

# ***'Where to spend'* matters a lot for service delivery: A case of SWM services**

Name of the presenter: Shishir Gupta

Organization: CSEP

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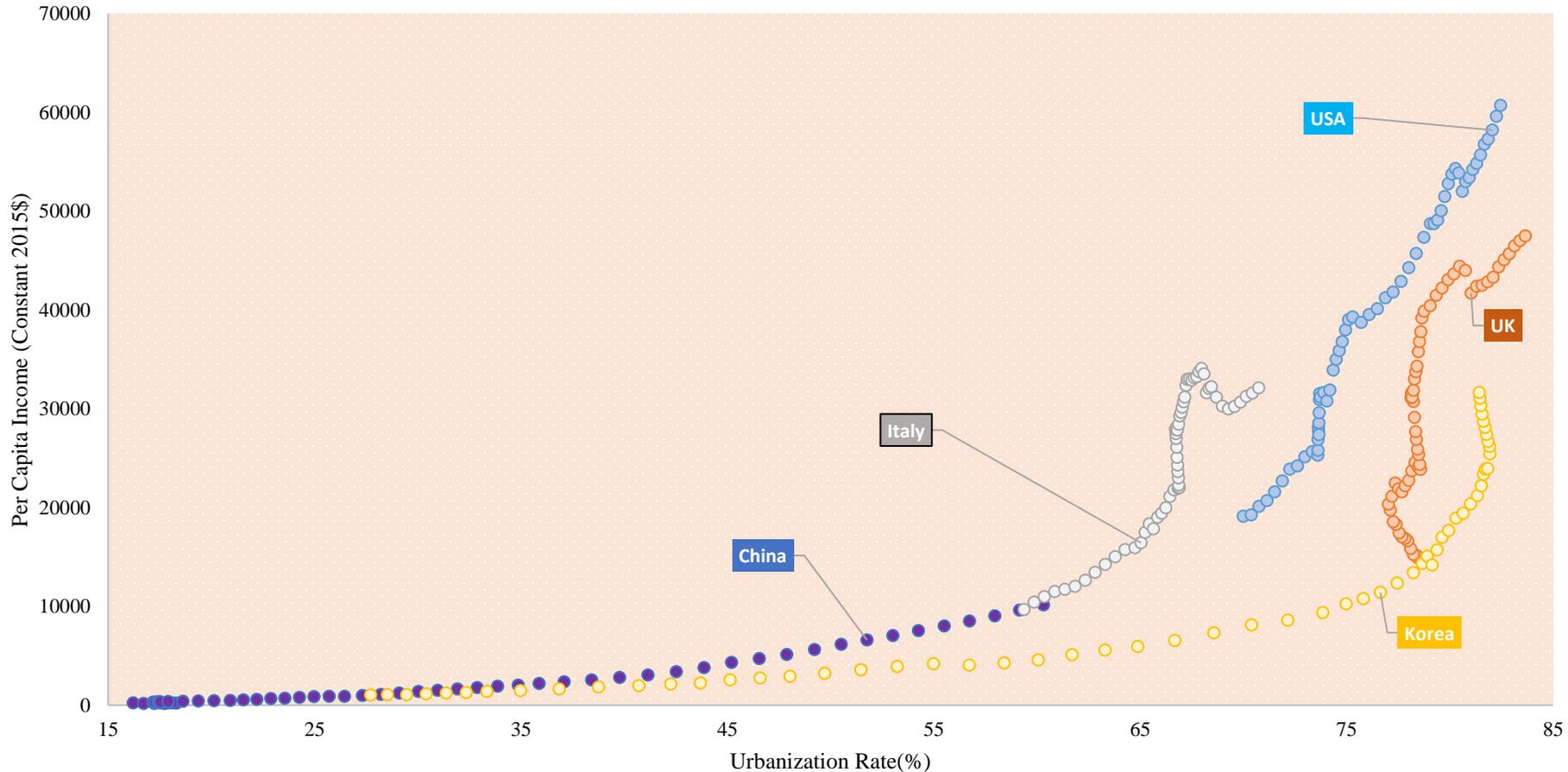
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# Urbanisation and prosperity go hand in hand

Urbanisation and Per Capita GDP (1960-2019)



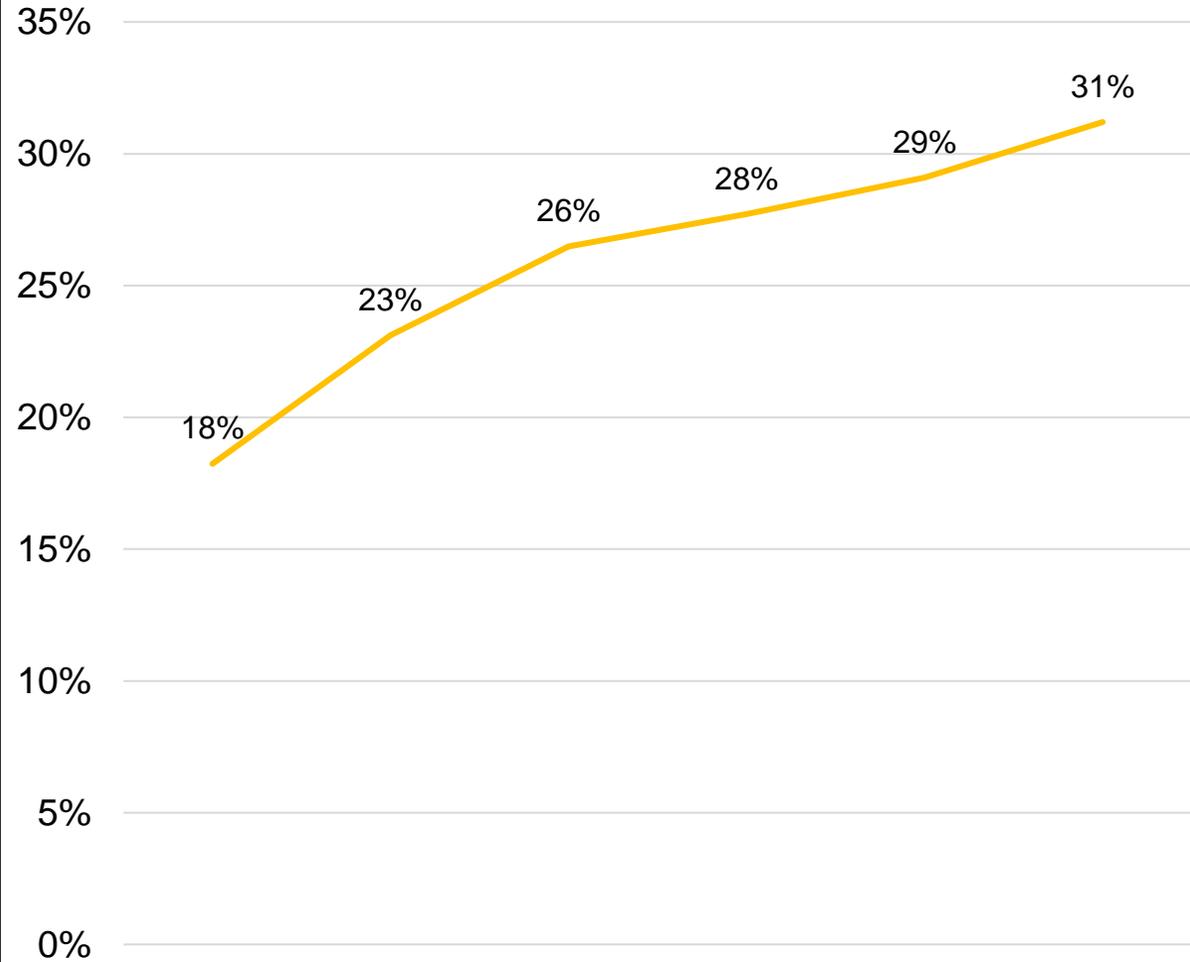
**The positive association is because urban areas have a) higher per capita GDP (compared to rural areas), and b) the per capita GDP growth is faster**

