

Mapping Pollution in Godavari

Why in news?

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A group of U.S. researchers is working on a system to map surging pollution trends in the Godavari.

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What is the project about?

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- The exercise is part of a Bill and Melinda Gates Foundation project. $\space{\label{eq:stable} \space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\space{\s$
- It is to support the programme of the Administrative Staff College of India (ASCI) to provide city-wide sanitation improvements in urban Andhra Pradesh.

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- The team's long-term objective is to inform State officials and citizens of a probable spike in levels of dangerous microbes or effluents. \n
- The project has identified two "hotspots" of pollution. $\slash n$

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What methods are used?

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- The methods includes satellite-monitoring to collect water samples. $\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\space{1mm}\spac$
- It also uses special sensors to measure bacterial and chemical pollution. $\slash n$
- Cloud-based data collection and real-time mapping is also used.

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- The sampling exercise measures parameters such as total dissolved salts, nitrate, pH, temperature, turbidity and electrical conductivity. \n
- These are then relayed to map environmental parameters for analysis. $\ensuremath{\sc n}$

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What are the advantages of this project?

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- It is accesses "raw data" that could be used to inform the efficacy of a proposed faecal sludge treatment plant \n
- It also can be used to analyse behavioural interventions including incentives or punishments to restrict activities that pollute the river could actually work.

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- It can detect and anticipate pollutants that enter the Godavari. \slashn
- It can develop an economical river water forecast system. $\slash n$
- In advanced stages, low-cost sensors can be used to measure microbial levels in real time.

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Source: The Hindu

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