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**PRI**

# **Monitoring and Action Tools for Citizens and Citizen Groups to Achieve Inclusive Sanitation in Cities**

## The 'Attitude' towards waste and sanitation:

Attitude, generally defined as 'our overall evaluations of people, groups, and objects in our social world'<sup>1</sup> determines our actions towards waste and sanitation along with rest of the things in life. Psychologists have defined<sup>2</sup> following three elements of attitude explained under ABC model of attitude. Below are these three elements with examples contextual to waste and sanitation:

- i. **Cognitive Component** ⇒ *Belief/ Evaluation* ≡ *the knowledge about characteristics of waste and its impacts on health and environment; its processing methods and prevailing system of waste management*
- ii. **Affective Component** ⇒ *Feeling/ Emotion* ≡ *feeling of hatred for solid waste or human waste and love for cleanliness*
- iii. **Behavioural Component** ⇒ *Response/ Action* ≡ *keeping oneself away from the waste or trying to keep waste away from places of presence; no action towards managing waste*

Above examples clearly explain the reasons behind the citizens' approach towards the issue of sanitation. Such attitudinal elements reflected as reactions during our interactions with multi stakeholder groups. Some of the common reactions are- "municipality is not paying attention towards problems in my area"; "how to contribute in sanitation, if majority of people don't know what is dry and wet waste"; "I don't litter on roads and keep waste responsibly, that fulfils my responsibility"; "we keep our neighbourhood clean through periodic campaigns". At some occasions citizens acknowledge the problems but forget soon due to the above mentioned attitudinal factors. For most citizens, the realization does not sustain for long in absence of a repeated incidence and never convert in affirmative actions.

## Why citizen monitoring and action?

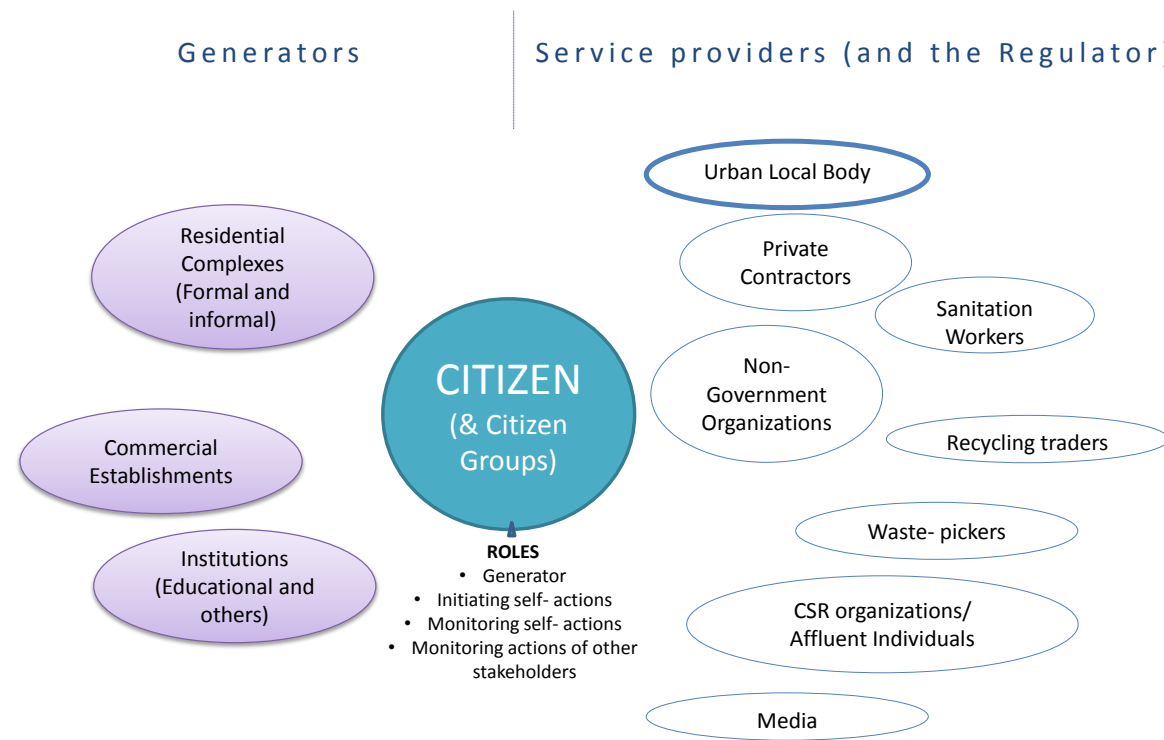
The constitution of India has mandated the responsibility of providing sanitation services as a basic amenity in cities to the urban local bodies (ULB) through 74<sup>th</sup> constitutional amendment act. In practice, provision of sanitation service becomes a multi-stakeholder activity. At city level, the stakeholders may be broadly categorised into three parts: generators, service providers and others. Generators include residential colonies (formal and informal), commercial establishments (like markets, offices, hotels, hospitals etc.) and institutions (schools, colleges, hospitals, sports facilities etc.). Service providers primarily include the urban local body which is the regulator as well. There are other service providers like private waste collectors, operators of the processing plants, public toilets construction & maintenance agencies, sanitation workers, CSOs engaged through the urban local body or otherwise. recycling traders and unorganized waste- pickers are also important service providing stakeholders.