Source: World Development Indicators

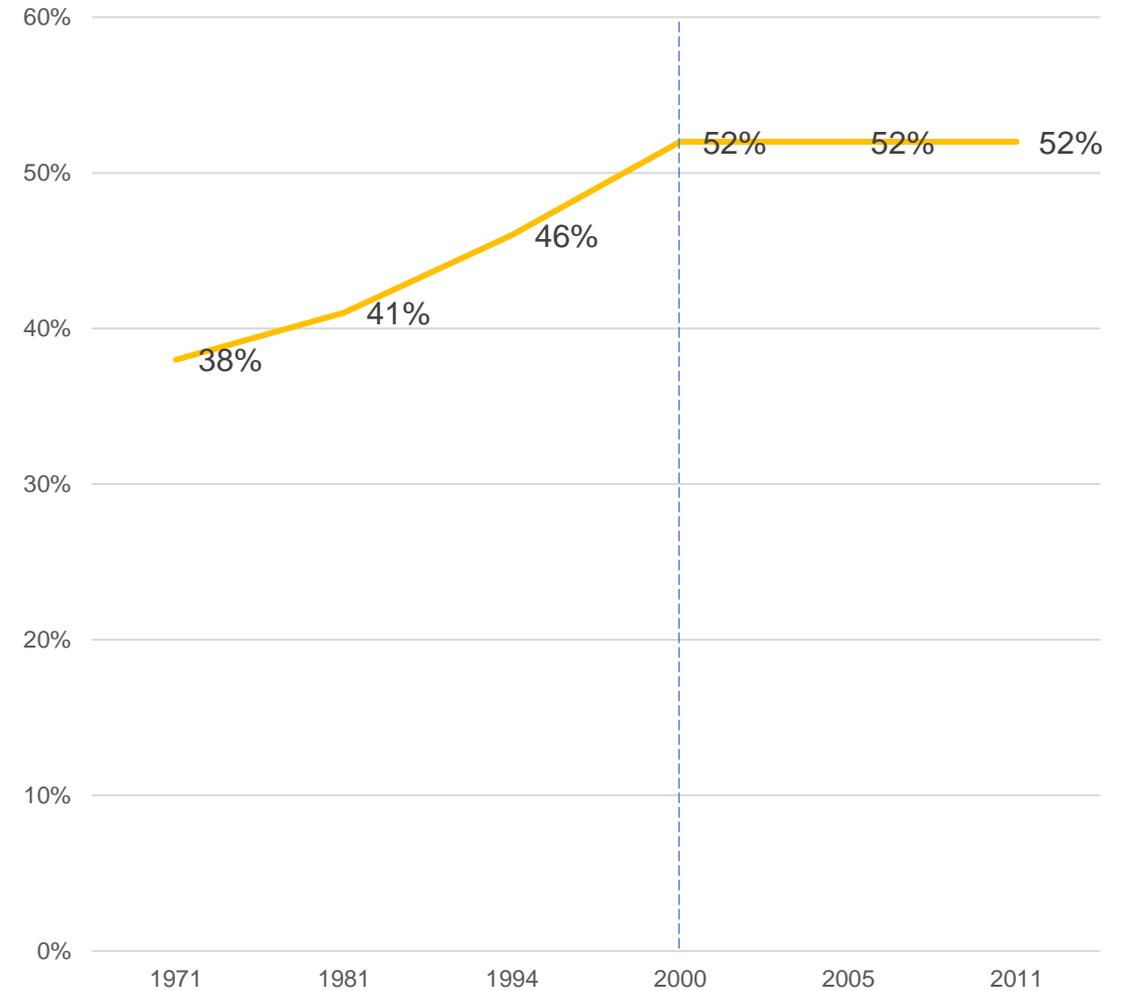
Urbanisation is defined as share of population of a country living in

