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Mithi River an open drain, another 2005-like deluge inevitable in Mumbai: Panel report to SC

Encroachments, dumping of waste made the river a drain, city prone to 2005-like floods

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Badri Chatterjee (https://www.hindustantimes.com/columns/badri-chatterjee) Hindustan Times



The river, which meets the Arabian Sea at Mahim creek, starts at the Vihar and Powai lakes and passes through several areas of the city's suburbs.(HT PHOTO)

It's all sweet talk when it comes to the authorities' promises on reviving Mithi River, 13 years after a deluge killed more than 1,000 people, in part owing to the deplorable condition of the city's largest river.

Encroachments, reclamation, improperly built retaining walls, indiscriminate dumping of industrial effluents and solid waste have made the 17.84km river 'an open drain', and consequently, left the city vulnerable to a deluge similar to the one on July 26, 2005, according to a report submitted by the state government to the Supreme Court (SC).

During the deluge, 944mm of rain over 24 hours, including 190.3mm between 3.30pm and 4.30pm, combined with a high tide of 4.48m resulted in severe flooding in the river's catchment area of 7,295 hectares.

The river, which meets the Arabian Sea at Mahim creek, starts at the Vihar and Powai lakes and passes through several areas of the city's suburbs

Also, less than 5% of the river has been planned for treatment, said the 243-page report. "It is important to note that of the 124 million litres a day (MLD) that flows into Mithi, only 6 to 8 MLD is planned for treatment," said the report. This means effectively, 95% of the river is sewage, according to an expert who prepared the report.

The report, prepared by the Indian Institute of Technology, Bombay (IIT-B) and National Environmental Engineering Research Institute (NEERI), along with two independent experts, is likely to be discussed by the SC on December 7.

The report was submitted on March 13 by then additional chief secretary Satish Gavai. The matter was based on a petition filed by environment group Vanashakti. On August 16, 2017, SC had ordered the formation of a panel to ensure pollution in the river reduces and its restoration begins soon, while slamming the state for not taking any steps to rectify the situation over 12 years. The government deposited ₹50 lakh with the court for expenses incurred by the committee to study and restore the river. "As large-scale urbanisation, encroachments, and development have taken place in the river basin, a repeat of the 2005 deluge is inevitable," the report concluded. "Earlier committees recommended the removal of encroachments along the river with a minimum buffer of at least 15m. However, even after 13 years since the deluge, this work is not complete and the issue of encroachment removal has not been taken seriously by authorities. Hence, the river has become a solid waste dumping yard and gets polluted owing to sewage entering directly from slums…," the report concluded.

The report identified Bandra Kurla Complex (BKC) as a source for flooding and called for an immediate need to widen bridges. "The major problem of flooding is because of reclamation(620 hectares) for BKC and owing to the bottleneck forming of non-widened bridges at the downstream of the river," it read. "It is a damning report about the current condition of the river, but it clearly establishes the loopholes and how state agencies need to work in tandem to revive this water body," said Gavai, currently posted as additional chief secretary

(industries), Maharashtra . "We need to take inspiration from the revival of Europe's Rhine River, which was many times more polluted than Mithi, but countries like Austria, Switzerland, Germany, France and the Netherlands came together to develop a robust restoration plan."

From extremely poor water quality, poor infrastructure, inappropriate construction of roads, setting up of unauthorised industries, and slum settlements, the report collated by four scientists from NEERI, led by director Dr Rakesh Kumar, three scientists from IIT-B, professor AD Sawant and architect PK Das, divided Mithi into 15 zones and suggested short-term and long-term restoration measures for each zone to be 'implemented at the earliest'.

"Areas around BKC not only have slums, but massive buildings that have been illegally constructed on floodplains. Construction of retaining walls in areas around Aarey Colony and further towards Sanjay Gandhi National Park can be disastrous for such areas as the interaction with the river reduces significantly," said a committee member. Other committee members refused to comment as the matter is being heard by SC and remains sub-judice.

The report compared recommendations from nine previous committee reports between 2006 and 2017, including the one by the Chitale committee soon after the 2005 deluge and the Maharashtra Pollution Control Board (MPCB). The recommendations directed government bodies to put a stop to industrial effluent discharge and setting up sewage treatment plants (STPs) to capture domestic waste from adjoining encroachments. "However, it has been observed that no proper planning and execution work was carried out," read the report, adding that unauthorised industries continued to dump effluents in the river.

The committee said the construction of service roads along the river banks was not done, the construction of a river flushing system for swift rejuvenation as directed by the Chitale committee was never implemented, and the development of flood risk maps for rainfall levels every year post 2005 was not prepared.

"The retaining walls constructed along Mithi are not constructed the way they should have been for an urban river. The committee found there was no coordination between different agencies for the planning and execution of the river-related work," the report said.

BMC to challenge

An additional municipal commissioner from the Brihanmumbai Municipal Corporation (BMC) closely associated with the river rejuvenation plan said they had been carrying out civil and environmental engineering solutions over the past 13 years. "The BMC has removed more than 60,000 encroachments across the river's length. Based on recommendations of the Chitale report, the river wall was built and new stormwater drains were constructed. Proof of this has been witnessed over the past two years when during monsoon Mithi did not overflow, which had been happening regularly over the past two decades," the officer said. "There is a lot of change since 2005 and there has been a significant improvement. We will be telling SC about our version when this report is discussed."

The officer said, "At first, IIT-B had suggested the use of wetland technology to clean up the river, but it failed because the area had too many encroachments. We decided to float a tender and hire an international consultant in 2015-16 that carried a flow study where of the 398 million litres, the current flow of the river is 8 million litres, which means 390 million litres is sewage. There are 73 major and medium nullahs emptying into the Mithi," the official said, adding, "Based on this, we broke Mithi into three parts under the revival project at about ₹1,000 crore."

The first part started from Vihar Lake going up to a portion of a compound in Powai, a distance of about 3km, where an STP was commissioned and this cost was ₹100 crore. The STP is under construction, the BMC officer said. Part two from Powai compound to CST bridge, sewage will be collected and taken to already existing STPs, the officer added. "The third part is from CST Bridge to Mahim creek. We will build interceptor sewers and the collected sewage will be treated at Bandra STP."

Rajiv Kuknoor, deputy municipal commissioner, said, "Work is underway in full swing in part one with the STP under construction. Draft tenders for the other parts are ready and over the next 15 days, the tenders for these will be published. It will take three months to develop the work order, prepare a scrutiny report for the tenders and then work will start," he said.

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