Orientation on Swachh Bharat Mission 2.0 and Swachh Survekshan 2024

Swachhata Knowledge Partners (SKP)

Center for Water and Sanitation (CWAS), CRDF, CEPT University

Urban Management Centre (UMC)

For

Swachh Bharat Mission – Urban

Government of Gujarat

શહેરી વિકાસ અને શહેરી ગૃહ નિર્માણ વિભાગ
ગુજરાત સરકાર

स्वच्छ भारत
एक कदम स्वच्छता की ओर

CWAS CENTER FOR WATER AND SANITATION
CRDF CEPT UNIVERSITY

Urban Management Centre
Making cities work for everyone

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Session 1

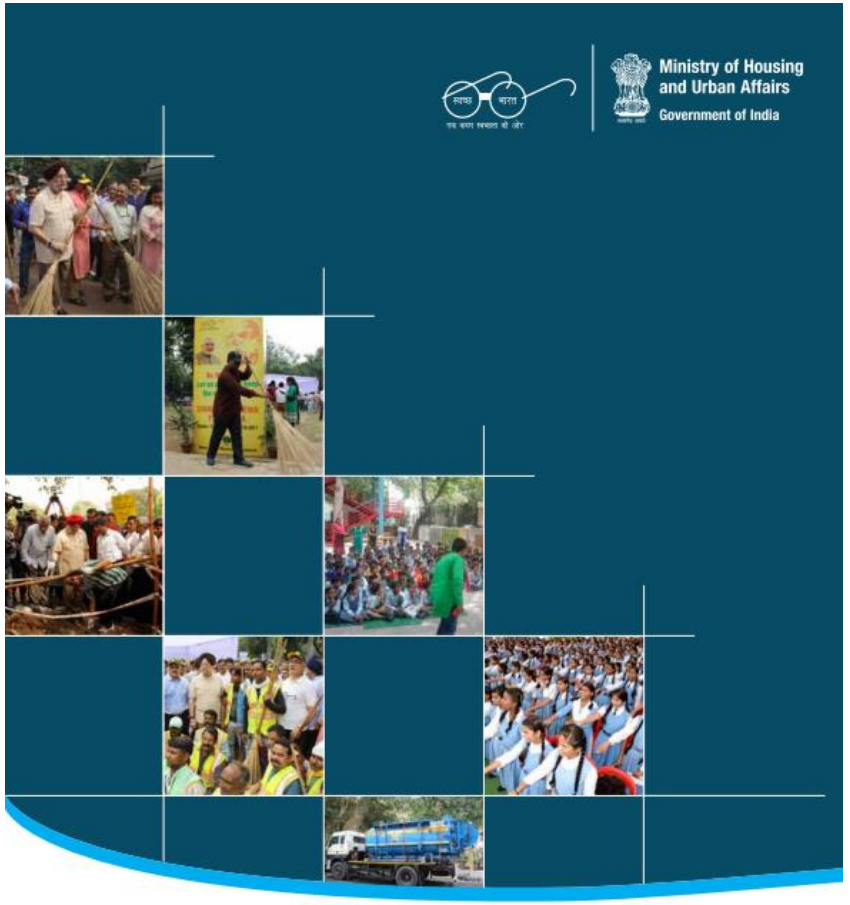
District Level Officials

Overview of the Swachh Bharat Mission– Urban 2.0

India has become Open Defecation Free under SBM 1.0

Mission Objectives of SBM 1.0

1. Elimination of open defecation
2. Eradication of Manual Scavenging
3. Modern and Scientific Municipal Solid Waste Management
4. Behavioral change regarding healthy sanitation practices
5. Generate awareness about sanitation and its linkage with public health