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<sup>1</sup> <https://psychology.iresearchnet.com/social-psychology/attitudes/>

<sup>2</sup> Vishal Jain (2014), '3D Model of Attitude', International Journal of Advanced Research in Management and Social Sciences

Figure: Landscape of stakeholders in citizen centric inclusive sanitation service delivery



## Role of citizens and change in attitude:

Waste is an outcome of human activities. Both of the broad types of waste- solid waste and liquid waste are generated from human activities of different nature. As a fundamental principle, the citizens being generators, naturally get the ownership of wastes generated and the onus of actively contribute towards better waste management. For improving the sanitation scenario, it is important that citizen become aware of various dimensions of waste/ sanitation and take ownership of own actions, initiate new actions and get activated to monitor the services provided by other stakeholders.

Now, for activating citizens, first of all their attitude towards waste and sanitation need to change. Traditionally spreading information has been extensively used to change behaviours, assuming the education plays an important role in determining behaviour. Later more methods or tool were

evolved and proved to be more effective when used in combination with the information campaigns. Some of these methods include prompts, norm-appeals, feedback, commitment and incentives/ rewards etc. For citizen actions on improved sanitation services, two of these methods seems more relevant- prompts and commitment.<sup>3</sup> Prompts are designed to remind a person about a task, what he might forget to do. Commitments are written or verbal promises to undertake a certain type of activity.

## What are citizen action and monitoring tools?

Citizen action and monitoring tools are tools to bring attitudinal and behavioural change and induce actions and monitoring.

**Objectives:** Major objective of citizen action and monitoring tools for inclusive sanitation is to change attitude and behaviour of citizens and citizen groups and nudge them for initiating actions to improve the situation. Other objectives of the tools are:

- To educate citizens about various stages of waste management cycle
- To motivate them observe various aspects of service delivery diligently
- To remind them about their roles and responsibilities as a ‘engaged and activated’ citizens
- To make them take actions for improving situation of sanitation
- To encourage them to think creatively for actions that can be initiated by them and their groups
- To activate citizen and citizen groups through writing committing/ promising monitoring and action points

**Structure:** The tools are divided into two sections- solid waste management and toilets. Solid waste management is further covered under 5 major steps of generation & storage, collection, transportation, processing & treatment and end-use/ reuse (columns). Section on toilets is divided into two parts- individual toilets and public (and community) toilets. Each section is divided into 3 columns.

1. Aspects of Inclusive Sanitation (Aspects to be acted upon & monitored)
2. Emerging Questions (Question for introspection/ observation)
3. Action Points: What we can do for this? (Self-actions and monitoring initiatives)

First column provides an illustrative list of aspects pertaining to each of two sections. Second column provides some questions emerging out of the aspect given in first column. The third column provides space for writing the action points that a particular citizen or citizen groups finds doable and connects to. The aspects of inclusive sanitation are broadly of three types:

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<sup>3</sup> Ashlea Bartram (2009), ‘Behaviour Change Intervention Tools’, Government of South Australia

- A. aspects suitable for initiating action by a citizen in his own organisational capacity
- B. aspects suitable for persuading/ informing ULB for action
- C. aspects suitable of initiating monitoring and action by a citizen in his individual capacity

**Use of tools through citizen forums:** Under ECRC program, as a first step, citizen action and monitoring tools were introduced at meetings of citizen forums<sup>4</sup> in cities of Ajmer, Jhansi and Muzaffarpur. The structure and the role of tools were explained to the participants. Later, the citizens and their representatives were hand-held to fill the framework and identify/ prioritize actions. It was attempted that the discussions in the consecutive meetings of the forum are based on the agenda identified by using tools in the previous meeting. The deliberation and discussions on the cities' sanitation road map acted as a knowledge and information backdrop before introducing citizen monitoring and action tools.

