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.
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- 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.
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- The project has identified two “hotspots” of pollution.
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What methods are used?

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- The methods includes satellite-monitoring to collect water samples.
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- It also uses special sensors to measure bacterial and chemical pollution.
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- 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.
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- These are then relayed to map environmental parameters for analysis.
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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
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- 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.
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- It can develop an economical river water forecast system.
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- 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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