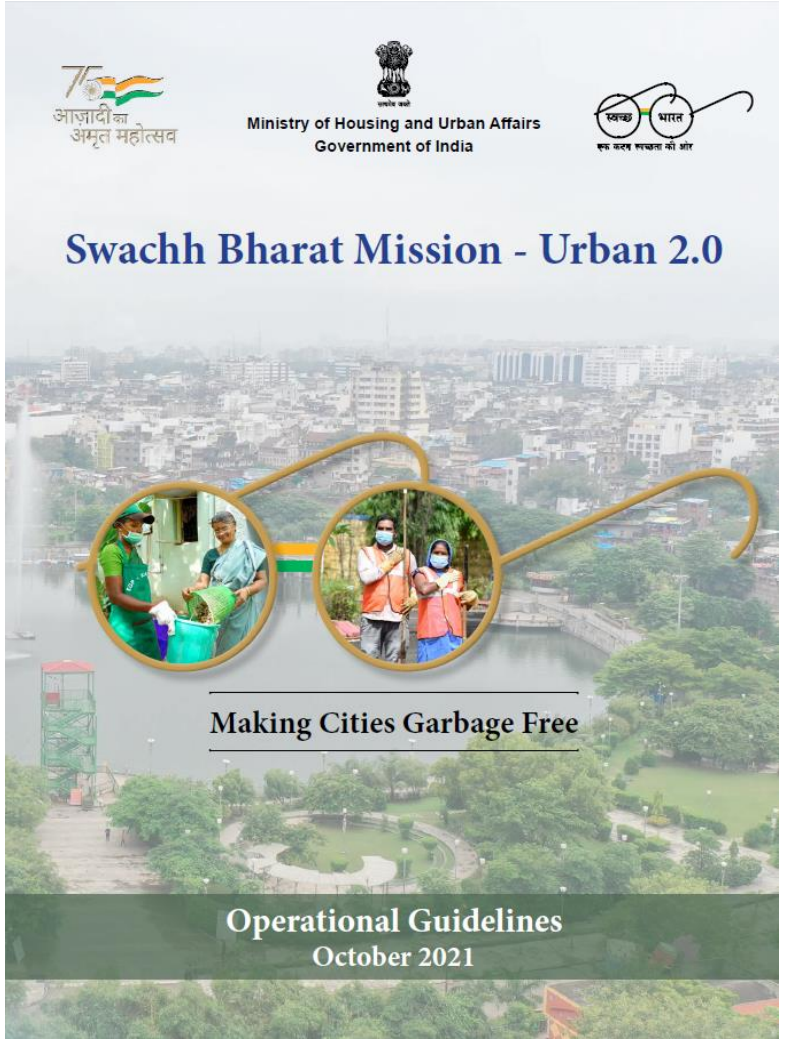


Swachh Bharat Mission- 2.0

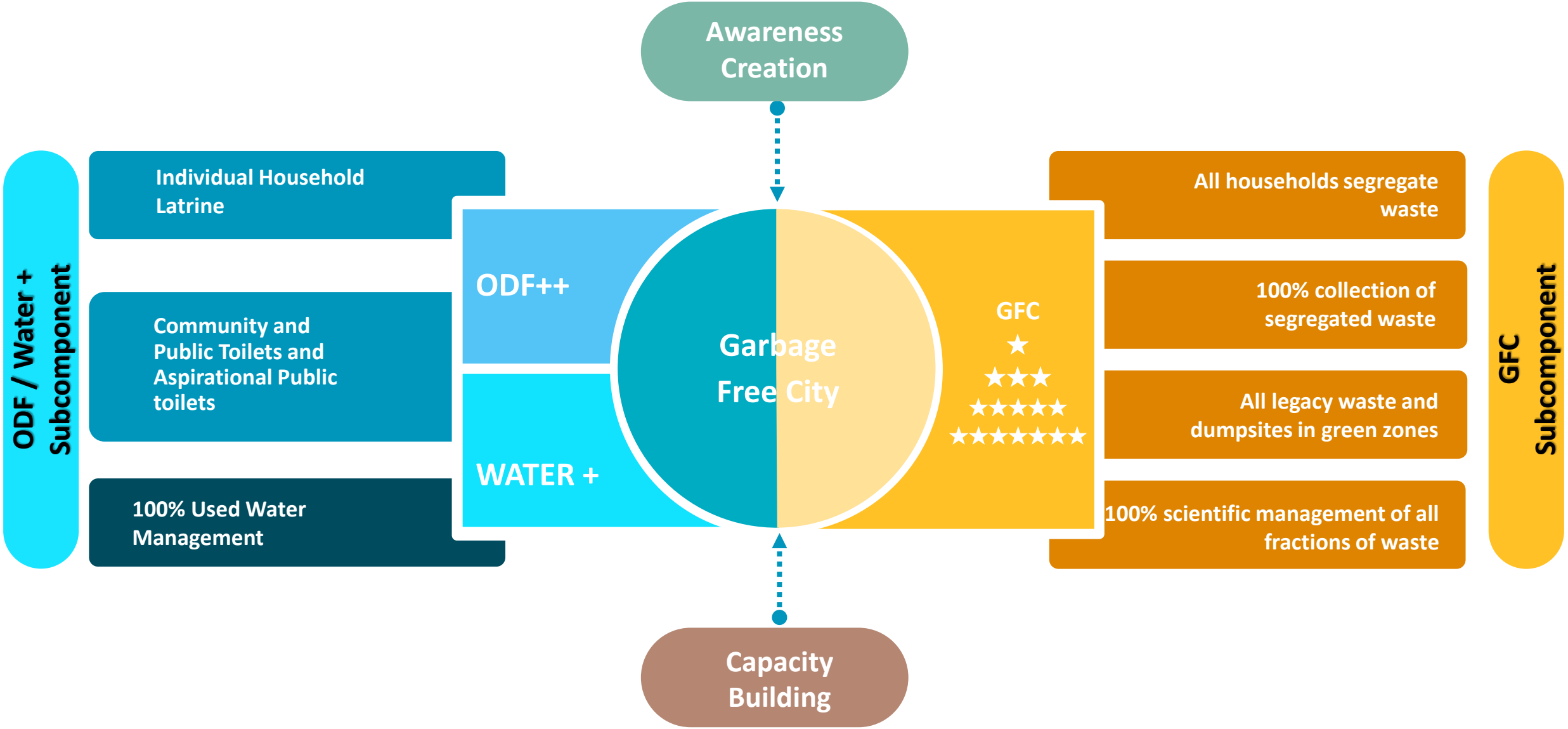
Mission Aim

To make all our cities **‘Garbage Free’**

2021 - 2026

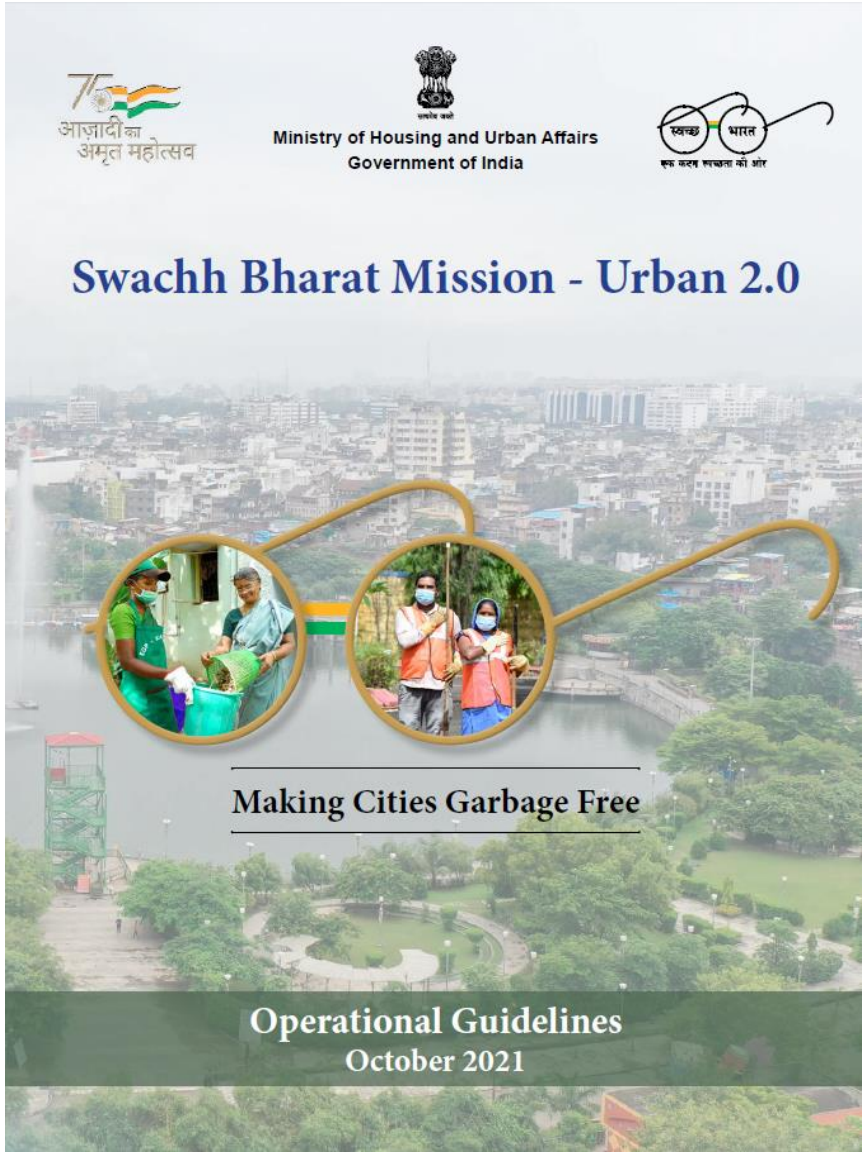


SBM 2.0 Goal - Garbage Free City



To achieve this vision, specific targeted objectives are to be achieved

1. Sustainable Solid Waste Management
2. Sustainable Sanitation and Used water management
3. Awareness Creation- ‘Jan Andolan’ ‘Swachh’ Behaviour
4. Capacity Building



Nirmal Gujarat 2.0

Mission & Objectives

- To become a **Garbage Free State**

Mission

- To have **visible cleanliness** all around through synergies of efforts between **Government, Civil Society & Citizens**

Objective

240 crore allotted for 1st year

ODF+/ODF++/ Water+ Certification

ODF+	ODF++	Water+
• Nobody found defecating/urinating in open	• ODF+ conditions complied with	• All ODF++ conditions met
• All CT/PTs and standalone urinals are well maintained and functional	• No untreated sewage including faecal sludge & septage discharged/ dumped in water bodies or open areas	• Sufficient number of vehicles with haulage capacity available for scheduled and regular emptying of septic tanks
