

💧 Delhi Under Water? Building a Smarter Monsoon Ready City

AI, IOT & Governance for Flood-Resilient Urban Delhi



Developed by
Team Dominators



From Reactive Flood Control to Predictive Urban Intelligence

The 1976 Ghost: Why Delhi Drowns



PLAN STATUS:
OUTDATED
(1976)

THE CRISIS: LEGACY INFRASTRUCTURE VS. CLIMATE EXTREMES

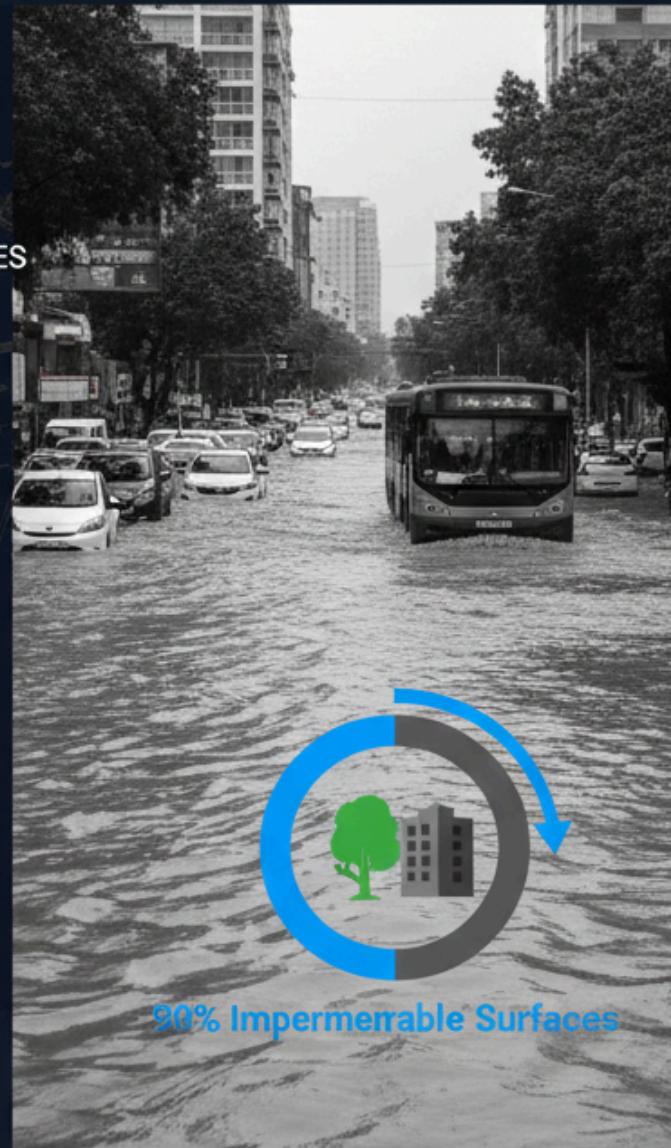
Delhi's drainage master plan, last updated in 1976, was designed for a city one-third its current size. Rapid urbanization and unauthorized construction have choked the ancient system.

THE GROUND REALITY

The Yamuna's backflow, intense cloudbursts due to "Urban Heat Island Effect", and a neglected network lead to inevitable flooding every monsoon.

The Silent Chokehold

70%



POPULATION GROWTH:
4.5M (1976) → 33M (2024)

DRAINAGE CAPACITY:
Static since the 70s

RAINFALL INTENSITY:
15 days in rain in 3 hours



Eyes on the Ground: Ultrasonic Sensors & Real-Time Telemetry



- 30-Second Precision: Real-time monitoring at underpasses
- The Dominator Node: Solar-powered LoRAWAN & 4G connectivity
- Disaster Proof: Active during power outages



POPULATION GROWTH:
4.5M (1976) → 43M (2024)

DRAINAGE CAPACITY:
Static since the 70s

RAINFALL INTENSITY:
10 days in rain in 3 hours



From Response to Anticipation: The AI Forecasting Engine

- Machine Learning: Historical data & live weather predict hours of advance.
- The Algorithm: Neural Networks calculate runoff, identifying vulnerable zones.
- Early **Warning**: Automated alerts, automatic & proactive resource deployment.

