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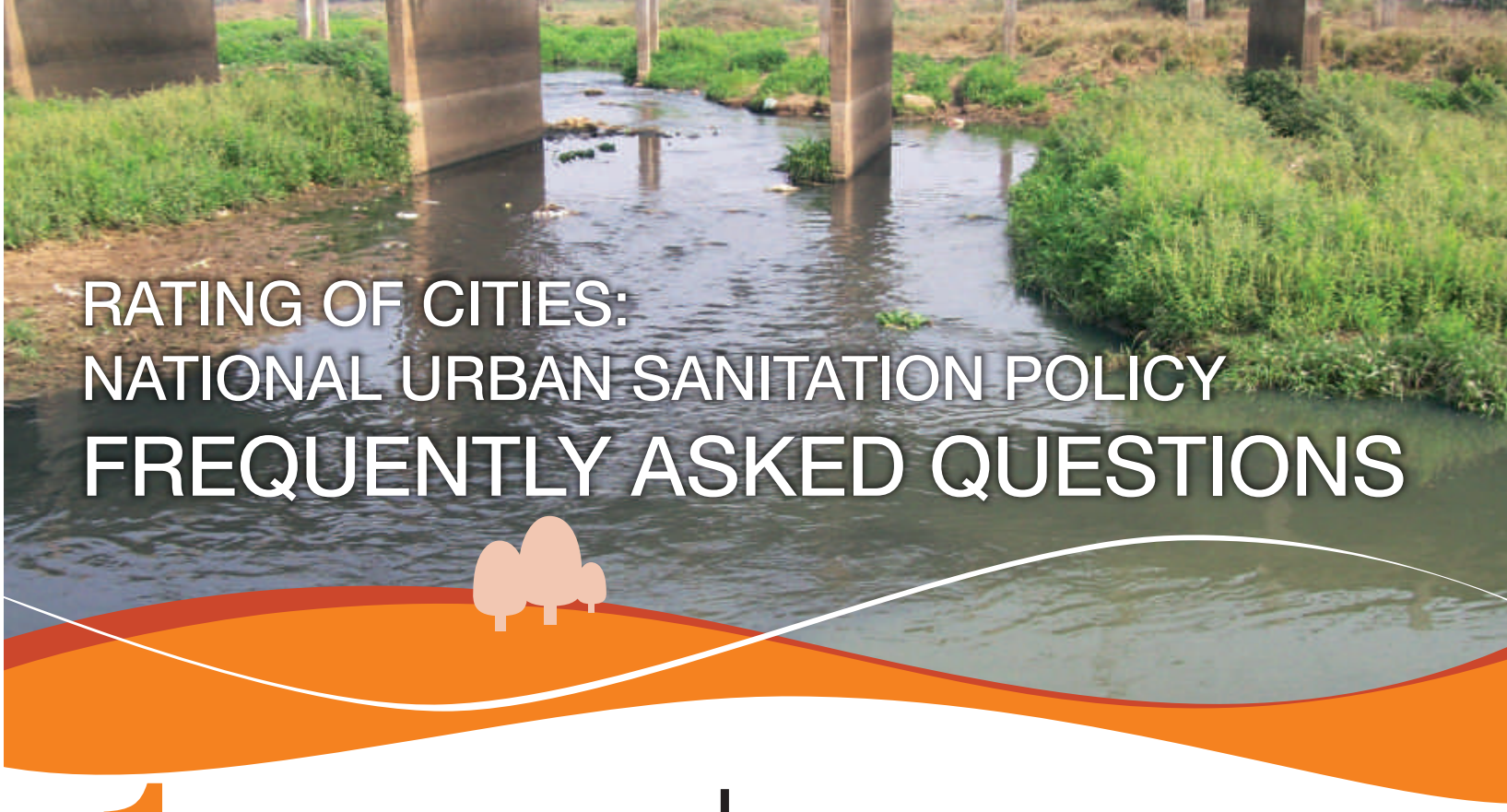
RATING OF CITIES: NATIONAL URBAN SANITATION POLICY

