



# UDAL

Urban and District Advancement by  
Localising Innovations



**MANGALURU**  
SMART CITY *Relay the go. Relay to Green.*

Mangaluru | 10 May, 2025

Organizing Partners:



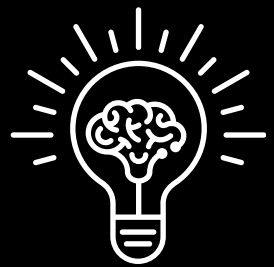
**inunity** | innovation  
for community



# THE VISION

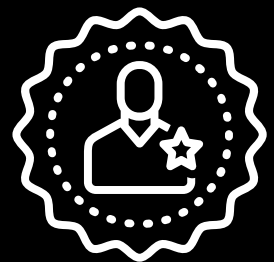
District Development by, from, and for the People is a collaborative initiative led by the Deputy Commissioner of **Dakshina Kannada District** that empowers citizens to actively participate in solving the district's most pressing challenges.

## OUTCOMES IN 3 YEARS



**1000+ Ideas**

applied for civil issues of  
Dakshina Kannada



**60 DC's Fellows**

Graduate out of 6  
editions of UDAL



**10+ Startups**

established and  
incubated in CEOL



# UDAL, IN ESSENCE

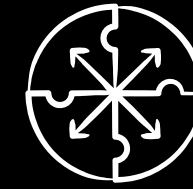
A 6-month biannual program that invites the youth to participate in solving pressing challenges of the region alongside the District Administration

CITIZENS | INSTITUTIONS | CORPORATES



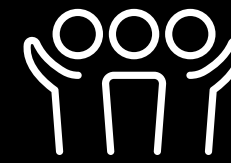
Mullai Muhilan M P, IAS  
DC, Dakshina Kannada

This movement creates a structured platform for individuals, institutions, and corporates to engage with government departments, co-develop solutions, and contribute meaningfully to the region's progress, all under guidance of the District Administration.



## 5 Themes

led by champions of the District Administration



## 100+ Youth

participants from Dakshina Kannada



## 20+ Mentors

from corporate providing technical mentorship



## 10 DC's Fellows

recognised and awarded as innovative citizens

All anchored by the DC himself

# DISTRICT-LED, PEOPLE-POWERED

## 1 Official UDAL Portal

A dedicated platform hosting all problem statements, public submissions, and updates — ensuring transparency and engagement.

## 2 5 Comprehensive Cases

5 pressing district challenges opened to the public, drawing over 200 ideas from engaged citizens.

## 3 Top 10 Idea Selection

Rigorous internal evaluation to identify 50 high-potential ideas based on feasibility, viability, and scalability.

## 4 10 DC's Fellows Announced

Ten top innovators are paired with champions of the District Administration to translate ideas into scalable solutions that serve the district.

# THEMES



## SUSTAINABLE CITY

Driving environmental transformation in D,K, by addressing single-use plastic reduction, promoting sustainable waste management, and enhancing green initiatives.



## PUBLIC HEALTHCARE SERVICE

Digitizing healthcare services at Hospitals, including streamlined medicine dispensary operations and blood dispatch tracking for improved efficiency and transparency.



## URBAN CITY PLANNING

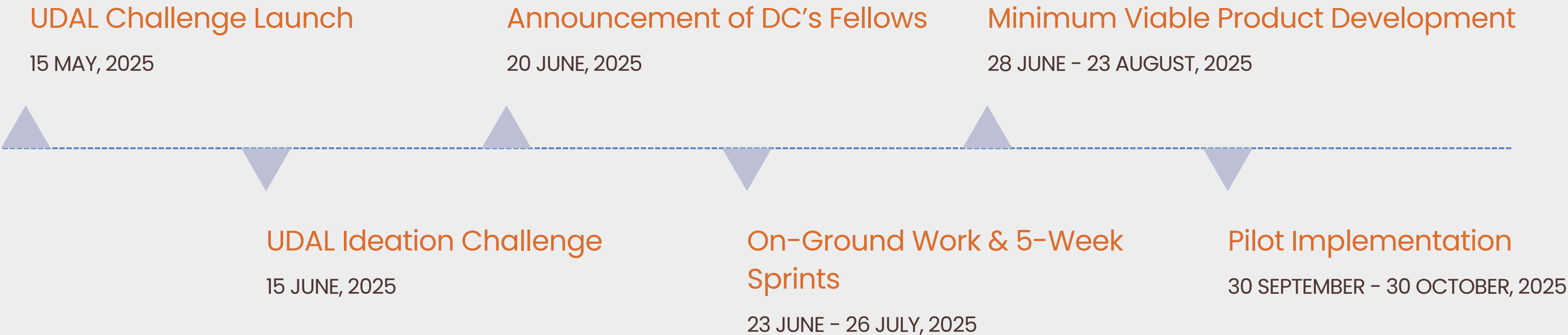
Improving urban infrastructure through effective road and construction management solutions tailored to the city's evolving needs.



