



PRESS RELEASE

Integrated Urban Water Management Approach Can Address Bengaluru's Water Woes

A new study on Bengaluru's water, wastewater and lake system by ATREE proposes an integrated approach which is more sustainable and should be incorporated in the revised master plan for the city to maximize economic, social and environmental benefits in an equitable manner.

Bengaluru, India (December 19, 2017): Ashoka Trust for Research in Ecology and the Environment (ATREE), today organized a workshop to disseminate the findings from its recently concluded 3-year long research on Bengaluru's water, wastewater and lake system.

The goal of this study was to evaluate the range of options for water and wastewater management, and provide input to civil society and policy makers as to how a 'sustainable, equitable water vision for Bengaluru' by 2035 may be implemented.

The three-year long study included survey data on household and commercial, industrial and institutional (CII) water consumption, analysis of KSPCB records, population, household and economic census data, the BWSSB billing database and water cess records. The study relied on advanced modeling methods to provide a holistic picture of the city's water and wastewater future.

The new study led by Sharachchandra Lele, Senior Fellow, Convenor (Centre for Environment & Development), Veena Srinivasan, Fellow & Programme Leader, Water, Land and Livelihoods Programme and Priynaka Jamwal, Fellow, Centre for Environment and Development, from ATREE, proposes an "integrated urban water management approach" that involves reduced dependency on inter-basin transfers that render the city vulnerable to projects being blocked by competing claims by farmers.

"So far there was no study detailing how the city of Bengaluru can live on its own resources by utilising both rain water and recycled wastewater. Our model of Bengaluru's water, wastewater and lakes suggests that such a model is indeed feasible in quantity terms. External dependence on Cauvery could be limited by treating wastewater and storing it in lakes. This would entail a "win-win" for Bengaluru's lakes and overall resilience while minimizing the need for destructive projects, said Veena Srinivasan.

The study also provides insights on a range of other issues. These include the following

- **Domestic Water Use: It was found that** only 20% of the households reported using rainwater. But these households reported a much lower dependence on piped water use -- 18 litres per capita per day (LPCD) less than the average of 123 LPCD. This suggests that rainwater harvesting remains an untapped resource and has potential to reduce Bengaluru's water needs.
- **Commercial, Industrial and Institutional (CII) Water Use:** The study reveals severe deficiencies in the way water data are reported in public records as well as Annual Reports making estimation of CII water use extremely challenging and recommends that standardised reporting formats are needed.
- **Wastewater Treatment:** Bengaluru faces the twin problem of too little STP capacity, yet the existing capacity is under-utilized. Creation of new centralised wastewater treatment infrastructure should go hand in hand with laying of underground drainage network. Although the government has been promoting decentralized wastewater treatment, there are two problems. First, most of the treated wastewater is not reused because there is still no market for the treated effluent. Second, compliance levels are low and the government needs to provide incentives to apartments.

A key highlight of the workshop - Citizen's Dashboard for Bengaluru's Lakes was also introduced during the workshop. An open source data platform, Citizen's Dashboard for Bengaluru's Lakes makes relevant data accessible to citizens' groups. The project aims to support all those citizens' groups who are actively responsible for maintenance of their lakes, and to ensure that the correct use of data brings in the required social change. An introduction to the dashboard as a tool for citizen engagement was presented during the workshop and citizen groups were trained on using low-cost water quality kits.

"The premise of Citizen's Dashboard for Bengaluru's Lakes is that despite years of research, both the government agencies and the citizens are ill-equipped to handle the management of these lakes as information is neither consolidated nor made usable to facilitate easy and informed decision making. Moreover, with various stakeholders and government departments having different responsibilities, there is no common platform to bring data and information from all these sources together," said S Vishwanath, Director, Biome Environmental Solutions.

The workshop concluded with a panel discussion on “Whose wastewater is it anyway?” Bringing together various experts including S. Vishwanath, Director, Biome Environmental Solutions, Sridhar Pabbisetty, CEO, Namma Bengaluru Foundation and Sharachchandra Lele, Senior Fellow, ATREE. The panel discussed the competing claims on Bengaluru’s wastewater. Who should it go to, farmers, parks, urban reuse or industry? What implications do these alternatives have on Bengaluru’s water security?

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About ATREE:

ATREE (www.atree.org), a global socio-environmental think tank was established in 1996 on the principles of environmental justice, to address pressing issues in biodiversity, water and climate change. ATREE conducts problem-driven interdisciplinary research and offers a PhD programme. It synergises multiple identities as a think-tank, academic institution and a grassroots organisation.

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