Frequently Asked QUESTIONS

wsp water and sanitation program

NUSP NATIONAL URBAN SANITATION POLICY

TOWARDS CITY WIDE SANITATION



RATING OF CITIES: NATIONAL URBAN SANITATION POLICY FREQUENTLY ASKED QUESTIONS

1 Why has the Government of India launched a national rating of cities for sanitation?

The national rating for cities has been launched by the Government of India to achieve the goals of the National Urban Sanitation Policy (NUSP)[1] which aims at making Indian cities and towns totally sanitized, healthy, and liveable. The exercise rated 423 cities (with population greater than 100,000)[2] for their performance across various aspects of sanitation. This was measured through indicators that included physical infrastructure, systems, processes, and outcomes related to achievement of total sanitation (refer Box I). The first national rating was carried out in 2009 and results were published in May 2010[3]. (See www.urbanindia.nic.in for details.)

The rating exercise was carried out to:

- Compare intra-city and inter-city data on sanitation.
- Monitor and measure improvement of cities against standard indicators over time.
- Generate awareness on the need to create totally sanitized cities.
- Allow states and cities to use the results to identify and address areas of poor performance.
- Enable cities to think city-wide, with an emphasis on smarter planning and investments that lead to improved sanitation in the country.
- Instill a sense of healthy competition amongst cities.
- Motivate and recognize excellent performance in sanitation through national rewards.

Box I: A totally sanitized city....

- Eliminates the practice of manual scavenging and provides adequate personnel protection equipment for ensuring safety of sanitation workers.
- Safely collects, treats, and disposes all wastewater.
- Implements, wherever possible, the recycling and or reuse of treated wastewater for nonpotable purposes.
- Safely collects, treats and disposes all solid waste.
- Provides sustainable sanitation services for poor people.

[1] The National Urban Sanitation Policy was launched by the Government of India in November 2008.

[2] These are classified as Class I cities. A total of 441 Class I cities were to be covered under the rating exercise, but since the exercise covered urban agglomerations, smaller cities were subsumed under neighboring larger city jurisdictions in many cases, leading to a reduction in the number of cities rated. Hyderabad was a significant exception to this; that is, neighboring cities were not merged and rating carried out separately for each.

[3] The survey for determining the points awarded for the rating exercise was conducted between December 2009 and May 2010.

2 What is the rating exercise?

The rating measures the sanitation performance of cities on 19 indicators, which set out standards or benchmarks. The rating measures performance related to the entire cycle of sanitation, which are safe access, collection, treatment, and disposal of all liquid and solid waste.

The exercise not only rates cities on physical infrastructure or expenditure incurred but places strong emphasis on the outcomes or goals achieved, and on the practices and processes followed by cities for safe access, collection, treatment, and disposal of liquid and solid wastes. The rating also recognizes that improved public health and environmental standards are the two outcomes that cities must seek to achieve for its citizens.

Cities with high performance ratings will be honored with the Nirmal Shahar Puraskar (Clean and Green City Prize).

3 How frequently will it be undertaken?

The rating exercise is proposed as a biennial (every two years) exercise to be commissioned by the Ministry of Urban Development, Government of India. This will provide cities with adequate time to implement actions that lead to improvements in their indicators. Further, it is expected that states would conduct rating surveys of their cities and introduce state-level awards to mobilize cities to improve their performance.

4 What is the difference between 'rating' and 'ranking' of cities?

A 'rating' exercise measures sanitation performance compared to standards or benchmarks. In the current rating exercise, service level benchmarks set out by the Ministry of Urban Development (MoUD) have been used as appropriate standards to measure a city's sanitation performance[4]. In case explicit standards were not available for a specific aspect or indicator then standards were created and the measurement methodology was detailed, after consultations with stakeholders and guidance from the National Advisory Group on Urban Sanitation. For instance, in the case of recording for open defecation, survey agencies were expected to count the instances of open defecation visible as a proportion of total field visit points. They were also required to make observations near railway stations and observe within a 1 km radius.

