# Is PMC's Pune River Rejuvenation Project Just Greenwashing?

A critique by

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Note: This critique was previously sent to Indian Express Pune in the Letter form. A part of it was published by them on 03/2/2025 in their 3-article series on the work called *river-front development* (RFD) undertaken by Pune Municipal Corporation on the banks of Mula, Mutha

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- 1. This review critiques the administration of Pune's rivers, whose decisions and policies directly impact the well-being of citizens. In no way, it casts any aspersions on the tireless hard work and the individual efforts of the personnel of various departments of PMC who keep the city running.
- 2. Facts in public domain are bizarre and absurd:
  - § PMC's website admits Pune rivers are highly polluted, blaming "the city";
  - § Swachh Survekshan 2023 claims Pune's rivers are 100% clean;
  - § MPCB issues notice to PMC to stop polluting the rivers with sewage;
  - § PMC calls limited riverfront development geological "river rejuvenation";
  - § The Centre says Environmental Clearance is not necessary for rejuvenation;
  - § PMC obtains Environmental Clearance twice, to keep rejuvenation out ...
  - § ... but retains the title "Rejuvenation of Rivers at Pune", a misnomer;
  - § The Project seeks to alter the flood lines to regularize encroachment ...
  - § ... by walling off the rivers, claiming it will prevent floods, an impossibility;
  - § Project costs quoted arbitrarily (DPR: 2619 Cr, EC1: 280 Cr, EC2: 4700 Cr);
  - § The public could not find the DPR sanction, if any, nor the ruling-party MP;

- § Meanwhile, a new water-borne disease appears in Pune.
- 3. These hyperlinked facts raise serious questions about river governance:
- 3.1 While saying that the "city has turned its back on the rivers," what has the PMC done to protect them since 1950? Who takes the blame?
- 3.2 How did the PMC secure a Swachh Survekshan Report Card declaring its rivers 100% clean while simultaneously stating on its own website that they are highly polluted?
- 3.3 How is the PMC responding to the MPCB notice?
- 3.4 Why was environmental clearance sought (and granted) for a project whose stated objective is the environmental protection of the river?
- 3.5 If rejuvenation and restoration are the aims, why adopt the unsafe approach of narrowing flood lines and legitimizing illegal constructions by walling off the river, instead of relocating people from restricted flood zones? Is this being done to create legitimate real estate for high-FSI construction?
- 3.6 If the existing riparian forests are to be protected under the project, why are trees on the riverside being felled?
- 3.7 How did the project cost fluctuate from ₹280 crore to ₹2,619 crore to ₹4,700 crore for the same "plot area", and what tendering process was followed to award the now-₹4,700 crore project to the Gujarat firm? Where are the necessary sanctions?

- 3.8 Given that the new waterborne disease was first linked to polluted well water, why is the PMC not acknowledging its own failure to manage sewage?
- Given these contradictions never raised by the press and never clarified by the PMC, one might describe this administrative ecosystem as a proudly dysfunctional civic administration that openly acknowledges its failures, yet manages to rebrand them as successes, securing validation from an uninformed or willfully blind central government.
- 4. Reviewing facts adding up to absurdity is challenging. But here is an attempt:

#### **BRIEF SUMMARY**

## Logical, Science-Based Approach

- 5. A logical and science-backed approach to rejuvenating Pune's rivers must include the following fundamental elements:
  - a. Sewage Management (Fundamental Priority)
    - i. Comprehensive Sewage Network Expansion → Ensure
       100% sewage collection from all residential, commercial, and industrial sources, eliminating direct discharge into nalas and rivers.
    - ii. **Restoration of Nalas** → Tributaries (nalas) must be restored as natural water streams, not accepted as open sewage channels. Encroachments should be removed and sewage outfalls into nalas should be eliminated at the source, preventing pollution before it reaches the river.