• All toilets are connected to safe disposal systems- septic tanks with soak pit or twin pits or sewer or pucca municipal drain	• Scheduled desludging for areas dependent on septic tank • Sewage including faecal sludge & septage is safely managed and treated	• Used water from all toilets discharged into a local sanitary outlet and/ or used water from drains is collected, conveyed and discharged safely into a STP or nearby sewer
		• Functional treatment plant available that effectively treats used water including sludge generated in the ULB
		• Functional RSA and ERSU set up with mechanized cleaning of sewers, machine-holes and septic tanks
		• 20% treated used water being reused after treatment
		• O&M costs of sewer networks/ STPs/ FSTPs being recovered

Status of Swachh Certifications

Swachh certifications in India and Gujarat

- 4,317 cities ODF
- 3,354 cities ODF+
- 964 cities ODF++
- 62 cities Water+

- 50 cities Recertified ODF
- 24 cities ODF+
- 86 cities ODF++
- 5 cities Water+

Garbage Free City- Certification

Conditions for rating

Key Component/ Condition	1 Star	3 Star (Mandatory ODF+)	5 Star (Mandatory ODF++)	7 Star (Mandatory Water+)
Door to Door Collection (wards)	At least 50 %	At least 70 %	At least 90 %	100%
Source Segregation (wards)	At least 40 %	At least 60 %	At least 80 %	At least 90 %
Wet waste processing	At least 50%	At least 70%	At least 90%	100%
Dry waste processing	At least 50%	At least 70%	At least 90%	95%
Facility for collection of C&D waste	20% wards	40% wards	80% wards	90% wards
Legacy dumpsite remediation	Action plan submitted	25% work completed	60% work completed	90% work completed
Single Use Plastic (SUP) ban	Notification issued	Notification and enforcement of SUP ban	Complete Ban	Complete Ban
IEC & Capacity Building	2 defined initiatives implemented	3 defined initiatives implemented	3 defined initiatives implemented	All defined initiatives implemented
Aspirational parameters	Aspirational parameters not mandatory	Aspirational parameters not mandatory	Compliance to aspirational parameters	All aspirational parameters to be met

