



Ministry of Housing and Urban Affairs Government of India



### <u>A report on performance of Urban Local</u> <u>Bodies in Chattisgarh and UP for Garbage</u> <u>Free City Indicators</u>

Mentor Name- <u>Ms Divya Agarwal</u> <u>By jully varshney</u>

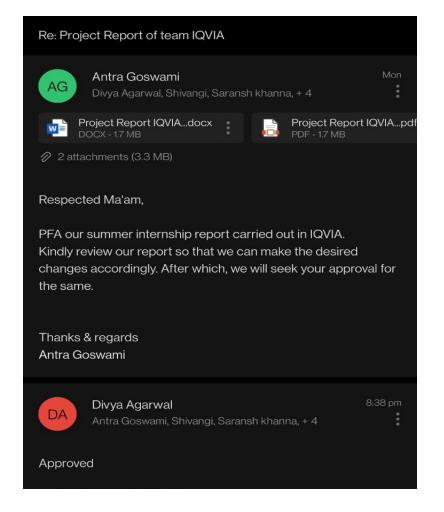
<u>y juny varsnincy</u>

IIHMR, Delhi





### **Screenshot of Approval**









## INTRODUCTION

IQVIA - a leading provider of intelligent connections across all aspects of healthcare through

- Analytics
- transformative technology
- big data resources
- extensive domain expertise.
- Swachh Bharat Mission 1.0 launched on October 2, 2014.

Emerging targets :

- 1. Garbage-free city (GFC)
- 2. Open defecation-free certificate (ODF), and
- 3. Citizen validation (CV).







### INTRODUCTION

• Swachh Bharat Mission 2.0 - introduced on October 2021,

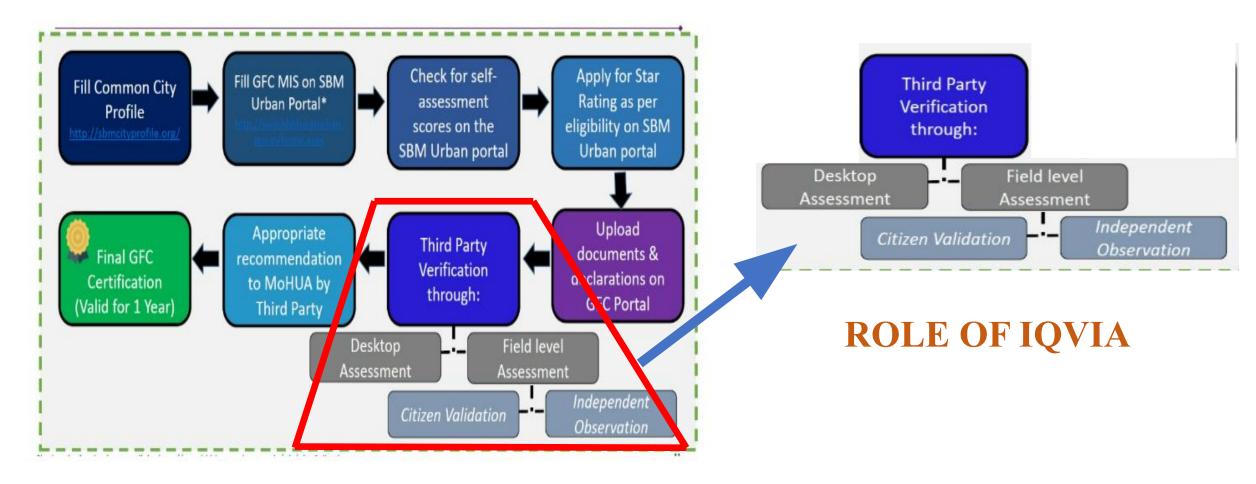
Its main goal of producing "Garbage Free Cities" & to achieve at least 3-star rating

- GFC protocol launched by the Ministry of Housing and Urban Affairs (MOHUA)
   24 Key parameters to improve
- 1. On ground waste management scenario of the cities to become "Garbage Free Cities"
- 2. Scoring of ULBs for achieving star ratings





### Introduction









## Objectives

To evaluate the performance of the urban local bodies in Chhattisgarh and UP for the garbage free city indicators

To identify the challenge and formulate appropriate solution for the urban local bodies in Chhattisgarh and UP in accordance with the garbage free city initiative.