### Other tools for citizen action on sanitation:

Swachhta App, a mobile phone based application is a novel initiative of MoHUA aiming to increase citizen's participation in sanitation service by providing them a platform for registering complains. (See Box). Swachhta app is an outward pointing tool. Citizen action and monitoring tool points more towards inside self and tries to seek one's contribution.

In other words citizen action and monitoring tools endeavour for initiating voluntary actions while Swachhata app helps in locating the person responsible for the required actions. With varying approach, both tools have potential to complement each other. Swachhata app is especially helpful in 'reporting' which is a follow up action of monitoring.

#### Swachhata App

Swachhata App is an initiative of Ministry of Housing and Urban Affairs developed by Janaagraha which aims to enable citizens to lodge a sanitation related issue with city's corporation. The complaint is further assigned to the concerned sanitation inspector of the ward. Out of total nine categories, five are related to solid waste, while four are on toilets. There is a provision of receiving updates on progress of redressal of complaints. An option of voting for a relevant complaint already filed is also provided in the application [1]

*Source: <https://play.google.com/store/apps/details?id=com.ichangemycity.swachhbarat&hl=en>*

<sup>4</sup> a multi-stake holder platform with representatives for various walks of the city like Resident Welfare Associations (RWAS), settlement improvement committees (SICs), traders associations, chamber of commerce, inner wheel, rotary club, university department heads, school principals, local community based organizations (CBOs), NGOs, waste collecting agencies & operators of processing plants, senior citizen associations etc.

## Way ahead:

The citizen action and monitor tool can be easily developed as a smart phone application having potential to reach a vast range of population. The existing features of the tools can be constructed using behavioural and attitudinal change methods like 'Prompt' and 'Commitment' in a more interactive way. In the web based application some additional features can be built using methods of 'Feedback', 'Rewards' and 'Norm-appeal'. Cities need to institutionalise a system of providing hand-holding support for the initiatives anchored through citizens and citizen groups. Such an institutional mechanism may be in the form of technical support centres or multi-stakeholder platforms like citizen forums. For sustained attitudinal and behavioural changes in the citizens, citizen action and monitor tools should be supported with an ecosystem of voluntary action in the cities, which can be developed through continuous and widespread interventions lead by civil society organizations and philanthropic groups.

*The Citizen Monitoring & Action Tool for Inclusive Sanitation is presented on the coming pages.*

## Inclusive Sanitation Services: Monitoring & Action Tools for Citizens and Citizen Groups

*Self-doing, self-monitoring & monitoring other stakeholders*

### I. Solid Waste Management

| <b>Aspects of Inclusive Sanitation</b><br><i>(Aspects to be acted upon &amp; monitored)</i>                                                         | <b>Emerging Questions</b><br><i>(Question for introspection/ observation)</i>                                                                                                          | <b>Action Points: What we can do for this?</b><br><i>(Self-actions and monitoring initiatives)</i> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| A. Generation & storage                                                                                                                             |                                                                                                                                                                                        |                                                                                                    |
| 1. Storage of segregated waste in 2/ 3 bins by households/ establishments/ shops                                                                    | 1. Is waste being stored/ kept in a segregated manner in houses/ shops/ schools/ establishments?                                                                                       | 1.<br>2.<br>.....                                                                                  |
| 2. No mixing of sanitary and hazardous waste with other waste by households/ establishments/ shops                                                  | 2. Is mixing of sanitary and hazardous waste with other waste commonly seen?                                                                                                           | 1.<br>2.<br>.....                                                                                  |
| 3. Provision of dust bins (green and blue) at all markets, bus stops, tourist places, transit nodes, along the roads                                | 3. Are all places like markets, bus stops, tourist places, transit nodes etc. have provision of dust bins (green and blue)?<br>4. Which are the locations where dustbins are required? | 1.<br>2.<br>.....                                                                                  |
| 4. Provision of storage bins with street vendors                                                                                                    | 5. Are waste storage bins available with street vendors?                                                                                                                               | 1.<br>2.<br>.....                                                                                  |
| 5. Provision of waste storage at venues of one time / occasional events like marriage ceremonies, fairs, exhibitions, rallies, public meetings etc. | 6. Is there provision of waste storage in a segregated manner at event venues?                                                                                                         | 1.<br>2.<br>.....                                                                                  |
| 6. Use of only specific types (legally permitted) of plastics, specially carry bags                                                                 | 6. Is there a prevalence of using one-time use plastics/ carry bags?                                                                                                                   | 1.<br>2.<br>.....                                                                                  |