Home Composting

Khamba composting

Drum composting

Community level composting

Movable compost pits – Community Level Composting

Photograph of Composting facility

C&D Waste Processing

Garbage Free City

Status of GFC certifications in India and Gujarat

335 cities
1 star

49 cities
3 star

10 cities
5 star

2 cities
7 Star

1 city
1 Star

6 cities
3 star

-
5 star

1 city
7 star

Cities with **No Star** in Gujarat = 157

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Session 2

Swachh Survekshan 2024

SS

2024

Total Marks 9,500

#Mera Shahar, Meri Pehchan

SS-2024 Total Marks 9,500

60%

Service Level Progress

5,705 marks

No.	Components	Marks
1	Visible cleanliness	970
2	Segregation, Collection & Transportation	750
3	Solid Waste Management	1,705
4	Legacy waste remediation	230
5	Sanitation, Used Water Management & Safaimitra Suraksha	1,245
6	Nudge indicators	805

26%

Certification

2,500 marks

No.	Components	Marks
1	GFC Star rating	1,375
2	ODF, ODF+, ODF++, Water+	1,125

SWACHH SURVEKSHAN
#Mera Shahar, Meri Pehchan 2024
REDUCE REUSE RECYCLE

14%

Jan Andolan

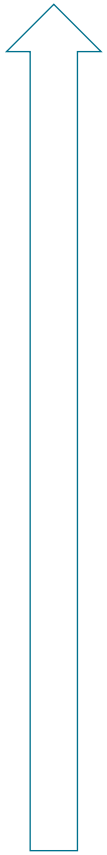
1,295 marks

No.	Components	Marks
1	Citizen Feedback	600
2	Engagement of Local Brand Ambassadors	55
3	Participation of ULBs in campaigns by MoHUA	100
4	Single use plastic clean up drives conducted in city	50
5	Onsite wet waste processing by non BWG	70
6	Grievance Redressal - Swachhata /Local App	100
7	Swachh ward ranking	320

This year’s theme - Reduce Reuse Recycle

Evolution of themes

9th edition of world’s largest urban cleanliness survey



Year	Theme	No. of cities
2024	Reduce Reuse Recycle	4800+
2023	Waste to Wealth	4477
2022	People first	4354
2021	Integrated approach	4320
2020	Institutionalizing Swachhata	4242
2019	Sustaining Swachhata	4237
2018	Measuring outcomes	4203
2017	Measuring output	434
2016	Measuring physical progress	73

Swachh Survekshan

New features and inclusion

1. **Mission Life indicators** related to Swachhata have been incorporated:
   - Do not discard waste in water bodies and in public spaces; Donate old clothes and books; Single Use Plastic Clean-up drives in cities and water bodies
2. **Sanitation & Waste management in schools** have been incorporated:
   - Cleanliness in schools; Separate toilets for boys & girls; Safe disposal of waste
3. **‘Cleanliness in areas of tourist interest’** in cities has been added.
4. **‘SBM-U & NULM convergence’** indicator added for SHG participation.
5. **‘Yellow spots’** added as a new indicator to control ‘open urination’ in the cities.

Moving up the ladder and improving- Actions to be taken

Moving from	Additional steps to be taken			
ODF to **ODF++**	All CT/PTs are functional and well maintained	Scheduled desludging – for onsite sanitation areas	STP functional and well utilized	Core parameters
ODF++ to **Water+**	Functional capacity of STP is sufficient to treat sewage for at least 70% of current population	20% treated used water is reused within ULB	Recovering O&M costs of sewerage, STP & FSTP through dedicated revenue streams	Municipal drains are well maintained and trash arrestors are well placed

Prioritize increasing sewerage connections and setting up of STPs

Cities with STPs

- **Priority 1: Ensuring 100% sewerage connections in the city (Currently only 60% properties are connected to sewer)**
  - Focus on increasing sewer connections
  - Conducting drive to bring illegal connections on the record
  - Digitizing manual records and uploading data on E-Nagar
- **Priority 2: Increasing capacity utilization STPs**
  - Focus on pumping station: Tapping used water from non-network areas and diverted to STP
  - Licensing private desludging operators for emptying sludge emptied from septic tanks