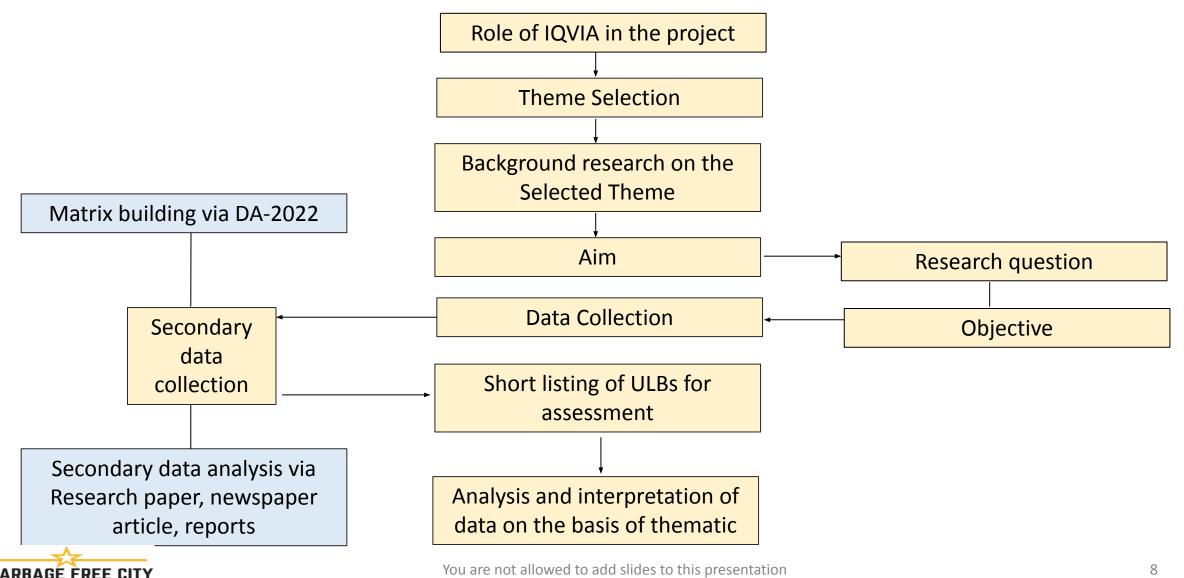
## Methodology

- Study type Cross sectional study
- Study duration 2 Months (April 2022 May 2022)
- Organization IQVIA (under GFC star rating 2022)
- Total number of ULBs covered 160 + 280 = 440
- Total ULBs evaluated 27





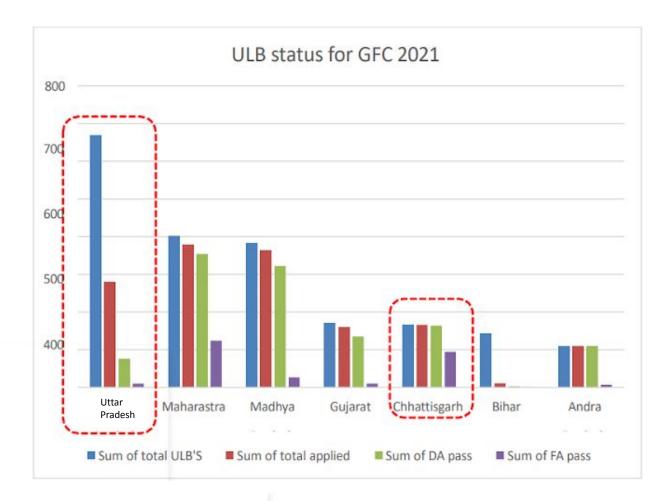
## Methodology



AR RATIN

° ≣IOVIA

### Results



States	ULBs evaluated	Pass	Fail	Query
Uttar Pradesh	11	2	8	1
Madhya Pradesh	7	4	1	2
Maharashtra	4	2	1	1
Chhattisgarh	16	12	0	4
Tamil Nadu	4	1	3	0
Assam	3	0	3	0
Himachal	2	0	2	0
Andhra Pradesh	1	1	0	0
Jharkhand	1	1	0	0
Telangana	1	1	0	0
Uttarakhand	1	0	1	0
Haryana	1	0	1	0