# The virtuous cycle seems to have broken for India

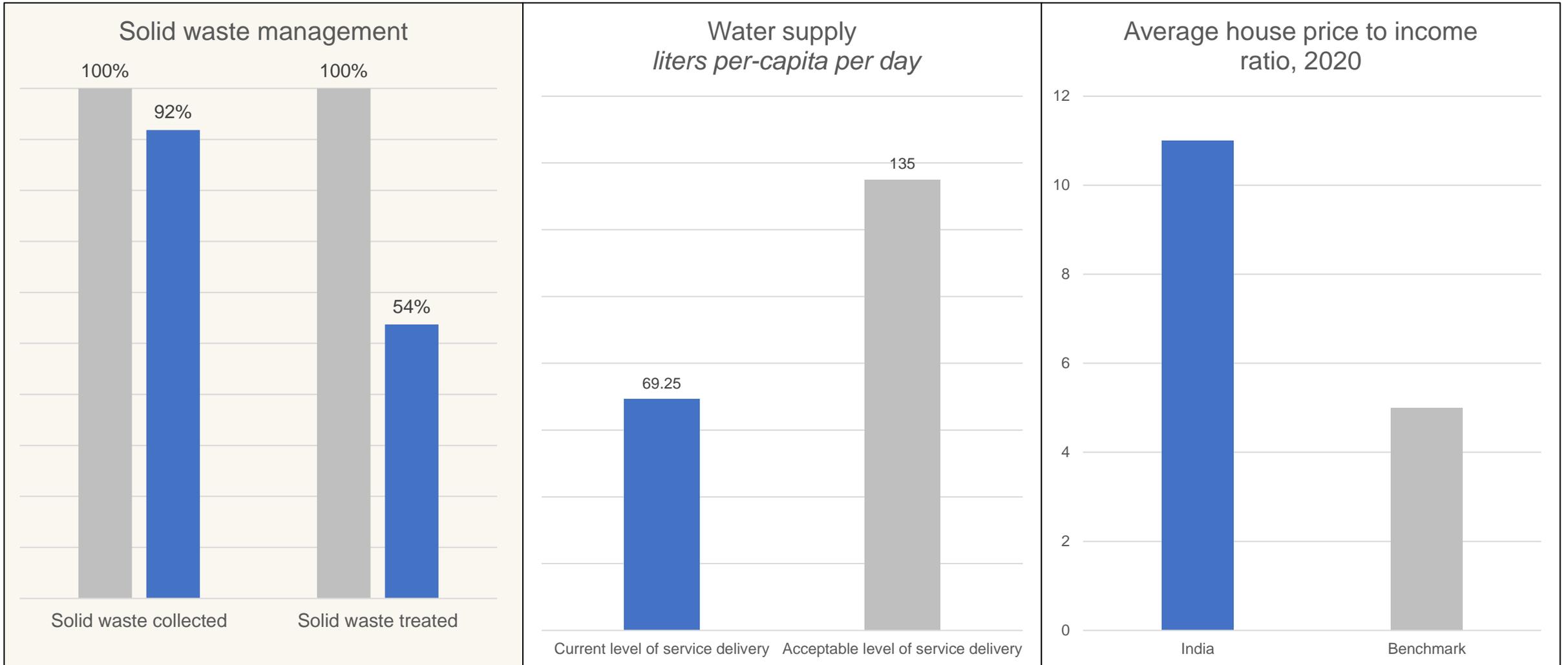
### Share of urban population in total



### Share of urban NDP



# Urban decay must be a big reason for this broken cycle



Source: CPCB reports, NFHS, (Gupta, Agnihotri, George, 2024)

# Higher spending is considered a must for improving service delivery

**THE HIGH POWERED EXPERT COMMITTEE (HPEC) FOR ESTIMATING THE INVESTMENT REQUIREMENTS FOR URBAN INFRASTRUCTURE SERVICES**

**Chairperson**  
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Former Registrar General of India

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National Institute of  
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**Shri P. K. Srivastava,**  
Joint Secretary and Mission Director (JNNURM),  
Ministry of Urban Development,  
Government of India

Improving service delivery to global benchmarks involve fundamental shifts in improving governance, planning and higher funding; the last is usually considered the most important

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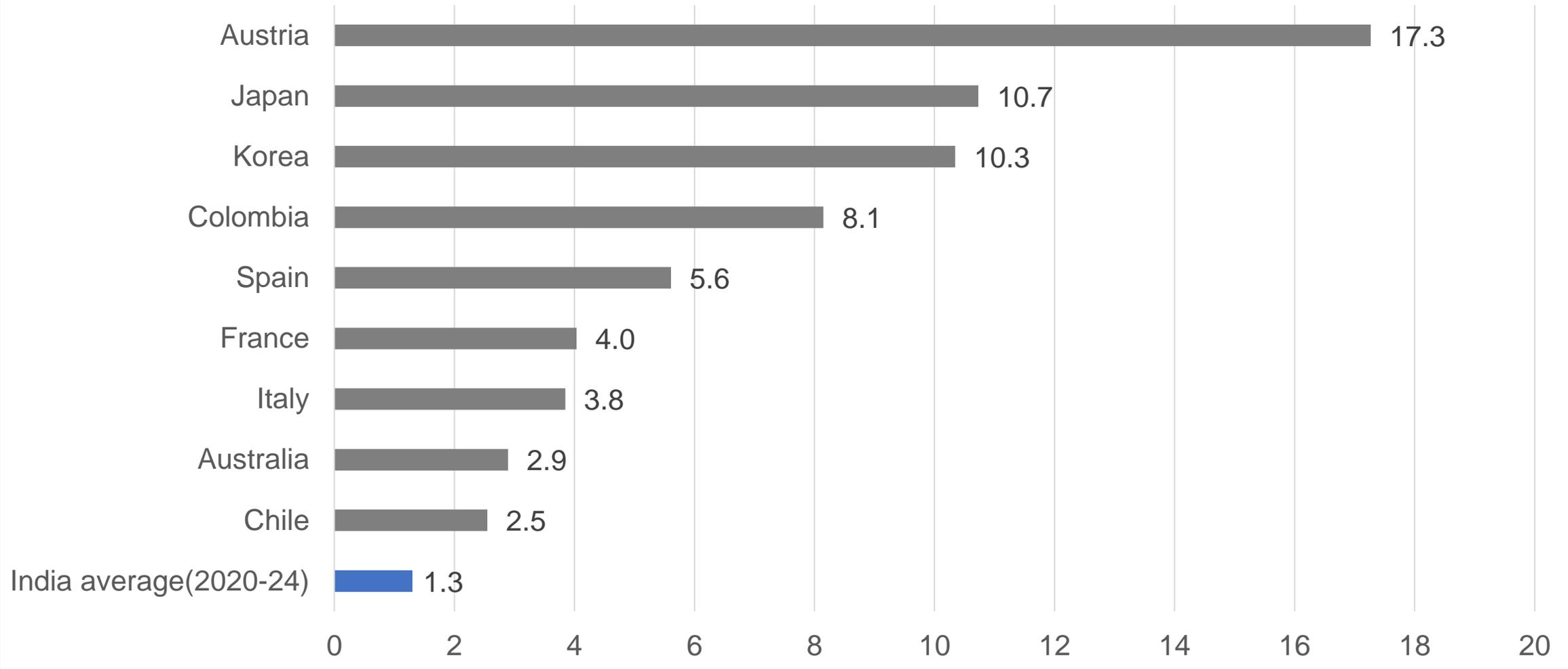
April 2010

India's urban awakening:  
Building inclusive cities,  
sustaining economic growth