Rating helps a city appreciate where it stands in comparison to the benchmark, for the different indicators.

However, scoring involves placing cities in some order or comparative ranks. Hence, the rating exercise has resulted in national 'ranking' of cities. Cities need to be concerned about how they can improve their rating—the ranking is but a by-product of clustering cities into different categories, and need not be taken as a refined comparison of positions which is not the primary purpose of this exercise.

[4] In 2006, a core group of senior experts was constituted by the Ministry of Urban Development (MoUD) for developing a common benchmarking framework of standard performance parameters for Urban Environmental Services. The Service Level Benchmarking Handbook (available on www.urbanindia.nic.in), covering 28 performance indicators across four sectors—water, sanitation, storm water drainage and solid waste management—was finalized and disseminated to all states in September 2008.

5 Which cities were covered in the rating exercise?

All Class I cities in the country have been covered under the national rating exercise. Class I cities house 207 million people, or 72 percent of India's total urban population (Census, 2001)[5].

These cities include metros, Big Class I and Other Class I. The distribution of cities is presented in Table 1.

Table 1: Distribution of cities under the rating exercise across population size-classes

Class of city	Population size-class of cities rated	Number of urban agglomerates/ towns
Metros	More than 5 million	6
Big Class I	1 to 5 million	29
Other Class I	1,00,000 up to 1 million	388
All Class I cities		423

Note: A total of 441 Class I cities were to be covered under the rating exercise. However, since the exercise covered urban agglomerations, smaller cities were subsumed under neighbouring larger city jurisdictions in many cases, leading to a reduction in the number of cities rated. Hyderabad was a significant exception to this; neighboring cities were not merged and rating carried out separately for each.

[5] India's urban population according to the Census of 2001 was approximately 285 million people, or 54 million households.

6 What were the geographical zones for the rating exercise?

The country was divided into five zones: North, South, West, East and North East, and Central and South Central. The distribution of Indian Class I cities across these zones is presented in Table 2.

Table 2: Distribution of states across the five zones for the rating exercise

Zone	States/union territories	Number of Class I cities/urban agglomerations	Firm
North Zone	Delhi, Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Uttarakhand, and Uttar Pradesh	98	AC Nielsen
Central and South Central Zone	Andhra Pradesh, Chhattisgarh, Madhya Pradesh, and Odisha	88	
East and North East Zone	Assam, Bihar, Jharkhand, Manipur, Meghalaya, Mizoram, Tripura, and West Bengal	94	Development and Research Services
South Zone	Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, and Pondicherry	62	
West Zone	Gujarat, Maharashtra, and Rajasthan	81	Centre for Environment Planning and Technology (CEPT University)

7 Who did the supervision and implementation of the rating exercise?

The rating exercise was financed by the Ministry of Urban Development (MoUD). The National Advisory Group on Urban Sanitation[6], constituted by the MoUD, is the apex body for supervising the implementation of the National Urban Sanitation Policy and the national rating exercise. Its role includes reviewing and monitoring the progress of states and cities; determining the rating methodology; approving the final results of the rating; and endorsing the Nirmal Shahar Puraskar. The ratings exercise involved detailed consultations with the states and cities on methodology, data collection, and data validations; results were declared only after discussions with state and city governments confirmed the ratings.

Three survey agencies were selected for five zones that covered all 423 cities (see Table 2 for names and details). The selection of the firms was undertaken by an independent evaluation committee using stringent selection criteria.

The rating agencies were provided extensive guidance and training on the methodology before the survey operations. The Ministry closely monitored the city surveys and field visits undertaken by the agencies.

8 How have the cities been scored?

Cities were rated on 19 indicators adding to a total of 100 points based on a common methodology. The indicators were divided into three main categories: Output, Process, and Outcomes indicators.