ULB's status for GFC 2022



### ULB status for GFC 2021





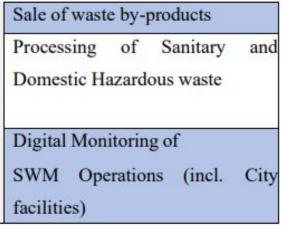
GFC protocol- 2021 Mandatory Components		GFC protocol- 2022				
		Important Components				
	Door-to-Door Collection		Door to Door Collection			
	Segregation at Ward Level		Source Segregation			
	Sweeping of Residential, Public & Commercial Areas	Ward Leve Parameters	Sweeping + Litter Bins + Secondary lStorage Bins			
Ward Level Parameters			Processing by Bulk Waste Generators			
	Storage Bins Waste Processing- Wet Waste	City-level Parameters	C&D Waste- Collection Waste Processing & Capacity- Wet Waste			
	Waste Processing Capacity- Wet Waste		Waste Processing & Capacity- Dry Waste			

GFC protocol- 2021		GFC protocol- 2022				
Mandatory Components		Important Components				
2	Waste Processing- Dry Waste		Dumpsite Remediation			
	Waste Processing Capacity- Dry Waste		Plastic Ban			
	Grievance Redressal	10	Grievance Redressal			
Essenti	al Components		User Charges			
Ward level G	Bulk Waste Generators		IEC and Capacity Building			
Parameters	Penalty or Spot Fines		Scientific Landfill			
0			No visible solid waste in water bodies + Screening of Storm water drains/ Nallahs			
	Source Segregation at City level		C&D waste- Segregation (nonbulk waste generators)			
		Ward Level Parameters	Geo-mapping of waste processing facilities, C&D facilities, landfills, dumpsites, STPs/FSTPs			
City-level Parameters	User Charges					
	Water Bodies Screening of drains/ Nallabs		C&D waste- Processing & Recycling C&D Waste- Use of Materials			





Desirab	le Components	Sale of wa
Ward level Parameters	Sustainability (Applicable only for 5 Star & 7 Star)	Processing Domestic
	On-site wet waste	Digital Mo SWM O facilities)
City Level Parameters	C&D Waste-Storage, Segregation, Processing &	
Parameters	C&D Waste- Use of Materials Dumpsite	
	Remediation	