# The assertion has valid rationale

Total municipal corporation expenditure as share of GDP, 2020



Source: Financially Empowering Municipalities, NITI Aayog; RBI, OECD

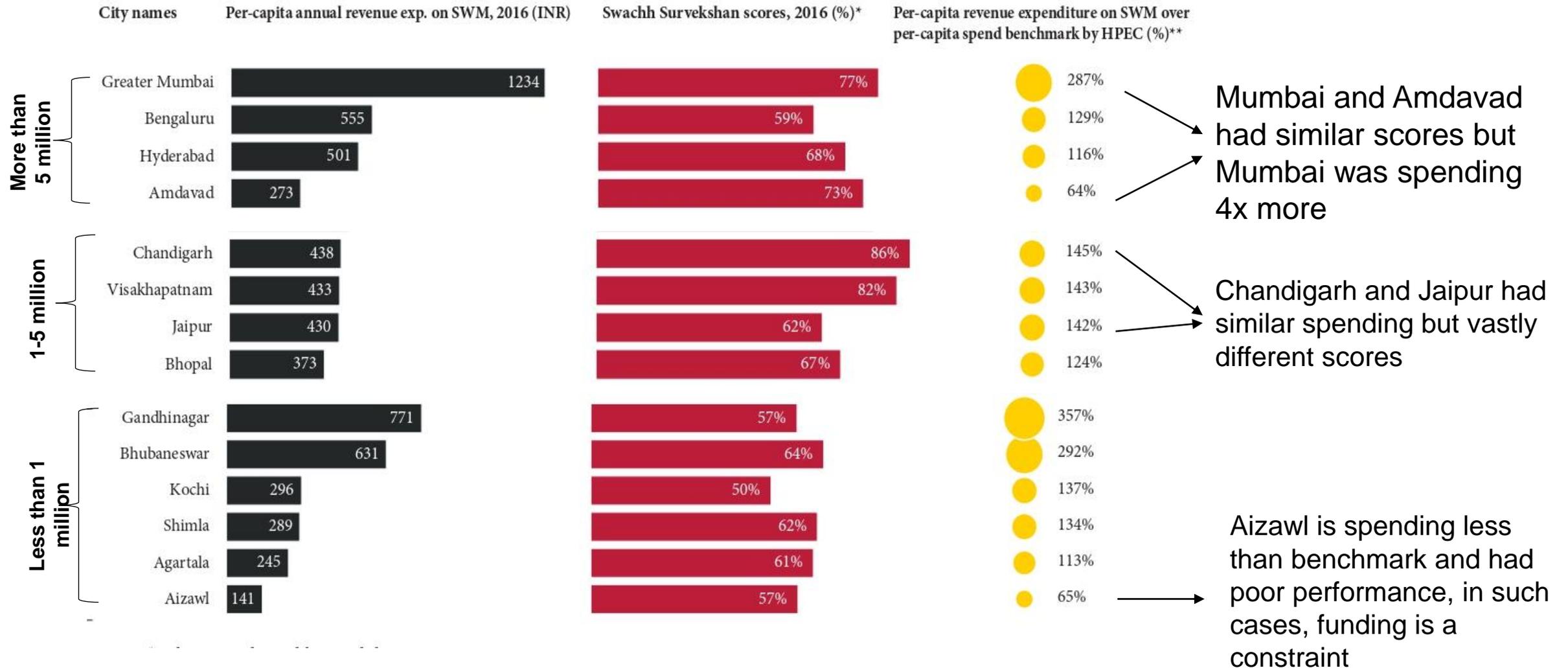
# A question...?

**IS HIGHER FUNDING NECESSARY  
EVERYWHERE FOR ANY IMPROVEMENT IN  
SERVICE DELIVERY?**

# We tested the funding constraint in the context of SWM services

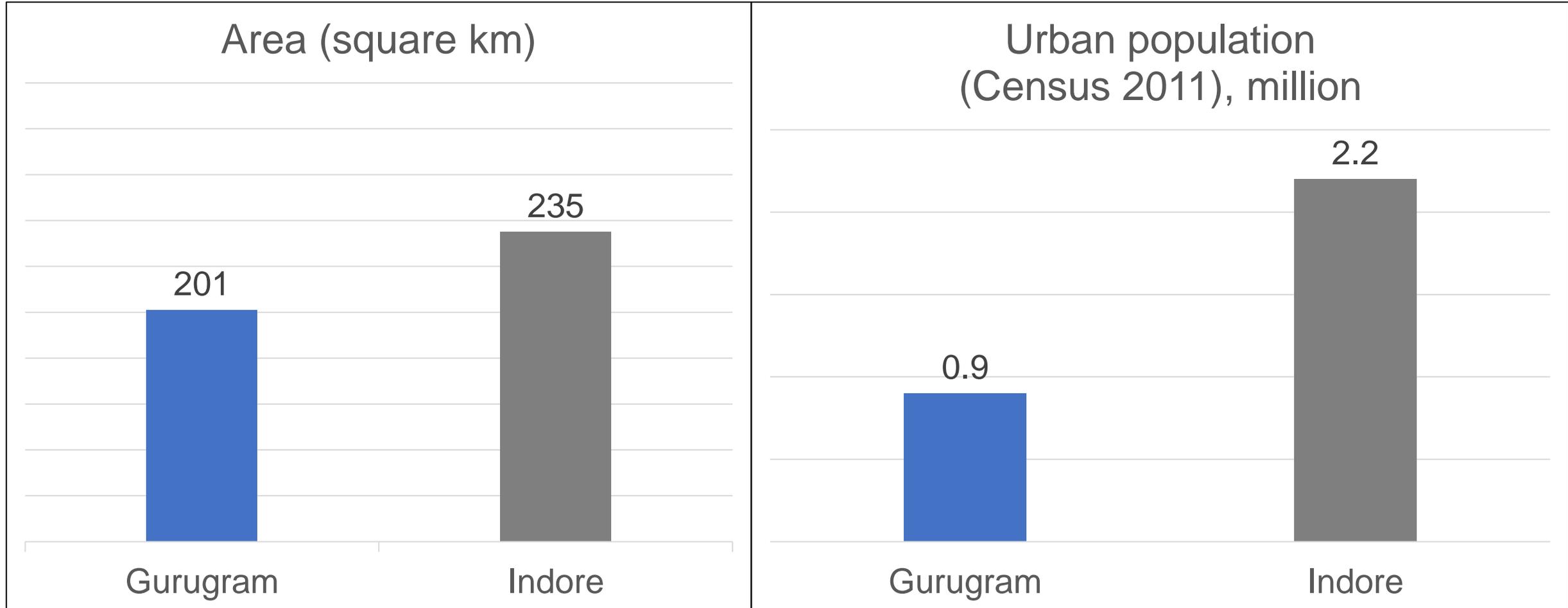
- Analysed expenditure on SWM and cleanliness for a sample of 27 major cities to answer the following questions:
  - How much cities spend on SWM relative to HPEC benchmark
  - Understand relation between the level of expenditure and its linkage with service delivery levels of SWM
- Revenue expenditure on solid waste management is used to understand the spend amount
- “*Swachh Survekshan*” scores, annual city cleanliness survey of India, is used as a measure of outcome of SWM