Output indicators pertain to the city having achieved certain results or outputs in different dimensions of sanitation ranging from access to toilets, safe collection systems, amount of sewage and solid waste that is generated and treated without harm to the city's environment etc. There are nine output indicators and they account for 50 points.

Process indicators pertain to systems and procedures that exist and are practiced by the city agencies to ensure sustained sanitation. These include points assigned for having set up appropriate monitoring and evaluation systems, compliance with Management of Solid Waste Rules, 2000, and so on. There are seven process indicators and they account for 30 points.

Outcome indicators include health and environmental outcomes, measured in the current round as the quality of drinking water, quality of water resources in the city, and reduction of sanitation-induced waterborne diseases in the city over a time period. There are three outcome indicators and they account for 20 points.

Table 3 presents the 19 indicators in three groups, and their weightage[7].

[6] The NAGUS is an inter-ministerial advisory group constituted by MoUD that has members from the Department of Drinking Water Supply and Sanitation (Ministry of Rural Development), Ministry of Urban Development, Ministry of Finance, Ministry of Environment and Forests, Ministry of Housing and Urban Poverty Alleviation, Ministry of Social Justice and Empowerment, Ministry of Water Resources, Planning Commission, NGOs, urban development state secretaries from Madhya Pradesh, Maharashtra, and Orissa, other experts and special invitees.

[7] For details on scoring and site selection, refer to methodology of rating of cities on www.urbanindia.nic.in.

Table 3: List of indicators for rating of cities under National Urban Sanitation Policy

List of indicators	Points
1. Output-related indicators	**50**
i) No open defecation	
– Access and use of toilets by urban poor and other unserved households (including slums)—individual and community sanitation facilities (4)	
– Access and use of toilets for floating and institutional populations—adequate public sanitation facilities (4)	
– No open defecation visible (4)	
– Elimination of manual scavenging and providing personnel protection equipment to sanitary workers (4)	16
ii) Proportion of total human excreta generation that is safely collected	6
iii) Proportion of total black wastewater generation that is treated and safely disposed off	9
iv) Proportion of total grey wastewater generation that is treated and safely disposed off	
v) Proportion of treated wastewater that is recycled and reused for nonpotable applications	3
vi) Proportion of total storm water and drainage that is efficiently and safely managed	3
vii) Proportion of total solid waste generation that is regularly collected	4
viii) Proportion of total solid waste generation that is treated and safely disposed off	4
ix) City wastes cause no adverse impacts on surrounding areas outside city limits	5
2. Process-related indicators	**30**
i) Monitoring and evaluation systems are in place to track incidences of open defecation	4
ii) All sewerage systems in the city are working properly and there is no ex-filtration	5
iii) Septage/sludge is regularly cleaned, safely transported, and disposed after treatment, from on-site systems in the city	5
iv) Underground and surface drainage systems are functioning and are well-maintained	4
v) Solid waste management (collection and treatment) systems are efficient (and are in conformity with the Management of Solid Waste Rules, 2000)	5
vi) There is clear institutional responsibility assigned, and there are documented operational systems in practice for (ii) to (v) above	4
vii) Sanctions for deviance on part of polluters and institutions are clearly spelt out and followed in practice	3
3. Outcome-related indicators	**20**
i) Improved quality of drinking water in city compared to baseline	7
ii) Improved water quality in water bodies in and around city compared to baseline	7
iii) Reduction in waterborne disease incidence amongst city population compared to baseline	6
Total (Output indicators + Process indicators + Outcome indicators)	100

9 How was the data collected for the rating exercise?

Since comprehensive data for each indicator was not likely to be available, the rating agency used a combination of published information and data available with the city.