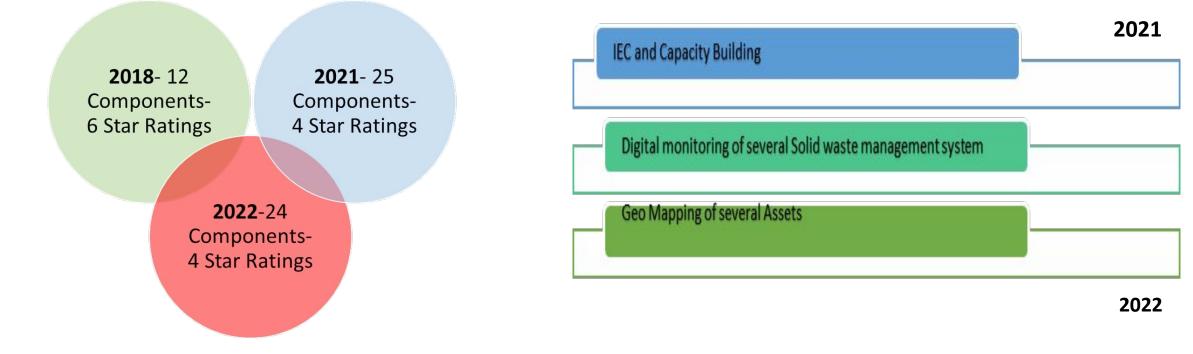


### Categories and indicators linked with each component

Category	Indicator	Impact measurement	Component for measuring the indicator		1	Grievance redressal	knowledge of the	Grievance Redressal
Efficiency in services		Introduction of new machinery, geo tagged	Waste Processing & Capacity- Wet Waste and dry				citizen towards the Entire GFC programme	User Charges
		vehicle	Geo-mapping of waste processing facilities, C&D facilities, landfills, dumpsites, STPs/ FSTPs Digital Monitoring of SWM Operations			Public participation	Improving the involvement and participation of people.	<ul> <li>IEC and Capacity Building</li> <li>City Beautification</li> </ul>
	Effective waste management	Improvement in collection, segregation and treatment or any other process involved in SWM chain	<ul> <li>Source Segregation</li> <li>Sweeping + Litter Bins +</li> </ul>	Quality	of life	Waste management	No GVP points, availability of twin bins as per the CPHEEO criteria and proper cleaning of nallah and SWD	<ul> <li>City Beautification</li> <li>Plastic Ban</li> <li>Sweeping + Litter Bins</li> <li>Secondary Storage Bins</li> <li>No visible solid waste i</li> </ul>
Employment and	Maintenance of services Generation of	awareness programmes	IEC and Capacity Building IEC and Capacity Building				3WD	water bodies + Screening of Storm water drains/ Nallahs
economy	employment	cluster-based facility or any NGO or SHG's engagement				City beautification	Presence of Green areas, banning the use	City Beautification
	Innovation	Introduction of any new technology or recycling of the waste product	C&D Waste-Processing & Recycling     C&D Waste- Use of materials				of plastic and improvement of the	
Governance	Awareness	Awareness and knowledge session via various capacity building sessions and programmes	IEC and Capacity Building				surrounding in sustainable way.	



### DISCUSSION





13



### DISCUSSION



- **299** ULBs had cleared the Field assessment post clearance of DA and FA, 2021.
- 9 ULBs achieved 5 Star Rating for GFC Assessment 2021
- <u>New Delhi(NDMC), Ambikapur, Patan, Indore,</u> Surat, Navi Mumbai, Vijayawada, Mysore and <u>Noida.</u>

### ISSUES WITH IMPLEMENTATION

- Technical and infrastructural
- IEC and capacity building
- Financial







## Limitations of Study

- Assessment carried out mostly in urban regions across India
- Time frame causing inability to conduct significant data collection and analysis that would be needed to examine the effects of such a sizable undertaking.
- The majority of the study and analysis is based on observational changes for the current year, which include the modifications that have been made but cannot precisely assess the level of change.





## Conclusion

The goal for the majority of the ULBs this year was to at least achieve 5 or 7 stars for GFC 2022.

Introduction of new components and lack of awareness has decreased their efficiency and scores.

Inability to produce desired updated evidences in desired time frame caused failing in DA 2022 refraining them from attaining star ratings.

Cleaner ULBs will have a lesser burden of WASH associated diseases like Typhoid, Cholera and other water borne deseases.







### References

- Bhagat, R., 2018. Urbanisation in India: Trend, Pattern and policy Issues., s.l.: International Institute for Population Studies.
- Bhattacharya, S., Sharma, D. & Sharma, P., 2018. Swachh Bharat Mission: an integrative approach to attain public health in India. International Journal of Environment and Health, 9(2), pp. 197-212. CPCB, 2020. Annual Report on Solid Waste Management, s.l.: 2020. CPHEEO, 2016. CPHEEO, s.l.: s.n.
- Jha, G., 2013. Conceptualizing Capacity Building of Urban Local Self Government: Looking beyond Training. Urban India, s.l.: s.n.
- Joshi, R. & Ahmed, S., 2015. Status and challenges of municipal solid waste, s.l.: Cogent environmental science.
- Journal, T. C., 2019. Noida becomes garbage-free city, ranked India's cleanest medium city. [Online] Available at: https://thecsrjournal.in/noida-garbage-free-cleanest-medium-city-india/ [Accessed 20 May 2022].
- MO HUA, G., 2019. The Critical Role of Community Based Organizations in Urban Sanitation and Waste Management, Ahmedabad: Urban Management Centre. Pandey, S. & Malik, J. K., 2015. Industrial and Urban Waste Management in India







### A REPORT ON PERFORMANCE OF THE URBAN LOCAL BODIES IN **CHATTISGARH AND UP FOR THE GARBAGE - FREE CITY INDICATORS**



### INTRODUCTION

The Ministry of Housing and Urban Affairs (MOHUA) has launched the Protocol for Star Rating of Garbage Free cities. The star rating conditions have been designed in a way as to enable cities to gradually evolve into a model (7-star) city, with progressive improvements in their overall cleanliness. In India, urban local bodies (ULB) are required to perform the task of solid waste management (SWM).