- iii. **Trunk Sewer Lines**  $\rightarrow$  Primary sewage pipelines transporting all collected wastewater to STPs should have no leaks.
- iv. Interceptor Network  $\rightarrow$  Only as a secondary safeguard to prevent leakages and untreated outfalls, NOT a substitute for a fully connected sewer system.
- v. Sewage Treatment Plants (STPs) & Pumping → Upgraded, decentralized STPs to handle localized sewage loads with real-time monitoring to track performance and prevent untreated discharges. The capacity must be based on accurate estimates.
- vi. **Desilting & Debris Removal** → Prevent blockages in sewers that reduce capacity and cause untreated sewage to overflow or stagnate.
- b. Riverside Management (Sustainable & Community-Oriented Approach, with Ecological Priorities—as against the PMC's Riverfront Development, which implies beautification and real estate expansion rather than ecological restoration)
  - i. Elimination of Encroachments from Floodplains →
     Restore natural floodplains instead of constructing "engineered"
     embankments proposed by PMC that disrupt river ecology.
  - ii. Riparian Forest Restoration & Expansion → Native tree plantations & biodiversity conservation to naturally filter pollutants and improve microclimate.

- iii. **Public Green Spaces & Parks** → Controlled, low-impact recreational areas (e.g., eco-parks, biodiversity corridors) instead of heavy construction.
- iv. Water-Based Activities → Introduce eco-sensitive boating, kayaking, swimming and nature trails rather than large-scale commercial ventures.
- v. Visarjan Tanks with Integrated Pumping & Restoration

  System → Scientifically managed immersion facilities that prevent river pollution while maintaining religious traditions.
- c. Riverbed Management (Ensuring Free-Flowing, Clean Rivers)
  - i. **Debris & Obstruction Removal**  $\rightarrow$  Systematic riverbed cleaning to ensure uninterrupted flow and prevent artificial flooding.
  - ii. Natural River Course Restoration → Avoid straightening or restricting river paths with concrete embankments that cause long-term ecological damage.

### PMC's Illogical and Technically Unsound Approach.

- 6. Instead of eliminating encroachments from floodplains (5b-i), which is fundamental to flood prevention, PMC has introduced a questionable alternative—flood protection by walling off the river. This is not based on sound hydrological science but appears to be a political compromise to protect illegal constructions.
- According to the <u>Detailed Project Report (DPR)</u>, PMC proposes to protect unauthorized structures within the red and blue lines, not by removing them, but by raising "engineered embankments"—in effect, walling off the rivers. DPR,

- Page 79 (Verbatim Quote): Another way of saying this is that the effect of these measures will help to redraw the red and blue lines closer together and protect the flood-prone surrounding areas. Clearly, instead of enforcing floodplain regulations, PMC is manipulating flood lines to legally accommodate encroachments.
- 8. Environmentalists Ameet Singh and Sarang Yadwadkar have repeatedly warned that embankments will not prevent flooding. Instead, they worsen the flood risks by narrowing natural river flow. But PMC is only looking at regularizing the unauthorized constructions in floodplains and, apparently creating high-FSI land parcels allowing new high-rise developments that benefit real estate interests.
- 9. While focusing on contracted real-estate development under the misnomer "Pune River Rejuvenation Project," PMC is actively neglecting its fundamental duty—Comprehensive Sewage Management (5a) and Riverbed Management (5c). Instead, the civic body has repackaged its own flawed version of Riverfront Development, which only implies beautification and real estate expansion rather than ecological restoration of the rivers with non-viable "Engineered Embankments" as a flawed flood-protection measure.
- 10. Instead of undertaking comprehensive sewage management or taking the responsibility for outfalls, the DPR has selectively included the work of trunk sewer line and interceptor network. It ignores the root cause—a disjointed or missing sewage network upstream. If an outfall remains unconnected to the interceptor, PMC can claim it is not part of their project.
- 11. Once sewage is sent to STPs, the contracted project takes no responsibility for whether they have adequate capacity, are maintained & operated properly, or actually treat the sewage to required standards before discharge. Even the

- number of outfalls is wrong, and by patching over a broken system by interceptors as a last-minute diversion, river cleanliness cannot be guaranteed.
- 12. Moreover, PMC has ignored the all-important tributaries, or nalas, focusing only on sewage outfalls at river points. By doing so, it effectively legitimizes the pollution of nalas, treating them as permanent open sewage channels rather than natural water streams in need of protection and restoration.
- 13. Most critically, PMC is treating its core sewage infrastructure as a secondary issue:
  - d. Sewage network & STPs—the real work needed for river rejuvenation—are being handled under regular PMC tendering, without clear timelines.
  - e. The sewage work, which was due for completion in Dec 2021, has not even started in earnest. Meanwhile, the privatized real estate-focused construction project is being fast-tracked.
- 14. In effect, PMC is prioritizing a real estate venture under the pretence of river rejuvenation. PMC is financing an urban beautification project while abandoning its fundamental duty—river restoration. A blunt way to describe this approach is, adopting the neighbour's child while sending their own to an orphanage.