This included information/data from:

1. The ULB and/or the water and sanitation utility. The included information on toilet coverage, extent of open defecation, manual scavenging, treatment and disposal of waste etc.
2. Published sources like the Census of India that supplemented some of the information being provided by the ULB.
3. Pollution control agencies on river water quality and quality of effluents after treatment. These were also supplemented with limited sampling and analysis of drinking water(for contamination by human excreta and household waste) and water quality in water bodies in the city.
4. Health departments/agencies on diarrhoeal diseases and other health indicators.
5. Development agencies on permissions for new buildings or developments (used for monitoring household sanitation and arrangements for disposal).

Each agency strictly followed the prescribed methodology and collected data from cities in a consultative and collaborative manner. All the data was then validated and cross checked via extensive field visits and surveys.

After the data was collected and the field surveys undertaken, the agencies presented the data to the respective city for their verification. Cities counter signed the data to ensure that they were aware of the baseline data collected and ensured ownership of the data.

10 The rating of cities has a color coding. What does the color coding mean?

The rating scores cities on 100 points, based on the different weights assigned. Once scores are calculated, cities are categorized into four color categories—red, black, blue or green—depending on the marks they score in the rating exercise. Each color code is associated with the state of sanitation of the city. For instance, a city that receives less than 33 points is rated as a 'red' city and requires immediate attention. Similarly, a city that has received more than 91 points is rated a 'green' city and is considered a healthy and clean city. Table 4 presents the marking scheme and associated color coding.

Table 4: City color codes and their categories

Category	Description	Points
RED	Cities requires immediate remedial action	<33
BLACK	Needing considerable improvement	<34 ≤ 66
BLUE	Recovering but still diseased	<67 ≤ 90
GREEN	Healthy and clean city	<91 ≤ 100

11 How were the sites selected for the city survey?

All agencies followed a common methodology which detailed standard instruments and protocols for field data collection and analysis.

The rating agencies had to select sites in each city for primary field visits/surveys. For site selection, the agencies had to divide the city into six zones in the metros/Big Class I cities, and four zones in other Class I cities[8]. Areas chosen and surveyed included main public locations like bus stations, railway station, market areas and business districts, sewage treatment plants if available, solid waste sanitary landfills or uncontrolled dumping sites and areas where liquid and solid wastes was likely to be disposed of (for instance, rivers, canals, drains, lakes, and ponds).

The survey agencies chose the sites and collected the basic data after detailed meetings with city governments, and after extensive consultations with urban local bodies. While the data was being collected and the field survey was underway, strict monitoring ensured that the data was fair and unbiased. The rating agencies attempted at establishing association with the officials of the urban local body to the best possible extent. The field data was rigorously scrutinized and validated with the respective cities and states before the scores were finalized.

12 Will the methodology change in the subsequent rounds of rating?

Given that this was the first round of rating, the exercise sets out the 'baseline' for the indicators based on which sanitation improvements can be measured in subsequent rounds. The rating exercise will be improved after receiving feedback from the various rounds. However, the methodology will ensure that the exercise is comparable over time and is consistent with the progress being made.

The existing methodology may be revised by the National Advisory Group on Urban Sanitation, only after significant improvements in sanitation performance by cities is observed. The weightage or marks allotted for each of the indicator categories may be revised. Over time, as cities improve their rating , the indicators will be made more stringent. For example, indicators in the future may include no urination, or no spitting in open/public spaces, etc. In addition, greater importance will be given to the outcome indicators and the weights accorded to each category, and specific indicators could be revised accordingly.

[8] In the metros, Big Class I cities, the areas of segmentation would be a Central Zone and a Periphery Zone, besides a North, South, East and West Zone. In the other Class I cities, these would be the North, South, East and West Zones.

13 How can we improve our city's rating?

The data collected for the first round of the rating exercise provides a comprehensive baseline for the cities to understand their current level of sanitation services with respect to solid and liquid waste generation, collection, treatment, and disposal in the city. The intention of the rating is to help cities prioritize sanitation and foster healthy competition, motivating them to improve upon their sanitation. This exercise has enabled cities to place themselves through an objective self assessment in the relevant category—red, black, blue or green.