### Swachh Bharat Mission 1.0

On October 2, 2014, Prime Minister Narendra Modi introduced Swachh Bharat Mission 1.0 - Urban (SBM-U), a massive initiative to create a Clean India by 2019, SBM was mostly composed of SWM. household toilets, communal toilets, public restrooms, information, education, and communication, public awareness, capacity building, and administrative and office costs. In 2016, 73 cities were the subject of the initial survey. By 2021, 4320 cities had been examined. Three factors are taken into consideration when ranking cities: service level advancement, which is a self-declaration by the city, garbage-free city (GFC) and open defecation-free certificate (ODF), and citizen validation (CV).

### Swachh Bharat Mission 2.0

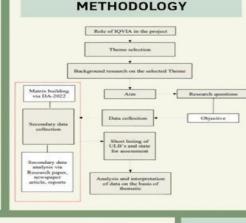
With the overarching goal of producing "Garbage Free Cities," SBM 2.0 was introduced on October 1, 2021 by the Hon, Prime Minister, As per the Star Rating procedure, the main goal is to make every ULB at least 3-star Garbage Free. The development of PTs/urinals, SWM (Material Recovery Facilities & Waste Processing Plants), C&D Waste Management - only for cities with populations of 5 lakhs and above, landfill remediation for all cities, and wastewater treatment would be the key focal areas.



### OBJECTIVES

1.To evaluate the performance of the urban local bodies in Chhattisgarh and UP for the garbage free city indicators

2.To identify the challenge and formulate appropriate solution for the urban local bodies in Chhattisgarh and UP in accordance to the garbage free city initiative.



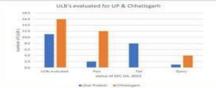
STAR RATING PROTOCOL OF
GARBAGE FREE CITIES
2022

		Scoring - Star Bating Performance for Garbinge Free Cities (Proposed)						
Component/ Condition		Ward/City Level	Level 1	Level 2	Level 3	Level 4		
1	Door to Door Collection	Ward	150	200	250	300		
2	Source Segregation	Ward	350	450	575	700		
3	Sweeping + Litter Bins + Secondary Storage Bins	Ward	150	200	250	300		
4	Processing by Bulk Waste Generators	Ward	50	100	150	200		
5	C&D Waste- Collection	City	150	200	250	300		
6	Waste Processing & Capacity-Wet Waste	City	350	500	550	600		
7	Waste Processing & Capacity-Dry Waste	City	350	500	550	600		
8	Dumpsite Remediation	City	100	250	300	400		
9	Plastic Ban	City	100	200	300	300		
20	Grievance Rectressal	City	50	150	175	200		
11	User Charges	City	150	200	250	300		
12	IEC and Capacity Building	City	75	100	125	150		
13	Scientific Landfill	City	.75	150	200	250		
34	No visible solid waste in water bodies + Screening of Storm water drains/ Nullahs	City	100	150	200	200		
15	C&D waste- Segregation (non- bulk waste generators)	City	100	150	200	250		
16	Geo-mapping of waste processing facilities, C&D facilities, landfills, dumpsites, STPs/FSTPs	City	100	100	150	150		
			2,900	3,600	4,475	5,200		

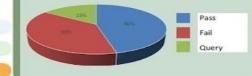
Star Rating Process Flow Declaration by City Declaration/Certification by State Third Party Assessment Certification by MoHUA

### DATA ANALYSIS

In Chhattisgarh, the majority of ULBs filed for 7 stars last year, but when the results were in, they barely met the goal. In contrast, in UP, ULBs applied for a variety of star types, but again, the outcomes were varied. Only 46% of them have successfully completed the DA, and 39% have failed it. Once more, it is clear that the number of ULBs in UP has been underperforming, in contrast to Chhattisgarh, where they are extremely effective



In Uttar Pradesh, 437 Nagar Panchayats, 198 Nagar Palika Parishads, and 17 Nagar Nigams are among the 652 ULBs in charge of managing solid waste. A total of 14468 TPD of solid waste is produced. A total of 13955 TPD of solid waste is collected (96.5 percent). There are 15 active MSW processing facilities with a 5395 TPD treatment capacity. The building of Solid Waste Management processing and disposal facilities has received land from 582 ULBs.