## DISASTER MANAGEMENT

Mitigating monsoon-related waterlogging by analyzing and optimizing the location and functionality of urban drainage systems.

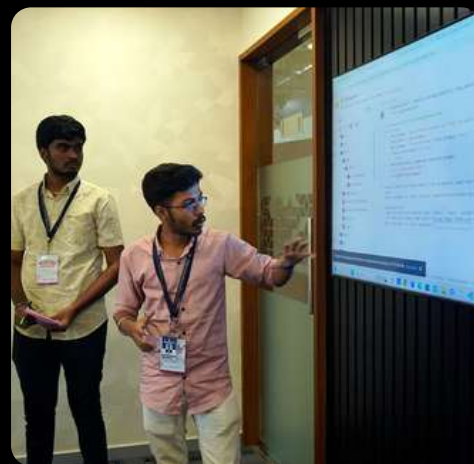
# TIMELINE





# SELECTION CRITERIA

The fellowship is designed not just to reward bright ideas, but to identify doers — individuals ready to walk the last mile with the administration.



▼ Understanding of Local Problems

▼ Relevant Skills + Strong Intent

▼ Ability to Execute on the Ground

▼ Alignment with District Priorities

▼ Commitment to Public Impact



# PILOT IN MANGALURU: SOLVE4DK

## DISTRICT ADMINISTRATION LAUNCHES SOLVE4DK INITIATIVE

Over 30 students were invited to the war room as a part of the Solve4DK initiative, where the DC introduced opportunities for innovation in the departments of the District Administration, starting a one of its kind civic innovation initiative pilot with engineering institutes in Mangaluru where close to 8 institutions were represented by their students.