# Higher spending on SWM does not guarantee cleaner cities



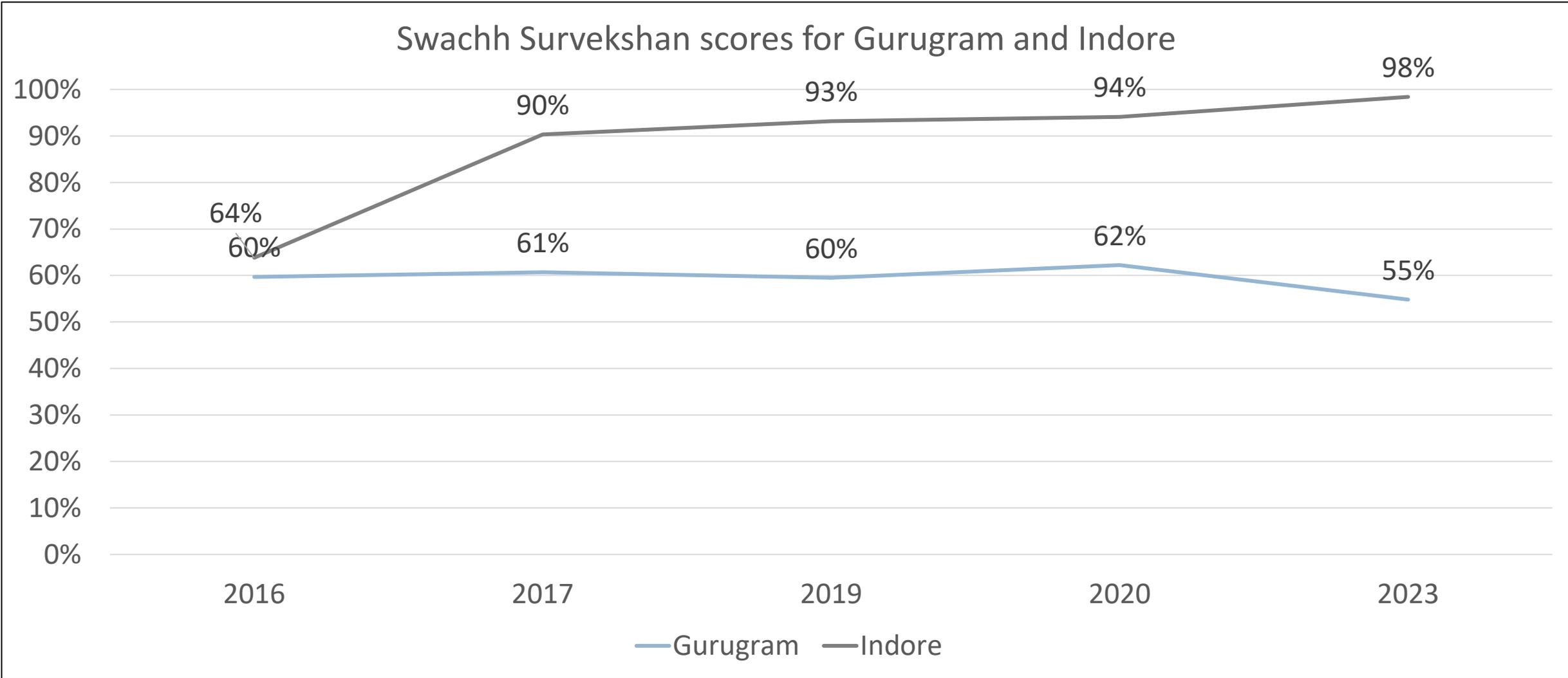
# COMPARING GURGAON AND INDORE

# Gurugram and Indore have similar area, but the former has half the population

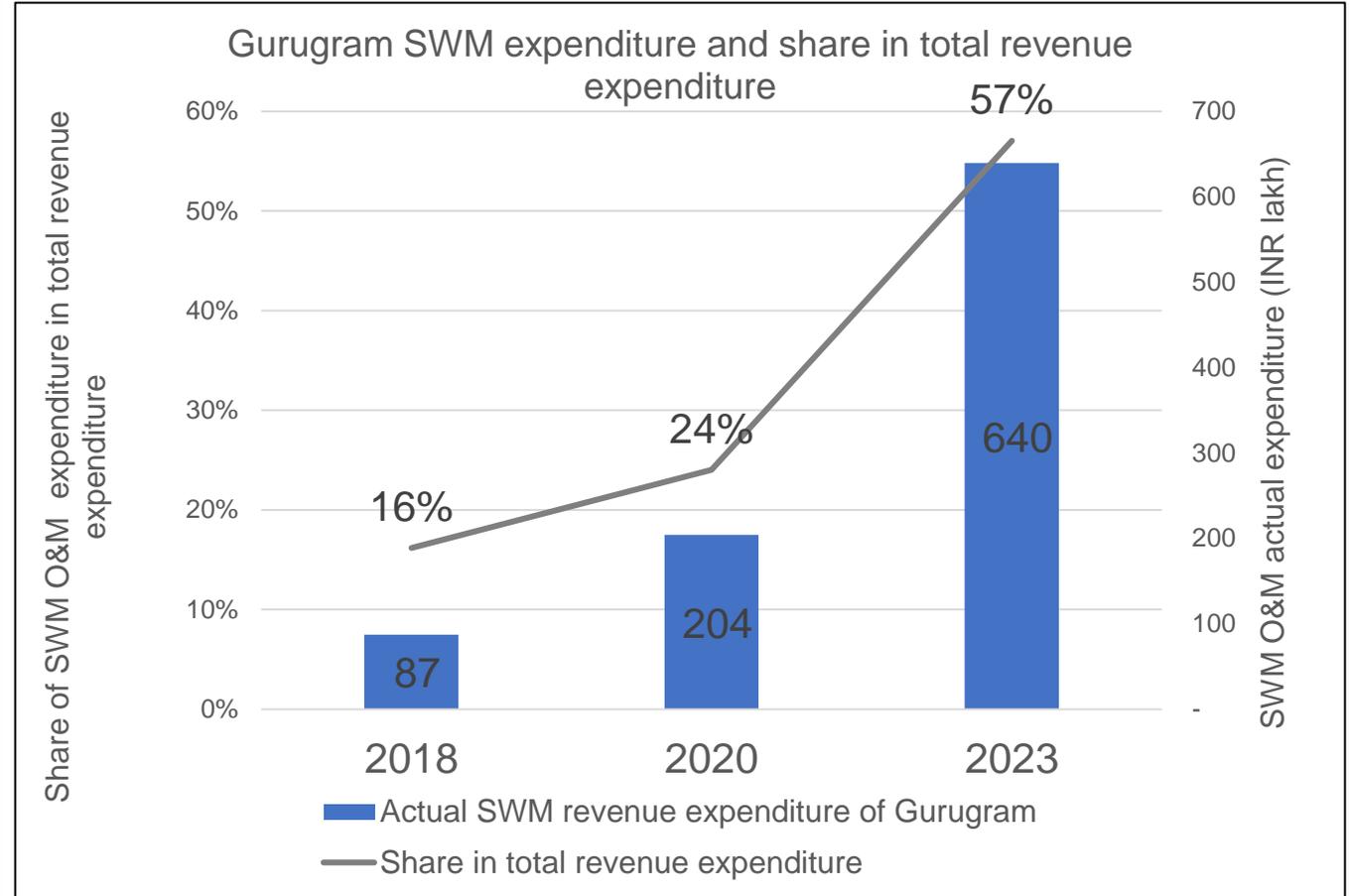
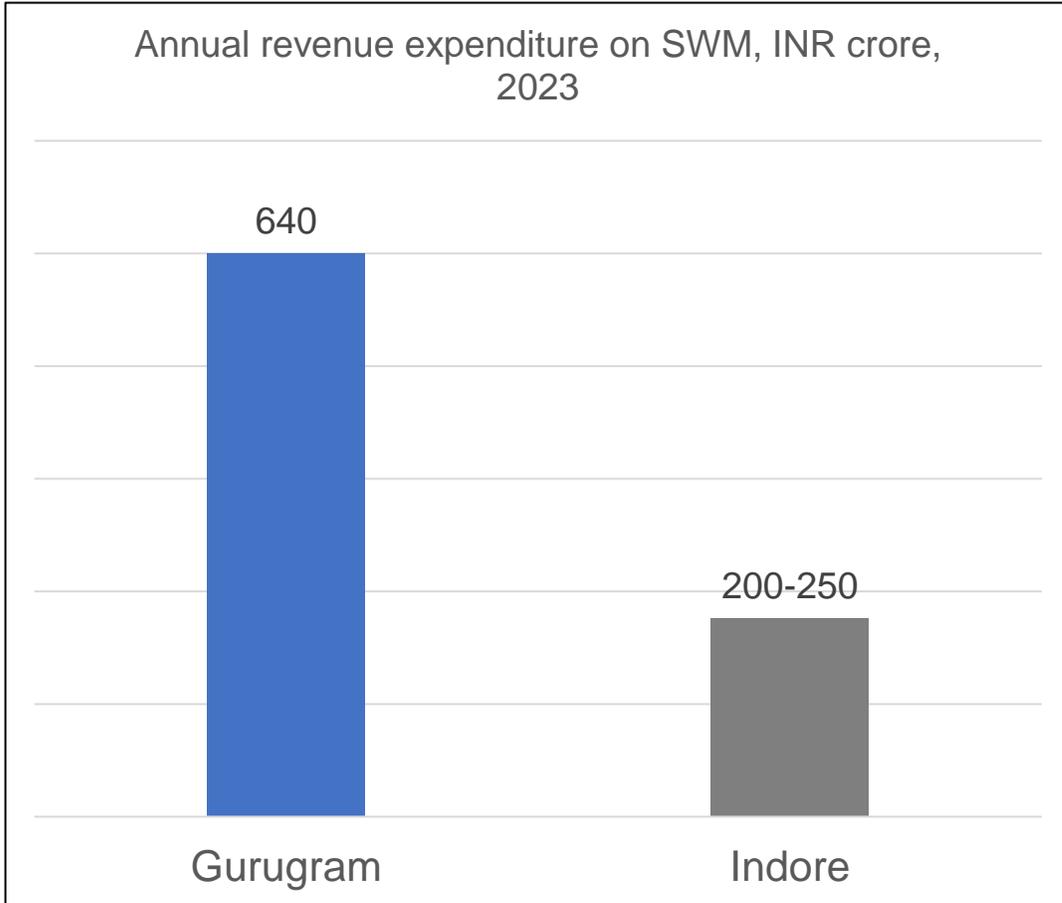


