Problem Statement: Water supply management system for the municipal corporation.

Background: Indore, like many cities, relies heavily on river water for its supply, with the Narmada River being the primary source. Despite having a system to measure the amount of water being drawn from the river, the city lacks the infrastructure to monitor the distribution of this water at the household level. This gap in monitoring leads to inefficiencies and potential wastage, making effective water management a critical concern for the city's administration.

Description: The key issue in Indore's water management system is the absence of a mechanism to measure and track the amount of water distributed to each household. Although the intake from the Narmada River is monitored, the distribution across different wards and areas within the city is not. This lack of measurement and tracking results in several challenges:

1. Inability to identify and address water wastage or leakages.
2. Difficulties in ensuring equitable distribution of water.
3. Lack of data to support decision-making for maintenance and upgrades of the water supply system.

Objectives:

- Implementation of Monitoring Systems: Develop and deploy both digital and physical systems to measure the amount of water received by each household in Indore.
- Data Collection and Analysis: Create a system for continuous data collection on water usage per household, enabling detailed analysis and reporting.
- Reporting and Management: Generate monthly and yearly reports on water distribution and usage for each ward and area. These reports will help in identifying trends, inefficiencies, and areas needing attention, ultimately leading to better water management and conservation strategies.
- Equitable Distribution: Ensure that water is distributed equitably across all households, preventing shortages and addressing any disparities in water supply.
- Leakage Detection and Prevention: Use the data to identify potential leakages or wastage in the distribution network and take timely corrective actions.