Ganga is risky business. But up at its glacial source in the Himalayas it is sparkling enough to be bottled and sold as a Hindu Perrier or Polagrino mineral water. It is. Under the Gangotri label Ganga water is bottled in plastic at 8,500 feet, just down from the Gangotri gorges. It claims to be the best mineral water in the world, and says right on the label that "consistent use cures several diseases." The water is even distributed in the US, but it's doubtful you can order it at the Four Seasons in New York City.

While some Hindu scientists are combating Ganga pollution, others are examining the river's baffling antiseptic properties. At the Malaria Research Center in New Delhi the Ganga water from its upper reaches didn't host mosquito breeding, and prevented breeding in any water it was added to. Water from other sacred rivers was soon filmed over with mosquito eggs.

Other research demonstrated that cholera germs die within hours of immersion in Ganga water. The Ganga water has an extraordinarily high rate of oxygen retention, allowing it to remain fresh during long storage periods. Other studies indicate that pathological bacteria do not fare well in Ganga water. Some scientists conjecture this is due to naturally radioactive minerals present in the water, and organisms that kill germs.