## This is Being Achieved Irresponsibly, and by Misrepresentation

15. Altering the red/blue flood lines is not rejuvenation—it is manipulation. Instead of restoring the rivers, PMC has rebranded this effort under the misleading title, "<u>Pune River Rejuvenation Project</u>," with no commitment to the fundamental duty of actual river rejuvenation.

- 16. This is not just a failure of intent but also of accountability. The original Environmental Clearance explicitly states under Item 37 that "budgetary allocation", "capital cost", and "operation & maintenance (O&M) costs" under "Details of Pollution Control Systems (Existing and Proposed)" are "Not Applicable". This translates to the fact that pollution control—the core of any river rejuvenation project—is simply not part of this project contracted to a private firm at the cost of Rs. 4700 Cr.
- 17. In a lame attempt to justify this misdirection, the contractor has redefined the very meaning of "rejuvenation" in its DPR:
  - f. DPR (Page 118): "Creating a continuous public realm along the river."
  - g. Official Vision Statement (Page 67): "To create a safe, clean, beautiful, and integrated river **edge**," not the river itself.

#### DETAILED DISCUSSION

#### **Rivers and Tributaries of Pune**

- 18. PMC's project carrying the official title of "Pune River Rejuvenation Project" (see the <u>last undated Environmental Clearance</u>) but better known as Riverfront Development (RFD) without the element of ecological restoration essential to any riverfront development, addresses the three rivers of Pune: Mula, Mutha, and Mula-Mutha ("Pune rivers").
- 19. Mutha enters Pune from Khadakwasla in the south of the city, while Mula encircles Khadki in the north. Both rivers join near Sangam Bridge to form the Mula-Mutha river, which flows westward and exits Pune at Kharadi to join the Bhima, and subsequently the Krishna, which pours into the Bay of Bengal.

20. According to PMC, twenty-three tributaries (nala) of natural water flow into Pune rivers. PMC website shows the contour maps of the associated Nala Basins. For example, the Shivajinagar Nala originates at the hills west of SB Road and flows past Parimal Udyan in Model Colony, crosses Ganesh Khind Road, and enters Mula river through the forest south of Tanaji Wadi STP.

#### The Origin of River Pollution.

21. PMC admits and informs that Nalas and piped outfalls discharge untreated sewage directly into the rivers, converting the river into a polluted 'drain'. The PMC website adds, "past few decades has led to haphazard urban development along the river. At some locations, the development extends right up to the edge of the river", further stating that these factors have "transformed a beautiful river into a polluted drain that the city has turned its back to": The blame is directed to the "city" of Pune, not PMC, which is in existence since the year 1950.

### PMC is Responsible but Not Acting: Warns MPCB

- 22. Since its creation in 1950 under the MMC Act, 1949, PMC administers the city:
  - § It has legal powers to remove unauthorized constructions. Yet, PMC's description is generic and not useful for planning. While PMC admits "haphazard urban development", there is nothing in public domain to show what actions PMC has taken over the past 75 years against construction inside the flood lines.
  - § PMC has the legal duty to provide sewage network and STPs to maintain the cleanliness of rivers, tributaries, and other water bodies. Most recently, the MPCB notice of 26/12/2024 specifically reminds PMC of this, stating:
    - o It is obligatory on PMC's part to treat the entire sewage generating from Pune Municipal Corporation Jurisdiction by providing adequate sewage

treatment plants and full-fledged network of sewage carrying system, so as to achieve the standards prescribed under the Water (Prevention & Control of Pollution) Act, 1974 r/w the Environment (Protection) Act, 1986.