Cities will need to use these results to identify areas for improvement by developing and implementing city sanitation plans (CSPs). They would need to prioritize sanitation planning into longer term and focused planning horizons that have short, medium, and long term goals and targets. However, many immediate activities need not await the finalization and implementation of the CSPs—that is, it may be possible to complete some activities with little financial resources and in a short time (Refer to Box 2). Others measures may be more resource- and time-intensive (reforming urban local body organizational structure, financing sewage treatment plants, inviting nongovernmental organizations to build and operate public toilets, and so on). To improve a city's rating, a city need not only focus on infrastructure or sewerage. Improved septage management, and better management of on-site toilets, are equally important in determining a higher score and, in fact, easier to do in the short term.

Box 2: Immediate actions that could improve cities' rating

Not all actions need to wait till the preparation and completion of city sanitation plans. Cities could take some immediate steps to improve their rating score. These actions could include measures such as:

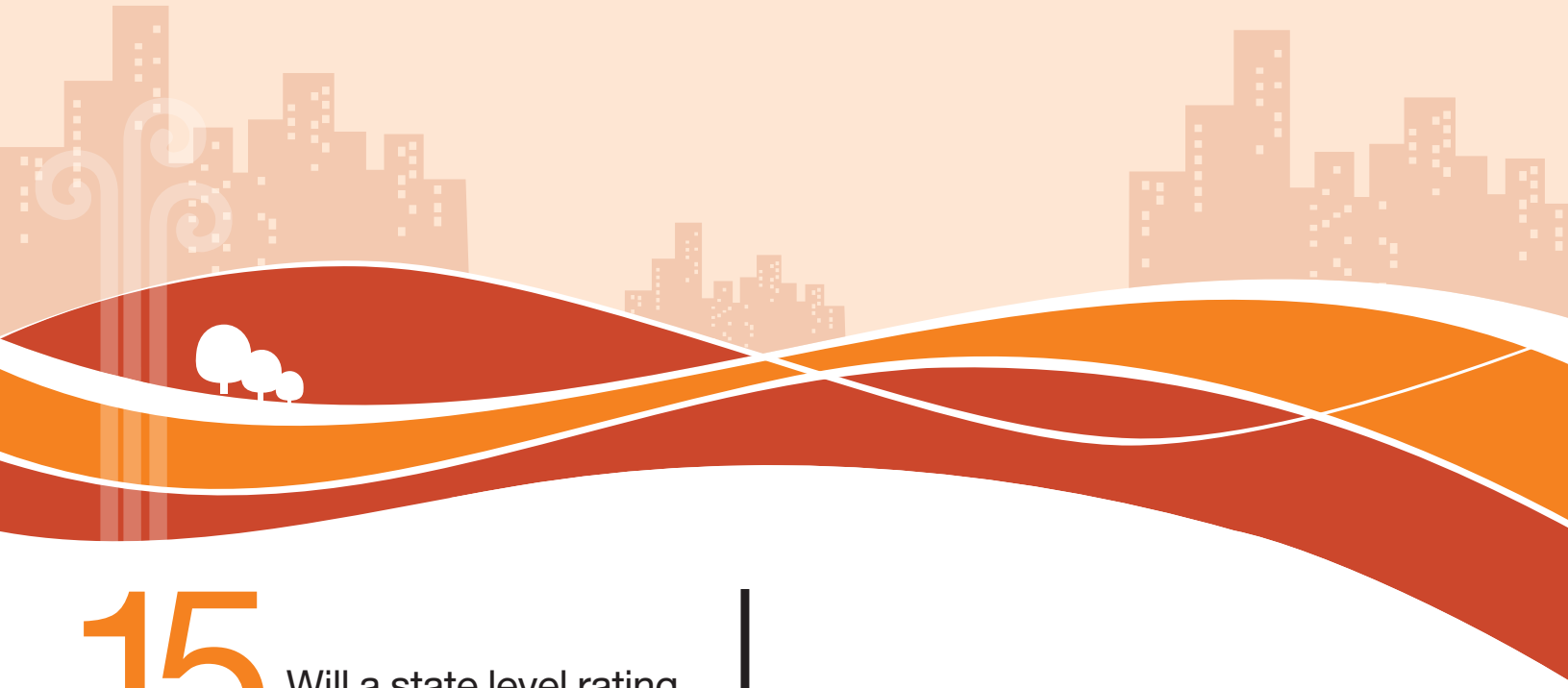
- Ensuring that septic tanks are constructed properly and are maintained and cleaned regularly.
- Providing sanitation access to the poor and floating population by ensuring proper usage and maintenance of existing facilities.
- Discouraging open defecation by awareness generation and campaigns for bringing about behaviourial change.
- Safe collection of all solid waste.
- Enforcing proper rules and regulations to meet standards, like a 'polluter pays' principle.
- Efficient and safe management of storm water drains.
- Providing protective gear and safety equipment to sanitary workers.
- Ensuring a functioning grievance redressal mechanism for complaints relating to sewerage/septage systems.

