

REVIVING THE PERIYAR

The lives of the residents on the Periyar river island of Eloor take a U-turn as vigilance and legislation give the toxic hot spot a second chance



RIVER KEEPER: Jose keeps a tab on pollution level in the Periyar

■ By M.G. Radhakrishnan in Eloor

When Joel, 7, swims in the Periyar, his childish frolicking becomes an act of faith. Joel's family has been living for generations on the banks of the river in Eloor island, about 25 km from Kochi. But for 30 years, swimming in the river had been taboo. Eloor had been named a "toxic hot spot" and ranked No. 35 in the world's worst-polluted places in a 2003 study conducted by Greenpeace International in collaboration with Occupational Health and Safety Centre, Mumbai, NIMHANS and St John's Medical College, Bangalore. The 35 sq km area of Eloor and Edayar, a nearby island, has the highest ag-

glomeration of chemical industries, bone meal factories and tanneries in Kerala. The Greenpeace study also stated that the chances of residents of Eloor contracting cancer are 8.5 times higher than in similar toxic areas in India, with children facing 2.63 times higher chance of malformation due to congenital and chromosomal aberrations caused by the pollution.

But if Joel swims in the river today it is because he is being watched over by his father V.J. Jose, Greenpeace India river keeper, and vigilant judges whose legislations have succeeded in lifting Eloor from a living hell. Jose, 50, checks the pollution levels in the Periyar every day and says, "This year the contamination has declined. After

30 years, I can bathe in it now."

So can 60,000 people of Eloor and Edayar villages, the victims of a high degree of air and water pollution caused by factories producing insecticides, fertilisers, other chemicals and even nuclear material. It has taken eight years for stringent measures initiated by the Supreme Court to start bearing fruit—in this not so heavenly slice of God's own country. According to eco-activists, the 247 factories in the area together discharge 173 million litres of effluent-filled water into the Periyar every day, resulting in higher incidence of ailments like bronchitis,



RIVER BLUES: Effluents discharged from factories turn the water black

Photographs by SHAMJAN

asthma and even cancer for users. The levels of contamination in the area have had disastrous effect on the ecosystem here. A study done by the School of Industrial Fisheries (SIF), Cochin University, confirms this. "In 1980, thirty-five fish species were recorded in this region while only 12 species were recorded in our present study," says SIF head B. Madhusoodana Kurup. Chicken eggs collected from Eloor were found to contain high levels of fatal persistent organic pollutants and DDT in a study done by the the Local Area Environmental Committee (LAEC), which was set up in 2004 by the state's Pollution Control Board (PCB) on orders of the Supreme Court.

It has been a long and bitter battle between the courts and the eco-activists on one side and the industrialists on the other. The reduced levels of pollution in Eloor indicate that judicial will works. In 2003 the apex court had ordered all state PCBs to close down factories that did not comply with the Environment Protection Act (EPA) and the Hazardous Waste (HW) Rules of 1989. Last year, the court's monitoring committee asked the boards to constitute a body of environmentalists, technical experts, lawyers and others to conduct an environmental audit of all factories. On the basis of the reports of the LAEC, the state PCB sent show-cause notices to 170 factories. Initially, there were attempts by managements to question the powers of the LAEC to make inspections. They also tried to instigate trade unions against its "anti-labour moves" but met with little success. The gravity of the problem was further underscored by the outbreak of an accidental fire in July 2004 at the factory of Hindustan Insecticides Limited (HIL). There were no escape routes for the people except local ferries off the island. "There was no casualty, but the fire was a grim reminder that Eloor was sitting on a volcano," says Jose.

Other than HIL, the LAEC named Merchem Limited, a private firm which makes rubber chemicals, and public-sector undertaking Fertilisers and Chemicals Travancore Ltd as the biggest polluters. These companies



POISONED: Till recently 139 types of chemicals were being dumped in Kuzhikandam creek

CRACKING THE WHIP

1999: Greenpeace India identifies the Periyar as one of India's most contaminated rivers and Eloor island located in the river as one of the world's 35 most toxic spots.

2003: The Supreme Court orders closure of 200 factories located in Eloor which discharged untreated effluents into the Periyar.

2004: The Supreme Court Monitoring Committee asks Kerala PCB to constitute a Local Area Environmental Committee

to conduct environmental audit of all factories in Eloor.

2004: The SCMC on hazardous wastes expresses shock at non-compliance of the apex court order for closure and pulls up the Kerala PCB.

2004: The Kerala PCB issues show cause notices to 170 factories which were found to have violated the Environment Protection Act and the Hazardous Waste Rules.

were allegedly dumping untreated hazardous waste in the Kuzhikandam creek leading to the Periyar. Following the LAEC report, the PCB sent notices to the companies with directives to instal treatment plants or close down the factories. Merchem installed an evaporation plant and a reverse osmosis plant, HIL installed an effluent treatment plant and a 1,500 degree Celsius incinerator for hazardous waste. Cochin Minerals and Rutiles Ltd has built a hazardous waste pond at the cost and initiated new effluent treatment measures. "The measures are nowhere near the desired levels but they indicate readiness on the part of some managements to make

changes if faced with serious consequences," says Purushan Eloor, environmentalist and member of the LAEC.

The state Government has now decided to set up a round-the-clock river monitoring station at Eloor. However, what the people of Eloor are looking forward to is the Total Ecosystem Restoration Project for the Periyar. To meet the expenses of the project, the SCMC has ordered collecting a levy of Rs 2.5 crore from the polluting factories in the area. The managements may flinch once again but given the no-nonsense approach of the Supreme Court, the goal seems to be within reach. ■