- o It is obligatory on PMC's part to maintain the wholesomeness of water quality of the natural water bodies including aquatic flora and fauna by avoiding contamination of water.
- § Citing Lokmat news item dated 24/12/2024, the MPCB notice of 26/12/2024 has made specific allegation that nallas are carrying domestic effluent into the Mula-Mutha river, their water is blackish, smells of faecal material, and has pH 6-7. PMC (MPCB says) is discharging approximately 90 MLD untreated domestic effluent into the river at the location inspected. Old Naidu STP of capacity 90 MLD is demolished while the new Naidu STP work is still not completed. PMC is not providing alternative power when the power fails. MPCB further alleges that consent to operate their STPs of capacity 567 MLD at various places in the Pune expired on 31/12/2023, but PMC has not got it extended.
- 23. To sum up, PMC has not at all performed its duties of (1) stopping the outfalls in tributaries and rives, and (2) removing the encroachment from flood lines.

#### **DATA of PMC Are Misleading, if not Missing**

24. There is no data on outfalls into the tributaries or nalas, which empty into the rivers. The data of outfalls in the rivers is not consistent across various documents issued by PMC, and the third-party data, e.g., of <a href="the 2021 TERI">the 2021 TERI</a> report titled, Water Sustainability Assessment of Pune, and others.

- 25. Ameet Singh is direct in his assertion when he says, "Most of the PMC's data are wrong. For instance, the DPR insists there are 88 sewage outfalls. We have GPS-tagged and photographed over 50 outfalls from PMC office to Karve Nagar, a stretch of 5 km only. We have recorded 37 outfalls from KP bridge to Kalyani Nagar Bridge."
- 26. With reference to the points listed in the DPR at Page 67, Ameet warns (as does MPCB in its notice) that dying fish bear testimony to the dangers posed to citizens' health. He cites Central Pollution Control Board (CPCB) data: 80% of the water consumed in Pune becomes sewage. Then the proposed STP capacities become questionable. According to Ameet, total current generation of sewage is 1654 MLD from the water consumption of 2000 MLD. The upcoming JICA and existing capacities add to 1034 MLD, which is inadequate even today, and we need to consider the city's expansion too. "They need to divert (both human and financial) resources to STPs—they have a manpower of about 16,000."
- 27. About the flood lines (blue and red lines), Ameet Singh adds, "The latest data from Maharashtra Engineering Research Institute (MERI) has blown the lid off the PMC claims. The old value for blue line is about 60,000 cusecs release. To everybody's surprise, the blue lines of most places in Pune were submerged and inundated with release of just about 30,000 cusecs from Khadakwasla Dam. It is evident that those lines have been gerrymandered with or the river has been dumped upon.". Ameet tweeted:

Naik island in a never before circumstance after the Panshet floods of 1961 was inundated. Yes, it was under water, as per eyewitness accounts of the Kachi tribes that live along the bank. MERI (Maharashtra Engineering Research Institute) now puts the water volume to be

considered for redrawing of the flood lines at 107724 Cusecs or almost double the volume of water, that's their data. Double the volume of water is now expected to be flowing down the same ecosystem and drainage in Pune. This is being done considering the latest rainfall patterns. TERI had predicted that rainfall will go up by about 37% over the next decade in their 2016 report in Pune. The rainfall trajectory is holding true as expected. There are increased incidences of huge urban flooding across Pune. Despite all of this. We continue to dump debris and concrete on the river bank and expect Pune won't flood. All the channels taking water into the river what we know as Odha or Nala are being blocked and constructed over to build a 30-metre road along the river bank. They'll reclaim 1546 acres along the river by dumping crores of tons of debris and concrete in it. That aside, I have physically counted over 50 outfalls in a 5 km stretch from PMC to Karvenagar. Over 37 outfalls between the two bridges of Koregaon Park to Kalyaninagar. The Consultants from CEPT have counted 88 in 44 kilometres. It's sheer genius I tell you, how they can teach others to forget how to count. Remember 15 lakh ₹ in your bank account, this is something similar. Anyways, this gives them & PMC the creative license to block and dump rubbish and debris over the surplus outfalls and later claim they never existed. Evacuation of flood water during climate events be damned. Our experience over the past decades teaches us we could go under water. They want to force their foolishness upon us in Pune by concreting our Riverbanks and killing this lifeline. Salim Ali Bio-diversity Park is already destroyed and dumped over, soon other wetlands also will be... they're trying very hard to replicate the damage at the Ram-Mula Confluence. Some noises are being made by