30+

Student Participations

8+

Institution Participations

6+

Projects Developed





# WASTE WATCH

## A CITIZEN-FACING APP BUILT BY LOCAL STUDENTS

### SOLID WASTE COLLECTION MONITORING SYSTEM

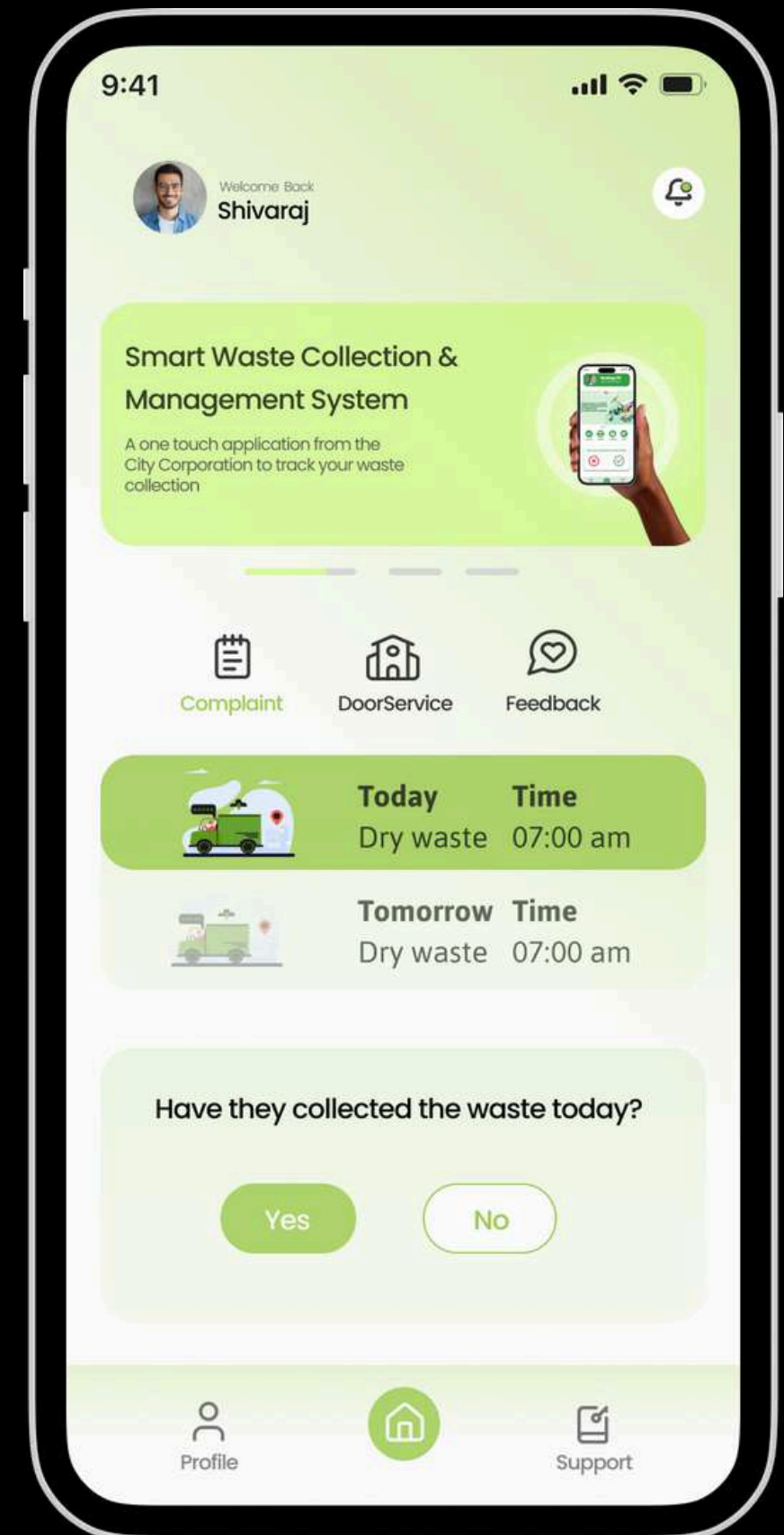
A team of students from Sahyadri College have built a citizen-facing mobile application designed to provide real-time updates on the schedule of waste collection. The app also empowers primary stakeholders to rate the Mangaluru City Corporation's (MCC) waste management initiatives and allows seamless ward-wise tracking for the Health Officer.

Current Stage:

## MVP Development

Partnering Institute

## Sahyadri College





# SMARTER ROUTES FOR 108

## STUDENTS BUILD FOR THE GOLDEN HOUR

### Smart Traffic Management for Emergency Vehicles

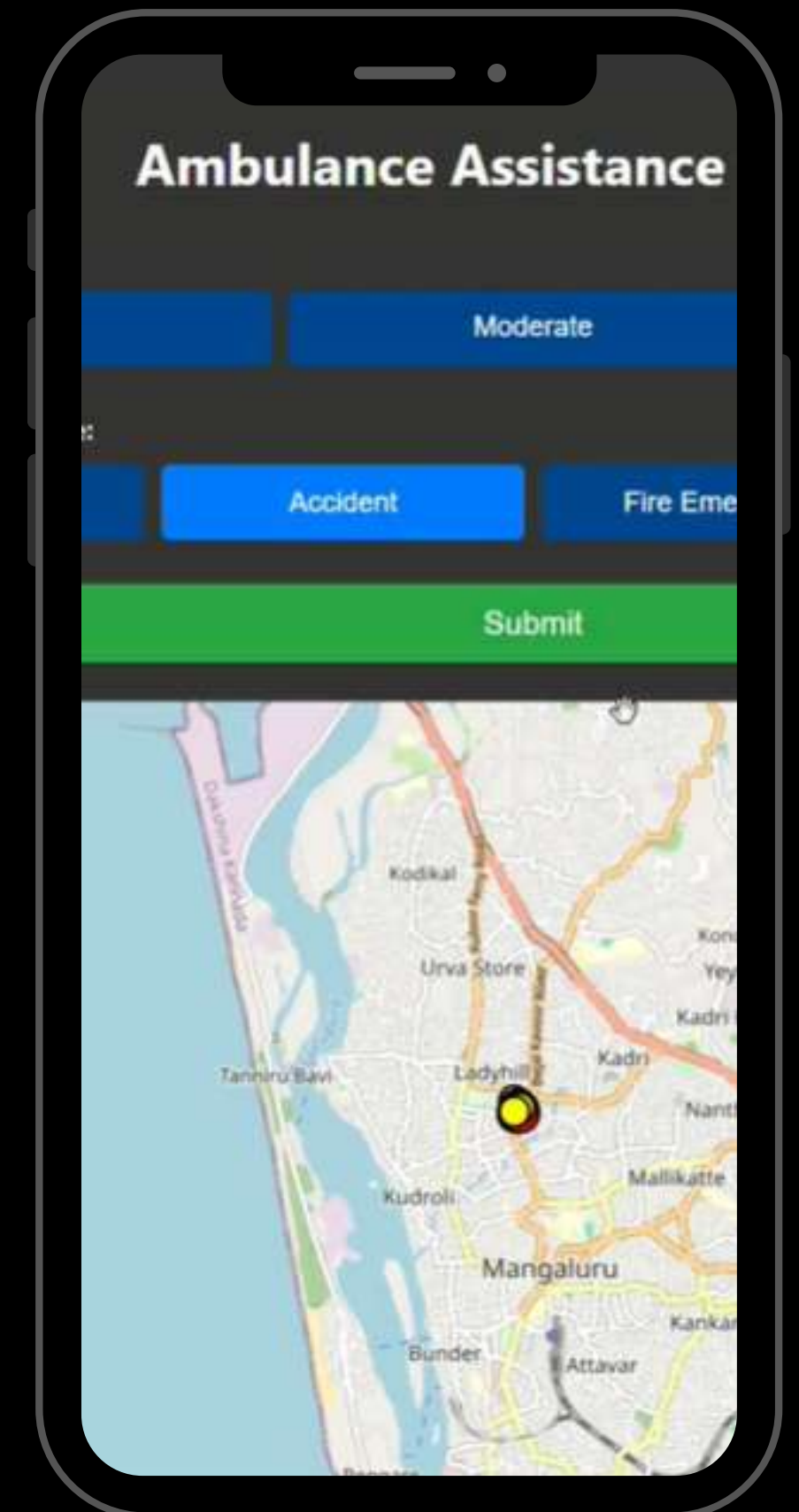
Team Rudra has built the MVP (Minimum Viable Product) for an ambulance route optimization application. Now they are collaborating with the Advanced Traffic Management System (ATMS) to identify key traffic lights, run a pilot project at a selected junction, and conduct research with Wenlock and other related hospitals to collect data on the 108 emergency response system.

Current Stage:

## MVP Development

Partnering Institute

## Sahyadri College





# ACADEMIC COLLABORATIONS







**ANNEXURE**



## PROBLEM STATEMENTS

# COORDINATED SCHEDULING OF ROAD & INFRASTRUCTURE WORKS

### STAKEHOLDERS:

- Private utility providers (e.g., telecom, gas companies).
- Water Supply & Drainage Board.
- Municipal Engineering Department.

In each ward, multiple infrastructure agencies and contractors dig roads for different projects—laying pipelines, cables, repairing drainage—without awareness of others' timelines. This leads to resource wastage and public inconvenience. The DC seeks a city-wide view to allocate digging permissions based on priority and to minimize duplication.





## PROBLEM STATEMENTS

# STORMWATER DRAINAGE THROUGH PIPE MAPPING

### STAKEHOLDERS:

- Municipal Engineering Department.
- Water Supply & Drainage Board.
- Utility and Infrastructure Departments.

During the monsoon, certain city roads repeatedly flood due to stormwater drainage issues. Many underground pipelines—laid by both public agencies and private players—drain directly onto roads or are damaged, blocked, or poorly maintained. Because these pipelines are not properly documented or mapped, it becomes difficult to identify.





## PROBLEM STATEMENTS

# DIGITIZING MEDICINE ACCESS IN THE DISTRICT HOSPITALS

### STAKEHOLDERS:

- District Health Officer (DHO).
- Hospital Administrators & Doctors.
- Health IT Department / NIC (National Informatics Centre).

Wenlock Hospital, a major public healthcare facility, requires every prescription to be routed to a senior health officer (like a District Health Officer – DHO) for approval before medicines are issued. This leads to long delays, particularly for low-income patients dependent on public healthcare. The lack of a digital workflow slows down treatment and strains hospital staff.