Note: Indore's SWM expenditure is an approximation based on conversation with IMC SWM expert who reported annual expenditure of INR 250 crore. This is validated with civic official statements in national newspapers stating INR 200 crore as annual spending on SWM for 2024 as well as estimate reported in smart city budget reports of INR 179 and INR 217 crore in 2017 and 2018. Indore's budget document states the budget as 1.7 crore which appears to be under-estimation. Gurugram's budget is for 2023. Source: (Swachh Survekshan, various issues), (Office of the Registrar General & Census Commissioner, 2011), Gurugram and Indore Municipal budgets

# Both had similar SWM performance at the beginning; Indore has become # 1, while Gurugram has stagnated



# This, despite Gurugram spending 2.5x more than Indore



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# Non monetary factors have played a pivotal role in Indore's success

Key Non Monetary factors	Indore	Gurugram
Citizen involvement	530 collection vehicles covering 6.5 lakh households, go with an NGO worker who teaches the citizens how to segregate waste and makes sure unsegregated waste is not collected.	No dedicated collaboration with organisation to spread awareness
Public Private partnerships	Work across stages is outsourced but MCI takes care of daily monitoring	Work across stages is outsourced but monitoring work by MCG is falling behind
Stable leadership, Number of municipal commissioners during 2015-25	4	8