the rest of us but it's not enough. But what happens to the water. I guess, we will see what happens to Chennai, Nagpur & Mumbai on a regular basis begin to happen to Pune too. Both Chennai and Mumbai lose 30 days minimum to rainfall events each year and due to urban flooding. Mumbai GDP loses a Billion dollars per day due to flood outages. That's a billion dollar a day not small money. This is a straight cost to the economy and a straight cost borne by taxpayers because we are held hostage to visionless gutless politicians and a dead bureaucracy which delivered precisely nothing thus far and continues to do so. They fail everybody all the time, not one two three, all the time. Boat club and NM roads will flood, that's the impact of "rain" nowadays. Intense 100 mm rainfall events will get even more frequent - that's what the data is alluding to. This year Pune airport and Yerwada Jail both of which are far removed from the river had flooding incidents no matter, how mild. It doesn't matter where you are, if there is enough rain you'll drown.

- 28. To sum up, PMC does not even have the correct, up-to-date, reliable data to work on. Besides, there are no details available for the following to make any political intervention possible, which is the primary duty of the executive toward the elected bodies:
  - The exact details of encroachment within the unauthorized zone
  - b. The exact details of the outfalls of sewage into tributaries and rivers
  - c. The exact details of the sewage network: present and planned
  - d. Any timeframe to completely stop pollution of tributaries and rivers

Funds Have Been Available but Remain Unused Since 2016

- 29. According to PMC webpage, the funds were sanctioned on 14/1/2016 for the project titled, "Pollution Abatement of River Mula-Mutha" (PARMM) at Pune" Under the National River Conservation Plan (NRCP). The MoU for this was signed earlier with Japan's funding agency, Japan International Cooperation Agency (JICA), on 13/2/2015 for a loan of Rs. 990.26 Cr. It is believed that the fund has been enhanced, but no such information is seen on the PMC website.
- 30. According to the Ministry of Jal Shakti, PDC of the project was six years from January 2016, that is, up to Dec 2021. However, the <u>PMC webpage states</u> that the "Hon'ble Prime Minister of India Shri Narendra Modi inaugurated the project on 06/03/2022". This discrepancy is not explained.

#### Netherlands' "Room for the River" Program Has A Lesson For the Politicians

- 31. In the absence of data, it is challenging to determine the extent of encroachment into the floodplains of the Pune rivers. However, given the known global practices it is surprising that our educated, modern politicians also did not act. Was it for real-estate interests, or lack of political will? Or perhaps both?
- 32. A prime example is the Netherlands' "Room for the River" program, where authorities relocated houses, farms, and businesses from flood-prone areas to allow rivers to expand naturally. The Netherlands' case is similar to Pune. Both faced settlements, businesses, and infrastructure built within floodplains, increasing flood risks. In both cases, riverbanks were encroached upon due to urban expansion, leaving no room for excess water during heavy rains. The Netherlands expanded river space—Pune is shrinking it. Expert inputs in DPR would have helped the political leadership to seriously consider relocation.

PMC Has Misrepresented River Rejuvenation.

- 33. In its true geological and ecological sense, the term "River Rejuvenation" refers to pollution abatement, water quality restoration, and ecological sustainability. However, in a baffling contradiction, a project supposedly designed to reverse environmental degradation has been made subject to environmental clearance, as if the PMC's contracted project of river rejuvenation with that very project title were a destructive infrastructure project rather than a restoration effort. It is.
- 34. This oxymoronic requirement should have been evident, yet the executive, the NGT, and even the judiciary have failed to recognize this contradiction. Instead of questioning why a river restoration project requires environmental clearance at all, they have allowed the project's true objective—pollution control—to be sidelined in favour of urban beautification and real estate-driven development over a polluted river.
- 35. It is noteworthy that the minister heading the Ministry of Jal Shakti stated on 09/8/2021 in answer to a Parliamentary question from a RS Member had informed that environmental clearance was not required for the project.

## Why is PMRDA Not Building Cities to Compete with Pune?

36. Pune Metropolitan Regional Development Authority (PMRDA), established in 2016 would have been a part of the solution. PMRDA's mandate is of building new cities (it has under its jurisdiction land to accommodate over 50 Chandigarhs) to create opportunities, which would lead to reverse migration from Pune. Instead, PMRDA, as reported by <a href="PuneTimesMirror on 01/10/2024">PuneTimesMirror on 01/10/2024</a>, is engaged in municipality work of building sewage network at PCMC under the central project funding. This particularly affects the city of Pune more than PCMC, since Pune is bursting at seems, in the present case at the rivers.

