http://www.hindustantimes.com/india-news/ecologist-of-the-poor-man-who-is-fighting-to-conserve-east-kolkata-wetlands/story-admvS9TGIk0MpW6V18UChN.html

An ecologist of the poor

The bustling megapolis of Kolkata produces almost 750 million litres of wastewater and sewage every day. Strangely, the core area of the city does not have a single sewage treatment plant. So where does so much sewage go?

Almost 30 years ago, a sanitation engineer was asked to investigate this mystery. What he discovered would change his life forever and open a new chapter in urban ecology. He discovered a vast network of wetlands on the city's eastern fringe. Managed by farmers and fisher folk, it received the city's sewage, and with the help of sunshine and oxygen, broke it down to produce food for fish, which was then sold back to the city. This unique ecosystem, which the engineer later would go on to officially get recognised as the East Kolkata Wetlands (EKW), is the world's only fully functional organic sewage management system.

Three decades later, DhrubajyotiGhosh is now a silverhaired septuagenarian. This year, the International Union of Conservation for Nature (IUCN) conferred to him the prestigious Luc Hoffman Award. This international award recognises the tireless and unpaid work of activists for nature conservation.

Ghosh's international renown is not limited to this award alone. He is a UN Global 500 Laureate and shares accolades with international celebrities like former US President Jimmy Carter, actor Robert Redford and conservationist Jane Goodall. His achievements, however, are a blip on national media radar. This is hardly surprising. If India's record of recognising its scientific heroes is poor, then that of his home state of West Bengal's is pathetic. In 1981, the year Ghosh started exploring the East Kolkata Wetlands; Dr SubhashMukhopadhyay committed suicide in his apartment. He was India's first physician, and second in the world, to have successfully performed in vitro fertilisation. Worried of his success, state Government machinery insulted and humiliated him to such an extent that he decided to take his own life. His tragic story later inspired the critically acclaimed Hindi film "Ek Doctor Ki Maut" directed by TapanSinha. A few years later, Dr DipankarChakraborti, from Jadavpur University, blew the whistle on widespread arsenic contamination of groundwater in West Bengal. He was promptly branded a CIA agent. It took him a decade of struggle to get the problem officially recognised as a public health issue.

Ghosh spent fifteen years of his life documenting and researching the East Kolkata Wetlands for his PhD in urban ecology. "What I had discovered within the sewage and muck of Kolkata was a living laboratory of science", he says. Poor farmers and fisher folk had upended mainstream scientific consensus of wastewater being a pollutant by converting it into productive fisheries. However, such ingenious improvisation was hardly acknowledged by the state Government. Ghosh coined the

term "cognitive apartheid" to describe the unwillingness of powerful elites to accept new knowledge coming from the poor. This, he said, would lead to "fatal exclusions", where by ignoring such knowledge, a city would head towards its own ecocide.

Since the 1990s, the rapacious real estate market of Kolkata has been eyeing the wetlands. This had directly put Ghosh's efforts at conservation at odds with the very Government he was serving as Chief Environment Officer. Ghosh pulled off a major victory by getting the East Kolkata Wetlands recognised as a Ramsar Site in 2002, making it a wetland of international importance. This recognition de-suffocated the wetlands, but choked Ghosh's career. Unable to get land, vested interests hounded him to the point that he had to quit his job.

But the struggle to conserve the East Kolkata Wetlands continues. It is reported that 25,000 illegal constructions within the East Kolkata Wetlands are to be legalised by the state Government. The Mayor of Kolkata, after having wrapped the city with cheap Chinese LED lights, now intends to concretize the eastern fringe. According to his press statements, he considers 'civic service' to be more critical than conserving a wetland for the sake of "environmental nicety". What escapes him is that the wetland is performing a greater civic service by treating the city's sewage, preventing flooding and providing livelihoods to the poor and food security to the city. It will be interesting to know how he plans to treat, daily, almost 50% of the city's 750 million litres of sewage and wastewater once he has effaced the East Kolkata Wetlands from the map.

Though from time to time there has been some debate about the possible contamination of fish and food grown on wastewater, data from institutions like Jadavpur University, Kolkata and Central Pollution Control Board (CPCB), New Delhi, have allayed such fears. A Jadavpur University study in 2006stated that absence of contamination was visible through the health of the fish workers. Not a single case of skin disease was reported from fish workers who on an average spent four to five hours in chest high sewage water. Ghosh is not surprised. "The ultraviolet rays of the sun clears out the pathogen from the upper layers and purifies the waters", he says. But of late, plastic and leather processing units have proliferated in the area. This is a new development that can alter the fragile ecosystem.

While nature purifies the wetlands, politics pollute it. The sale of fish brings in a rich haul of cash, and with that, conflict over how it is shared. The wetland is now a theatre for armed conflict between political gangs. Almost 10000 locally made weaponswere reportedly stockpiled in this area. Untouched by the much celebrated land redistribution efforts of the earlier Left Government, impoverished landless labourers at the mercy of political patronage in these areas. The cooperatives that manage fisheries operations are subjected to political capture. With power changing hands after the state elections of 2011, the wetlands havebeen frequently jolted by the deafening noise of bombs and gunfire.

"Unless we find a solution to the land question, we cannot save this vast body of water", says Ghosh. He had barely commenced on this task when the Government pulled the plug on him. The wetlands are a hornet's nest of vicious political interest, and after all these years, it still buzzes around him.

For Ghosh, what shines through such insanitary politics is the profound ecological thinking of the urban poor, who sustainably manage the East Kolkata Wetlands. He poignantly says, "with their improvisations, these people showcasean enlightenment of the ordinary". His decades of research on the wetlands are rare at a time when researchers parachute into ecosystems and become overnight experts. Even today, Ghosh continues to approach the wetlands as he did three decades ago, with childlike curiosity. "I keep discovering new things, which keeps me excited", he smilingly says.

Ghosh's knowledge of ecology, which he credits unhesitatingly to the urban poor, has unfortunately been relegated to the backbenches of wetland conservation. This pains him deeply. An ecologist of the poor, he firmly believes that if nature conservation has to work, then people must be at the centre. He can only hope that somewhere, people are listening.

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