# Thank You

**Global South Academic Conclave on WASH and Climate 2026**

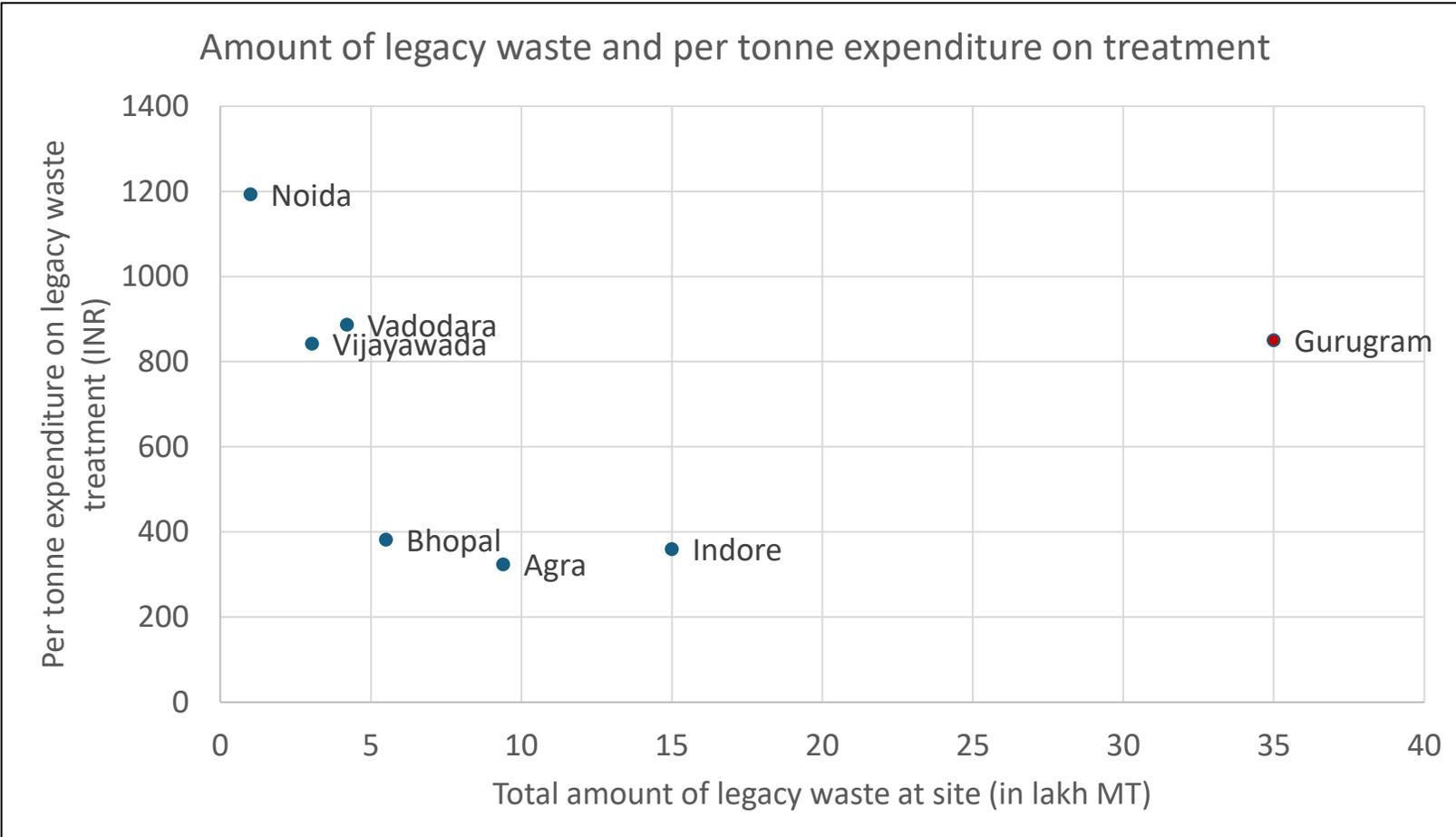
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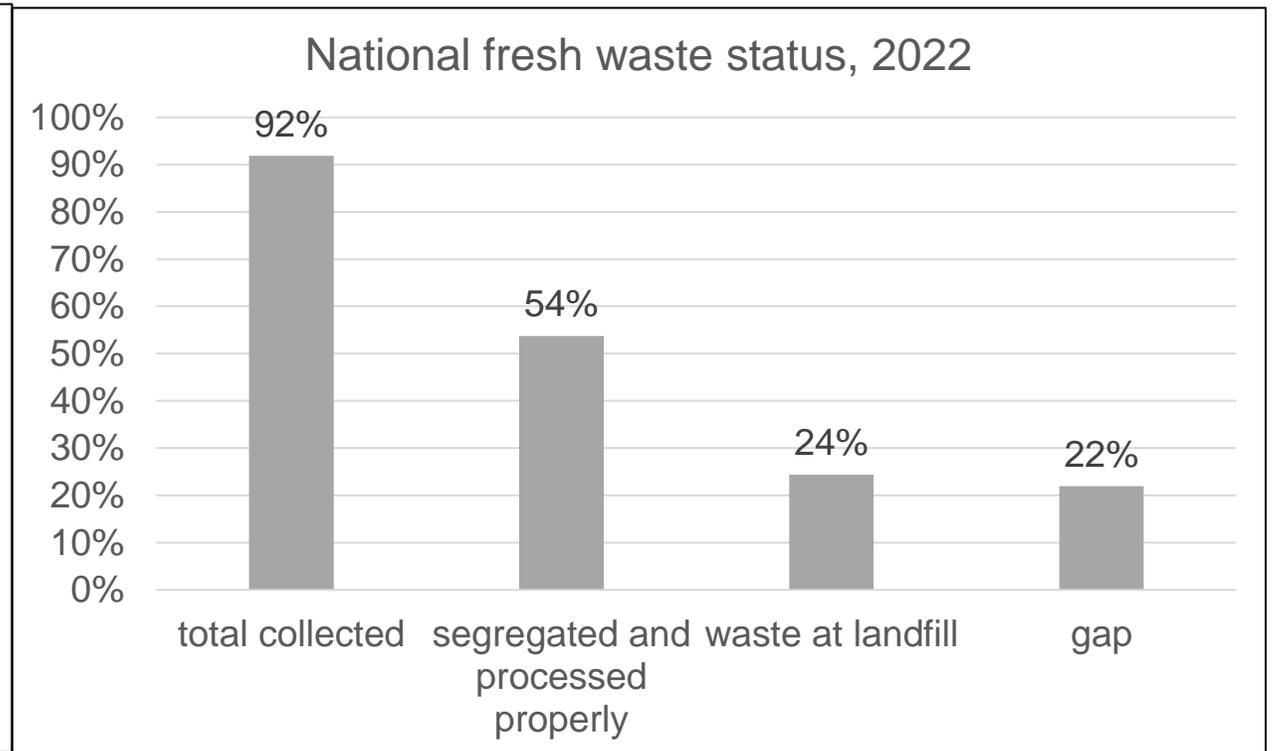
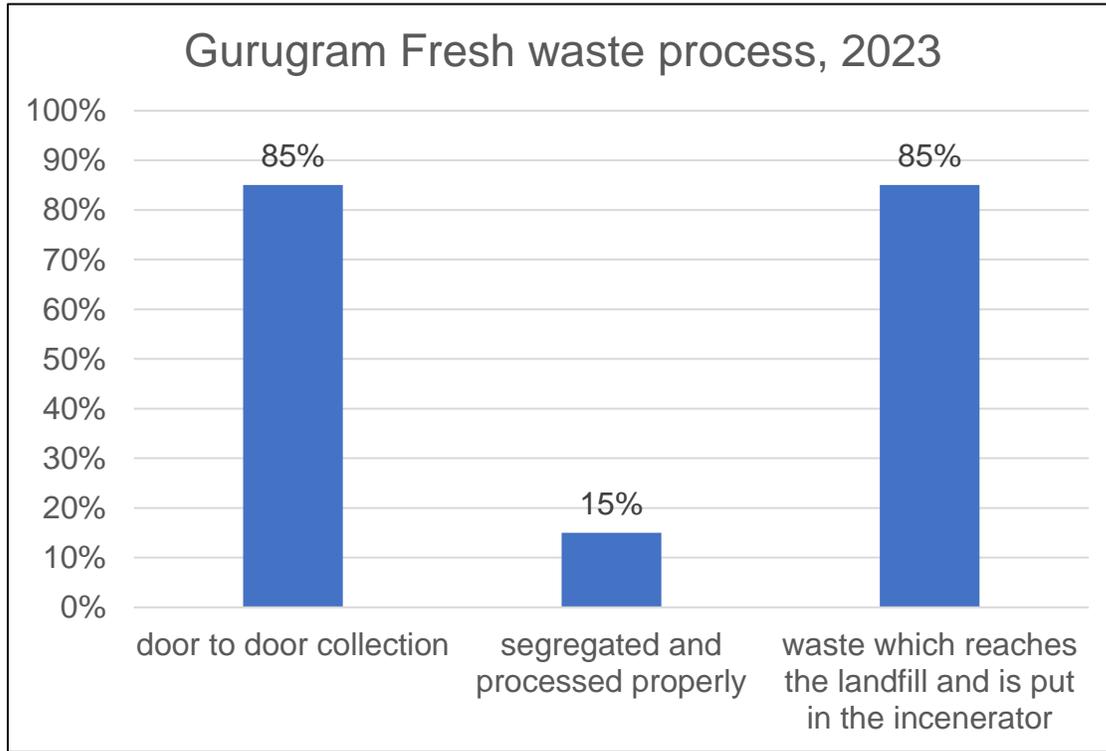
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# Inverse relationship between amount of legacy waste and per tonne expense; but Gurugram is an outlier