Predictive Flood Heatmap

Hotspot Alert

Sensor Data In

Flood Prediction

1-MOL

Predicted Water Levels



Empowering the War Room: A Unified Command Center

Single source of truth for PWD, MCD, & DDA.



FEATURE

Inter-Agency

Single source of truth for PWD, MCD, & DDA.

Smart alerts dispatch teams to hotspots instantly.

Real-time Overview

Live data on waves resources & response status.



Sustainable Urbanism: Recharging the Aquifer

Green Infrastructure for a Flood-Resilient Delhi

- **Beyond Drains: Bioswales & Permeable Pavement**

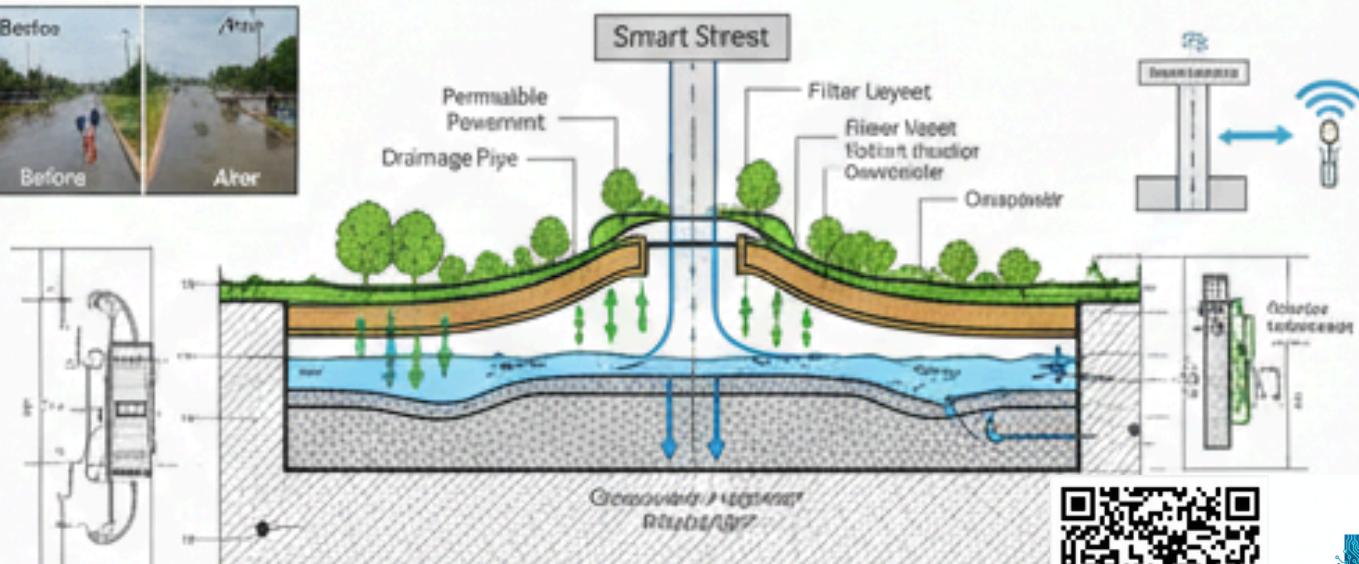
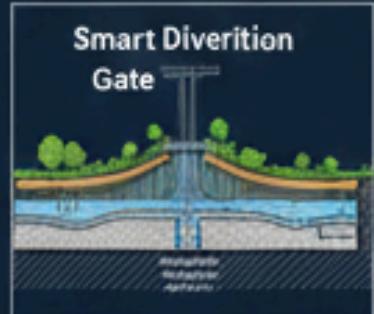


- **Rainwater Harvesting**

IOT-triggered gates divert excess water to recharge groundwater.



- **Green Infrastructure:** Reduces runoff, prevents flooding, and replenishes water tables.



Democratizing Data: The Citizen's Lifeline App

- **Real-time Rerouting:** Instant alerts & alternate routes via GPS.
- **Citizens report Reporting** issues with photos & location.
- **Crowdsourced Reporting:** Citizens photos & location.
- **Public Safety Map:** Live flood-risk map for informed travel.