| <b>Aspects of Inclusive Sanitation</b><br><i>(Aspects to be acted upon &amp; monitored)</i>                                                                  | <b>Emerging Questions</b><br><i>(Question for introspection/ observation)</i>                                                                                                 | <b>Action Points: What we can do for this?</b><br><i>(Self-actions and monitoring initiatives)</i> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 7. No burning of solid waste (on roads and in open areas)                                                                                                    | 7. Are there instances of waste burning in the locality?                                                                                                                      | 1.<br>2.<br>.....                                                                                  |
| <b>B. Collection</b>                                                                                                                                         |                                                                                                                                                                               |                                                                                                    |
| 1. Number of households/ establishments covered under door-to-door collection<br><br>2. Collection vehicles/ carts with compartments with 2/3 types of waste | 1. Are all households/ establishments covered under door-to-door collection?<br><br>2. Are the waste collection vehicles equipped with compartments to carry segregate waste? | 1.<br>2.<br>.....                                                                                  |
| 3. Provisions for collection of special waste like sanitary waste, hazardous waste and construction waste                                                    | 3. Are there provisions of collection of special waste types like sanitary waste, hazardous waste and construction?                                                           | 1.<br>2.<br>.....                                                                                  |
| 4. Frequency of sweeping of roads                                                                                                                            | 4. How frequently the roads in the locality are swept?                                                                                                                        | 1.<br>2.<br>.....                                                                                  |
| 5. Frequency of collection of waste from neighbourhood/ community bin (if any)                                                                               | 5. How often the waste is collected from the neighbourhood/ community bin?                                                                                                    | 1.<br>2.<br>.....                                                                                  |
| 6. Frequency of collection of waste from dustbins at markets, bus stops, tourist places, transit nodes, along the roads etc.                                 | 6. How often the waste is collected from dustbins at markets, bus stops, tourist places, transit nodes, along the roads etc.?                                                 | 1.<br>2.<br>.....                                                                                  |
| 7. Collection of waste from venues of one time / occasional events like marriage ceremonies, fairs, exhibitions, rallies, public meetings etc.               | 7. Is there a provision of collecting waste from venues of one time / occasional events?                                                                                      | 1.<br>2.<br>.....                                                                                  |
| 8. Poor living and working conditions of sanitation workers,                                                                                                 | 8. Are there efforts to acknowledge work of sanitation                                                                                                                        | 1.                                                                                                 |



| <b>Aspects of Inclusive Sanitation</b><br><i>(Aspects to be acted upon &amp; monitored)</i>                            | <b>Emerging Questions</b><br><i>(Question for introspection/ observation)</i>                                           | <b>Action Points: What we can do for this?</b><br><i>(Self-actions and monitoring initiatives)</i> |
|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| respect their work                                                                                                     | workers? Is there any initiative to improve the working and living conditions of sanitation workers (especially women)? | <b>2.</b><br>.....                                                                                 |
| <b>C. Transportation</b>                                                                                               |                                                                                                                         |                                                                                                    |
| 1. Transportation of waste in a segregated manner till the processing unit (using vehicles with separate compartments) | 1. Is the waste being transported to the processing unit in a segregated manner?                                        | <b>1.</b><br><b>2.</b><br>.....                                                                    |
| 2. No spilling of solid waste from the transportation vehicles                                                         | 2. Is the waste transport vehicle covered or closed to prevent spilling of waste?                                       | <b>1.</b><br><b>2.</b><br>.....                                                                    |
| 3. No in-route dumping of solid waste at unauthorised places                                                           | 3. Are waste collecting vehicles dumping waste at unauthorised places?                                                  | <b>1.</b><br><b>2.</b><br>.....                                                                    |
| <b>D. Processing and treatment</b>                                                                                     |                                                                                                                         |                                                                                                    |
| 1. Processing of own organic waste by colonies/ informal settlements/ market associations/ establishments              | 1. How many colonies/ informal settlements/ market associations/ establishments are processing their own organic waste? | <b>1.</b><br><b>2.</b><br>.....                                                                    |
| 2. Processing of own organic waste by households                                                                       | 2. How many houses are processing their own organic waste in the colony/ mohalla?                                       | <b>1.</b><br><b>2.</b><br>.....                                                                    |
| 3. Selling recyclable waste in an organized manner by colonies/ informal settlements/ market associations/             | 3. Are colonies/ informal settlements/ market associations/ establishments having their own arrangements for selling    | <b>1.</b><br><b>2.</b>                                                                             |