### RECOMMENDATION

OUR INVESTIGATION HAS REVEALED A GAP THAT CAN BE FILLED BY:

 STATE-SPECIFIC REGULATIONS FOR THE DISPOSAL OF PLASTIC TRASH, C&D WASTE, AND THE REUSE OF RECOVERED WASTEWATER CAN CLOSE THE GAP AND PROVIDE A WORKABLE MARKET CONNECTION, ALLOWING THE PRIVATE SECTOR TO PARTICIPATE.

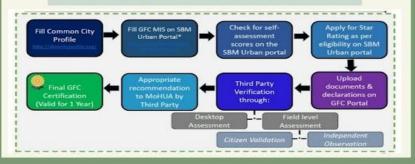
 INFORMING THE ULBS OF THE WEAKNESSES FOUND OVER THE FULL DESKTOP ASSESSMENT PERIOD SO THEY CAN ADDRESS THEM.

 THE PROTOCOL SHOULDN'T FREQUENTLY CHANGE OR ADD NEW ELEMENTS BECAUSE THIS MAKES IT HARDER FOR SOME ULBS TO MAINTAIN THEIR SUCCESSES.

 THE TIME FOR REAPPLYING HAS TO BE EXTENDED SO THAT ULBS IN PROGRESS CAN WORK TOWARD RECEIVING A HIGH STAR RATING.



### STAR RATING PROCESS FLOW OF ULBS

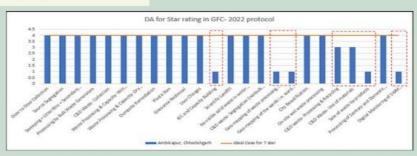


THIS YEAR (2022) THE PROTOCOL FOR STAR RATING OF GARBAGE FREE CITIES (GFC) HAS BEEN REVISED AGAIN AND THE BELOW MENTIONED NEW COMPONENTS HAVE BEEN INCLUDED TO ENCOURAGE CITIES TO CREATE AN ECOSYSTEM IN ORDER TO STRENGTHEN THE WASTE MANAGEMENT SYSTEM. THEY ARE AS FOLLOWS:

- IEC AND CAPACITY BUILDING
- GEO MAPPING OF CITY ASSETS
- SALE OF WASTE BY PRODUCT
- DIGITAL MONITORING OF SWM OPERATIONS

NEW DELHI (NDMC), AMBIKAPUR, PATAN, INDORE, SURAT, NAVI MUMBAI, VIJAYVADA, MYSORE AND NOIDA WERE THE 9 ULB'S OUT OF 299, WHO HAD CLEARED THE FIELD ASSESSMENT (FA) AND HAD MANAGED TO ACHIEVED FIVE-STAR RATING.

### RESULT





### **Internship Experiences**

- Monitoring and tracking Deliverables
- Conduction of trainings for new resources and field assessors
- Coordination among team members for timely achievement of output.
- Accomplish goals as a team player
- Effectively performing under deadlines
- Maintaining work life balance
- Supporting IT dashboarding and performed test runs for portal and on-field assessment tool/app.





 $\Box$ 



### **Suggestions Given to Organization**

- An improved portal for **Quality check of data**, mitigating Errors related to portal
- Real Time monitoring of on ground operations using precise metrics
- Develop a clear idea related to the protocol of the project during training.
- Alterations in data validation checks regularly could affect the consistency of data.
- To provide a clear channel of communication between QC's and FAs for better quality and effectiveness of evidences.





### **OUR JOURNEY**

You are not allowed to add slides to this presentation





# THANK YOU





You are not allowed to add slides to this presentation