14 What are the awards and incentives for cities to be part of the rating exercise?

The biggest reward for the cities from the rating exercise is for them to be able to demonstrate continuous improvements in sanitation through an objective assessment of their performance. In addition, cities are also rewarded with a national award - the 'Nirmal Shahar Puraskar.' The rating exercise has helped to create a baseline for cities around which improvements can be measured. On the achievement of remarkable results, that is, the status of a Blue or Green category city, cities will be eligible for the award.

Since states are responsible for supporting their cities in implementing the various steps for moving up the scale to become a green city, they may also wish to institute a state-level award scheme to promote competition amongst cities within the state.

The Ministry of Urban Development may also request state governments for recommending cities that have shown commendable performance which, after being duly verified, may become eligible for an honorary award. These honorary awards will be given for recognizing extraordinary achievements, especially in the initial stages, since achievement of 100 percent sanitation may be difficult in the beginning.



15 Will a state level rating exercise be more useful?

It is highly recommended that a state rating exercise and a state-level award scheme be introduced. This will help raise awareness and promote competition amongst urban areas within the state for achieving the sanitation outcomes as perceived by the National Urban Sanitation Policy and state sanitation strategies. Cities that were not part of the national rating exercise—for example, Class II and III cities—could become part of such a state rating exercise.

A city, especially state capitals and larger cities, could also formulate ward-level rating and awards scheme for promoting healthy competition amongst wards and motivating staff to improve service delivery performance.

16 Why have some cities, that apparently look dirty and insanitary, scored higher than other cities that are obviously cleaner? Does this mean that the results of the exercise are not robust?

The sanitation rating measured cities' performance based on output, process, and outcome indicators. (See Table 3.) While it was important for cities to have invested in infrastructure, it was equally important for cities to show success on indicators such as behavioral aspects, and the processes in place for ensuring the safe collection, treatment, and disposal of all waste, all of which would lead to an improvement in sanitation. For instance, a city may have had a lot of solid waste litter, but this did not necessarily translate to a 'dirty' and 'environmentally challenged' city and these cities may have performed well in a range of other indicators. On the other hand, some cities that look 'clean' may have 'invisible' waste going around—human excreta may not be safely collected and disposed of, and so on. For example, in the case of one city where the Ganges is flowing and where there are many sewerage treatment plants, the city scored well on outcome indicators despite the general perceptions otherwise of cleanliness. The rating exercise may have rated (and hence ranked) cities lower.

While cities were rated on specific standards and benchmarks of performance, the scoring allotted to cities automatically resulted in a comparative national ranking of cities and placed them into four broad color codes. Improving a ranking will help cities graduate to, or drop out (or even stay), within the broad color category. However, cities need to be more concerned about how they can improve their rating, since this will automatically lead to a change in their respective ranking, by bringing performance improvements in the systems, processes, and outcomes of sanitation and hence impacting their overall sanitary conditions.