- With higher amount of legacy waste, per tonne cost of remediation reduces, but Gurugram has the largest amount of waste at landfill and spending the most per tonne
- **Why is Gurugram spending more than others?**

# Lack of segregation has consequences for subsequent steps of SWM



- **Gurugram, compared to national average, has lower door-to-door collection, lower segregation and processing of waste and higher waste deposited at landfill**
- **85% of total waste generated in Gurugram adds to the legacy waste present at the Bandhwari landfill**

# 4 key characteristics led to Indore's success

- **Building trust:** till 2017 the city did not have a regular door-door waste collection process. Hence it was important to build trust in city's function. They ensured that door-to door collection was happening everyday and at the same time.
  - Overall they deploy 530 vehicles to cover 6-6.5 lakh households. Additionally, there are 70 more vehicles ready to deploy in case any vehicle stops working. There are 600 workers from NGOs for counselling and ward monitoring.
- **Daily citizen awareness:** Till now, the waste collection car goes with an NGO worker which teaches the citizens how to segregate waste and makes sure unsegregated waste is not collected.
  - The program started with two level segregation between wet and dry waste and now has expanded to six level segregation.
- **Strict rule enforcement:** Overtime, as trust was established with the community and they established efficiency of service delivery, they could now penalise the citizens for not segregating the waste, with fine ranging between INR 500 to 10,000
- **Supervision of sanitation workers:** To improve sanitation worker supervision, on-site biometric attendance was introduced. Additionally, the corporation was strict in penalising those who gave the garbage collectors unsegregated waste.

# Lack of focus on segregation, which is the most important step

Sequence of SWM stages followed are different from what is prescribed

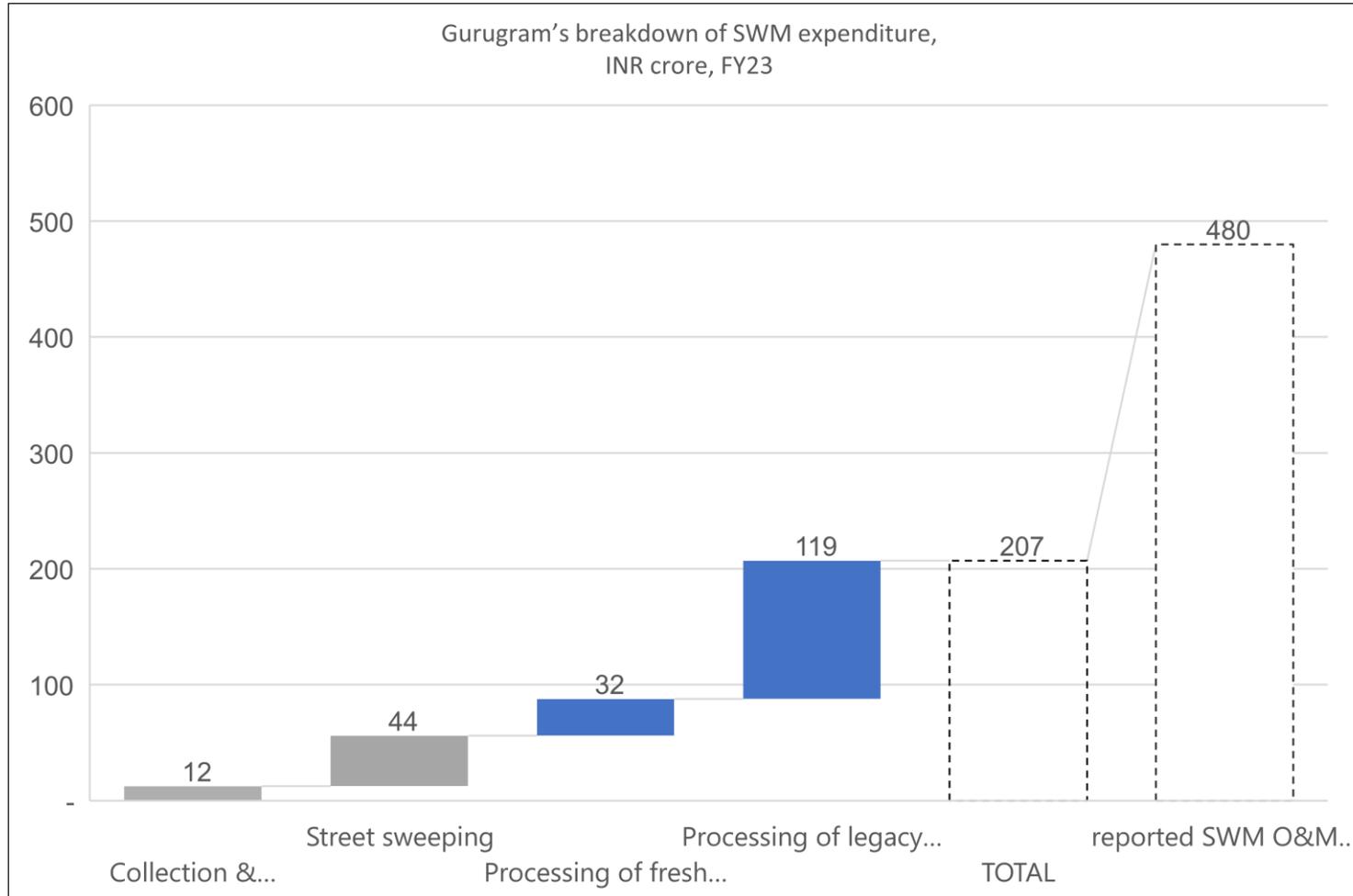
## What should happen



## What actually happens



# Division of SWM spend indicates the priority areas for spend



Note: reported SWM O&M expenditure refers to the actual expenditure reported in FY25 MCG budget document. The line item is as follow: SWM/Garbage clearance/sanitation expenses/manpower/etc. This does not include expenditure on wages and C&D waste. The expenditure by stage is calculated using bottom-up estimation (amount spent per unit on each stage\*amount considered for each stage)

- There is no expenditure on segregation reflecting lack of focus of the corporation on it
- 60% of the accounted expenditure is towards legacy waste remediation, indicating that it is the priority of the corporation
- MCG reports INR 480 crore as actual expenditure on SWM, we are yet to account for 50% of this expenditure