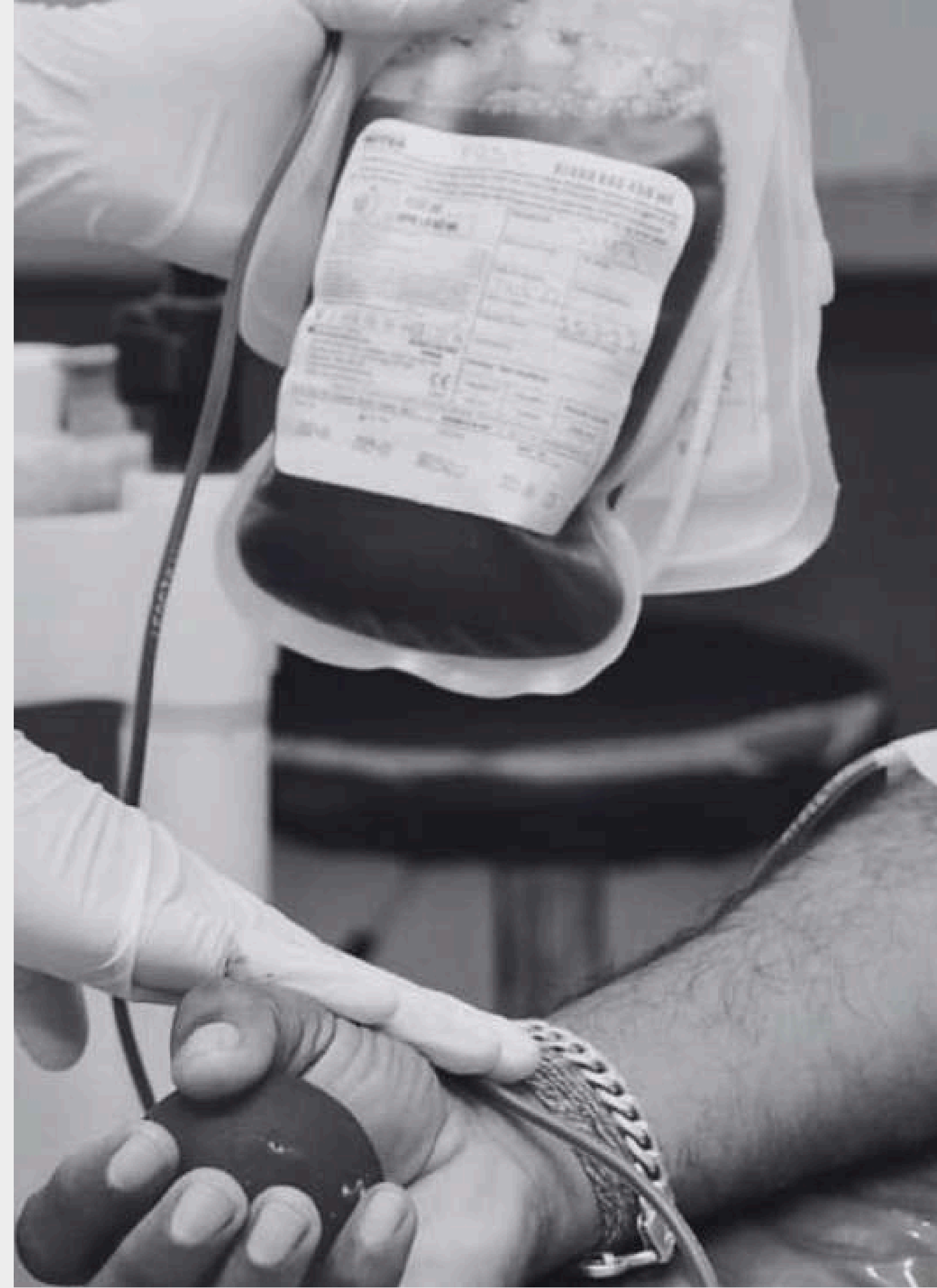
## PROBLEM STATEMENTS

# REAL-TIME BLOOD AVAILABILITY FOR CRITICAL PATIENTS

### STAKEHOLDERS:

- Blood Bank Staff and Technicians.
- District Health Officials.
- NGOs involved in blood donation and awareness.

In emergency cases like trauma, surgery or advanced illnesses, patients depend on timely access to blood. While blood banks handle donations and allocations, patients and their families are frequently left in the dark after the blood is requested or approved. The absence of a real-time tracking or notification system causes confusion, stress, and potential medical delays.





## PROBLEM STATEMENTS

# ENFORCING A BAN ON SINGLE-USE PLASTICS

### STAKEHOLDERS:

- Pollution Control Board.
- Urban Local Bodies.
- Trader's Associations.

The city has banned items like plastic bags, cutlery, and packaging materials, yet these continue to be used, especially by small retailers and vendors. Weak enforcement, low-cost availability, and lack of accessible alternatives keep the plastic economy running informally.

