



## CASE STUDY : **ROBOTIC MANHOLE CLEANING IN CHENNAI**

Transforming Urban Sanitation with Bandicoot Mobility Plus



**CLIENT :**

Chennai Municipal Corporation

**LOCATION :**

Chennai, Tamil Nadu

**SECTOR:**

Urban Sanitation &  
Sewer Infrastructure

**ROBOTIC SOLUTION DEPLOYED:**

Bandicoot Mobility+\*

\*Robotic cleaning of manholes across multiple city zones.

## PROJECT BACKGROUND

Chennai faced increasing challenges in maintaining clean and safe sewer manholes in densely populated areas, compounded by frequent urban flooding that disrupted city life and infrastructure. Manual cleaning methods posed safety risks and operational inefficiencies, especially during monsoon seasons when flooding intensified blockages. To overcome these challenges, Genrobotics deployed three Bandicoot Mobility Plus units across key zones starting in 2024.

## THE SOLUTION

To tackle these issues, Chennai Municipal Corporation deployed Bandicoot Mobility Plus, an advanced robotic cleaning system that improves efficiency, guarantees operator safety, and eliminates the need for human entry into manholes. With enhanced mobility, automation, and eco-friendly waste management, Mobility Plus transforms urban sanitation into a safer, faster, and more sustainable process.

## DEPLOYMENT HIGHLIGHTS (2024–2025)

**Area 6:**

1,401 manholes cleaned

**Area 9:**

1,397 manholes cleaned

**Area 13:**

1,512 manholes cleaned

**Total:** 4,310 manholes cleaned with zero human entry.

## CHALLENGES OVERCOME

- High traffic and confined spaces.
- Exposure to hazardous gases.
- Risks and inefficiencies of manual scavenging.
- Ensuring compliance with environmental and labor safety regulations.

## RESULTS

- Complete elimination of manual scavenging in all serviced zones.
- Enhanced safety for sanitation workers and improved operational efficiency.
- Improved sewer flow and reduced environmental hazards.