## Why There is No Clarity Over the Funds?

- 37. For the same land area multiple figures of the cost of the project/s have been floated in the public domain, with no transparency on how the funds are distributed:
  - h. In Jan 2016, the project took off with funding of Rs. 990.26 Cr from JICA;
  - i. <u>In Jan 2018</u>, the <u>DPR</u> (without undertaking sewage network and STP works) reflected the figure of Rs. 2619 Cr.
  - j. In <u>Nov 2019</u>, the first <u>Environmental Clearance</u> was obtained for a project cost of **Rs. 280 Cr**.
  - k. The <u>undated second Environmental Clearance</u>, <u>presumably in 2023</u>, shows the project cost of **Rs. 4700 Cr**. It is noteworthy that the project does not commit any sewage/STP work outside of the riverside.
- 38. The details would be contained the various sanction letters. The Indian Express

  Pune reported on 14 Jan 2025 that PMC was not able to produce the project sanction letter for the local MP's perusal. The secrecy over the public funding of a suspect project raises questions over the transparency of river governance.

## Is PMC Regulating Sewage Networking of New Constructions?

39. In this very month on 14/1/2025, Pune-Sixteen received and forwarded a written complaint from Model Colony residents that several buildings' including two newly constructed high-rise buildings' sewage is connected to Shivaji Nagar Nala which drains into Mula River. This shows that even as a large number of properties are under re-development to high-rise buildings, PMC's regulatory mechanism for sewage networking is not meeting the required standards.

#### The Real Estate Ambition Has Delayed the Priority Work

40. Had PMC followed the original river rejuvenation plan—which was sanctioned in 2016 with all necessary funding—the project (minus the riverfront beautification)

would have been completed within the stipulated six years, by Dec 2021. Thereafter, the beautification of the riverbanks would have been a logical next step. Instead, even today, untreated sewage continues to be discharged into the rivers and nalas.

### Obsolete Part of the 2007-27 DP Invoked to Destroy Existing Riparian Forest

- 41. The 2018 DPR (see Page 166) had claimed the riversides for development of Rural Riparian (37%), Urban Riparian (42%) and Engineered Sections (21%). Accordingly, any road that may have been shown on the 2007 DP passing through the existing riparian could be considered deleted from the DP.
- 42. However, even after obtaining revised Environmental Clearance a stretch of natural riparian forest along the Mula-Mutha river has been cleared by PMC. We have the disturbing pictures of the wetland <u>BEFORE</u> and <u>AFTER</u> the act showing the outrageous destruction of trees. Activists reported that the permission under the Tree Act was clandestinely obtained to destroy more trees than actually listed.
- 43. As reported by this citizen and Ameet Singh in the Times of India Pune, the Tree Authority constructed under the chairmanship of the Municipal Commissioner has long lost its legal sanctity after PMRDA came into existence. Under the Tree Act, in a metro region the local Tree Authority must be chaired by the Metropolitan Commissioner and not Municipal Commissioner.
- 44. Even as PMRDA has publicly announced creation of the new Tree Authority and warned the public against felling of trees without its express permission, the defunct Tree Authority under the Municipal Commissioner continues to function with impunity. Ameet Singh's legal notice in this regard is not denied by PMC.

45. This shows that even the existing riparian forests to be preserved along the riverside project take a backseat for creating land for development potential.

#### CONCLUDING REMARKS

- 46. The first step in stopping this "greenwash" is simple: SEIAA must revise PMC's Environmental Clearance based on MPCB's notice, making 5a and 5c genuine preconditions for any further work. PMC must not proceed with its version of riverfront development until these are fully completed and maintained—permanently.
- 47. Citizens are disheartened by the failure of all three pillars of democracy—legislature, executive, and judiciary—to uphold ecological integrity of Pune rivers. Even the NGT, a tribunal allowed considerable flexibility of overreach, has paradoxically upheld an environmental clearance for a project that contradicts its own stated purpose. The contracted project's real intent is obvious, yet, given the judicial backlog, this outcome is not surprising.
- 48. This puts the onus on the Press and the public to hold these institutions accountable. They can should rise to the occasion and be a strong voice of the Pune's rivers.

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