Population Growth

Drainage Capacity

Rainfall Intensity



Vision 2026: A Flood-Resilient Capital

Implementation Roadmap: A 3-Year Plan



- Key Milestone: Reduce flood incidents by 60%.
- Projected ROI: ₹500 Crores saved annually.
- Scalability: Blueprint for other Indian cities



INDIA



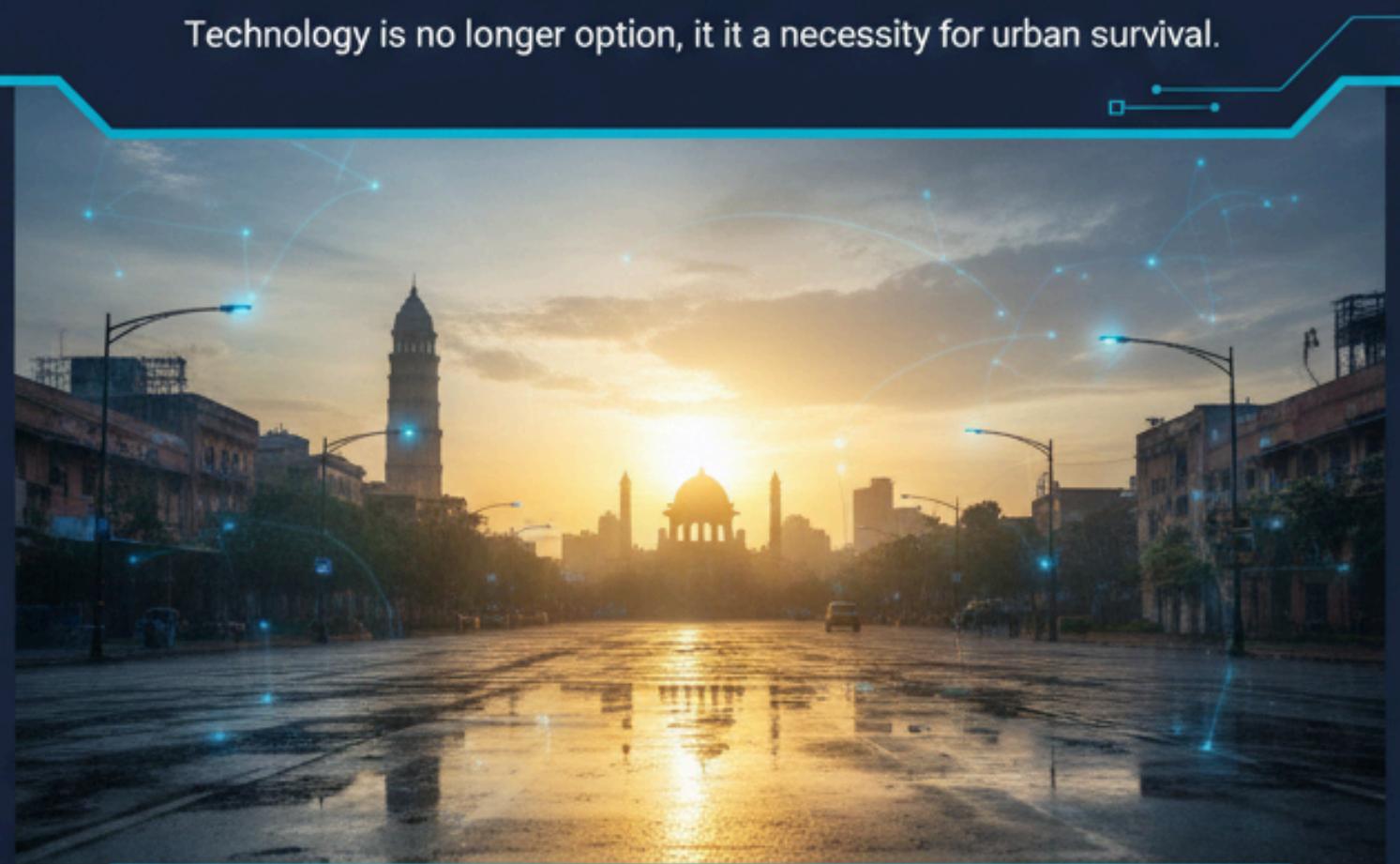
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Join the Revolution: Building the City of Tomorrow

Technology is no longer option, it is a necessity for urban survival.



ABOUT TEAM DOMINATORS :



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BACKEND TECH



RIA SARSAWAT
DATABASE TECH



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