| <b>Aspects of Inclusive Sanitation</b><br><i>(Aspects to be acted upon &amp; monitored)</i>     | <b>Emerging Questions</b><br><i>(Question for introspection/ observation)</i>                                                                                                                                                      | <b>Action Points: What we can do for this?</b><br><i>(Self-actions and monitoring initiatives)</i> |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| establishments                                                                                  | recyclable waste?                                                                                                                                                                                                                  | .....                                                                                              |
| 4. Provision of safe disposal bio-medical waste generated in the city?                          | 4. Is there a provision of safe disposal (treatment/ incineration) in health care facilities (hospitals) of city?                                                                                                                  | 1.<br>2.<br>.....                                                                                  |
| 5. Provision of processing of construction and demolition waste                                 | 5. Is there a provision of processing of construction and demolition waste in the city?                                                                                                                                            | 1.<br>2.<br>.....                                                                                  |
| E. End-use/ Reuse                                                                               |                                                                                                                                                                                                                                    |                                                                                                    |
| 1. Provision of a sanitary landfill site at city level for waste disposal                       | 1. Is there a provision of sanitary landfill site in the city?<br>2. Is mixed waste being dumped in open dumping grounds at ward/ city level?<br>3. Are old dumping grounds being closed and reclaimed scientifically in the city? | 1.<br>2.<br>.....                                                                                  |
| 2. Use of compost generated from processing of organic waste in parks/ gardening                | 4. Is compost produced (if any) by composting of organic waste generated in the city being used for gardening?                                                                                                                     | 1.<br>2.<br>.....                                                                                  |
| 3. Awareness on reducing waste at source and use of recycled items through changes in lifestyle | 5. Does our lifestyle focus on reducing waste and using recycled items?                                                                                                                                                            | 1.<br>2.<br>.....                                                                                  |

## II. Toilets

| <b>Aspects of Inclusive Sanitation</b><br><i>(Aspects to be acted upon &amp; monitored)</i>                                                   | <b>Emerging Questions</b><br><i>(Question to be asked/ observed)</i>                                                                                                              | <b>Action Points: What we can do for this?</b><br><i>(Self-actions and monitoring initiatives)</i> |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| A. Individual Toilets                                                                                                                         |                                                                                                                                                                                   |                                                                                                    |
| 1. Availability of 'sanitary toilets' at all individual households and establishments (schools, complexes etc.) in the localities/ ward/ city | 1. Are all households having individual 'sanitary toilets' in the ward/ city?<br>2. What are the problems faced by households in having their own toilets?                        | 1.<br>2.<br>.....                                                                                  |
| 2. Appropriateness of the containment tanks of individual toilets                                                                             | 3. Are the containment systems (tanks) of toilets built appropriately?<br>4. Are any toilet tanks connected to open drains (nali)?                                                | 1.<br>2.<br>.....                                                                                  |
| 3. Regular desludging of septic tanks                                                                                                         | 5. How often septic tanks of our houses/ localities emptied?                                                                                                                      | 1.<br>2.<br>.....                                                                                  |
| 4. Conveyance and Disposal of septage generated from emptying septic tanks                                                                    | 6. Are there arrangements of emptying septic tanks ensuring human dignity and applicable laws<br>7. How and where the septage being disposed after emptying the septic tanks?     | 1.<br>2.<br>.....                                                                                  |
| A. Public & Community Toilets and Urinals                                                                                                     |                                                                                                                                                                                   |                                                                                                    |
| 1. Availability of public toilets and urinals near markets, transit places, mandis, tourist spots etc.                                        | 1. Are there public toilets available near markets, transit places, mandis, tourist spots etc. for men and women?<br>2. Are urinals available at public places for men and women? | 1.<br>2.<br>.....                                                                                  |

| <b>Aspects of Inclusive Sanitation</b><br><i>(Aspects to be acted upon &amp; monitored)</i> | <b>Emerging Questions</b><br><i>(Question to be asked/ observed)</i>                                                                                                                                        | <b>Action Points: What we can do for this?</b><br><i>(Self-actions and monitoring initiatives)</i> |
|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 2. Availability of community toilets near informal settlements                              | 3. Are community toilets (with desired facilities) available near informal settlements?                                                                                                                     | 1.<br>2.<br>.....                                                                                  |
| 3. Status of existing public, community toilets and urinals                                 | 4. Are public, community toilets and urinals clean and equipped with facilities like water, electricity, caretakers?<br>5. Are existing toilets having facilities to enable children and differently abled? | 1.<br>2.<br>.....                                                                                  |

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