Box 3: How Do I fare on the rating scale?

We don't have a sewer system. Is this why we received a poor score?
A city can score well despite not having a sewer system, as long as there is safe confinement, conveyance, treatment, and disposal. A city's on-site sanitation arrangements, such as septic tank, pit latrines, and so on, were given weightage (100 percent in case of cities that did not have sewers, or proportions of properties served in mixed situations) and used for computing the score. It was not only collection of sewage but also the treatment that was looked at while assigning a score in this category.

How did you access the quality of my water bodies and drinking water?
The samples tested for water quality covered both groundwater sources as well as piped/surface water sources.

Drinking water samples: Each survey agency collected between 20 and 30 samples for assessing drinking water quality, depending on the class size of the city[9]. Fifty percent of the samples were taken from households from these study locations, another 30 percent from public sources (community taps, handpumps, and so forth), and the remaining 20 percent from public areas. The samples were tested for thermo-tolerant coliforms (TTC), residual chlorine, and turbidity.

Water bodies: For testing water quality in water bodies in and around the city, the agencies collected five samples from the five largest water bodies in the cities. The water bodies were within 0.5 km of the city limits, in case there were no water bodies within the city limits. Samples were drawn from surface water (river, stream, pond, and so on) and/or groundwater (where there were no surface water sources in close proximity to the city). These samples were tested for TTC, Dissolved Oxygen (DO), Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD).

All the water samples were taken to Government of India–certified laboratories for testing.

[9] For the metros, **30 samples** were collected, while for big class I and other other Class I cities, 25 and 20 samples were respectively collected.

The water tests that were conducted by our state or city agency for my city passed but the ones conducted by the National Rating exercise failed on the same standards tested. How is that possible?

The water samples were tested for turbidity, TTC, and residual chlorine. The water samples tested by the rating agencies were taken at the user end, that is, at the household level or at public standposts, and so forth. The samples taken by the state or city agency could have been tested at the point of release, that is, at the water works plant or the treatment plant. Thus, the water quality could have been contaminated in the distribution system and hence could fail on the same tests. The results are expected to encourage cities to test water samples at the user end to ensure that water supply is in conformity with the specified water quality standards, and also establish robust systems for water quality monitoring.

There are no water bodies in my city. Where were the samples taken from?

In case there were no water bodies in the city, then water bodies with 0.5 km of city limits were tested or, alternatively, groundwater samples were taken to Government of India–certified laboratories for testing.

How was the scoring undertaken if the ULB had no data available for on-site sanitation arrangements, such as septic tanks, and their maintenance?

The rating agencies were provided with very specific guidelines especially for such cases. Each city was divided into various zones. In case a city had no, or a partial, sewer system, the survey agency had instructions to consult the ULB and arrive at an estimate of the number of properties dependent on on-site arrangements, and then choose these areas of the city for the field visit. The agencies were required to undertake a survey of those areas and check for instances of pits or 'septic' tanks letting out wastes into drains or nalas, or where septage was otherwise not being disposed of safely. The agencies were required to have ample proof of such instances—by taking photographs, for example–and keeping them for ready reference.

How were cities scored on some of the process indicators, for instance on sanctions and laws for deviance, and so on?

The first round of the rating exercise gave marks to cities that reported that they had sanctions in place that were followed for deviance on the part of polluters. The rating looked for proof, not only of the sanction that may have government approval, but also of collection of fines from polluters. Similarly, if a city was claiming full or partial cost recovery, documented evidence, such as published data or tariffs, needed to be presented for scores to be awarded.

My town has several community or public toilets, yet I scored a zero in the indicator for access and use of toilet facilities. Why?

Scoring for this indicator is based on findings with respect to samples and the city can score poorly if the samples indicate poor performance on open defecation. The rating did not measure only the infrastructure available or built, but its appropriate and optimal usage.

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