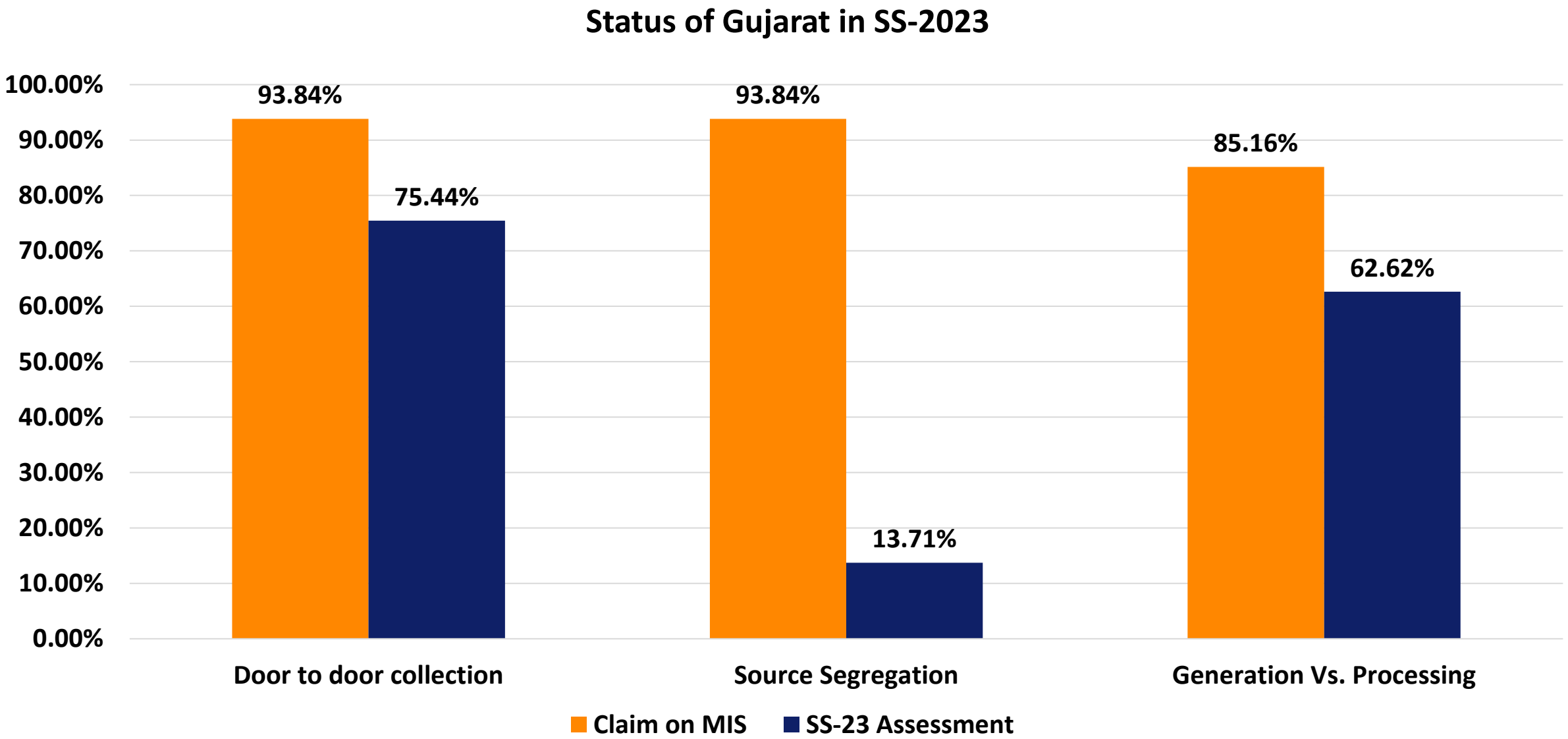
Cities without STPs (With 100% or partial sewerage network)

- **Priority 1: All cities to set up STP to treat 100% used water generated in the city**
  - Finalise the land for setting up STP
  - DPR approval for STP with 5 year of O&M plan + solar based operations
  - Scheduled desludging of septic tank in non-network areas
- **Priority 2: Network expansion and strengthening municipal drains**
  - Focus on increasing the coverage of sewerage network
  - Focus on eliminating open discharge points and cover open drains

Moving up the ladder and improving- Actions to be taken

Moving to	Additional steps to be taken			
1 Star	Segregated waste collection for 50% wards	Min. 50% Dry and Wet waste processing	SUP ban Notification issued	Action Plan for Legacy waste Remediation submitted
3 Star	Segregated waste collection for 70% wards	Min. 70% Dry and Wet waste processing	SUP ban Notification issued and enforced	25% Legacy waste Remediated
5 Star	Segregated waste collection for 90% wards	Min. 90% Dry and Wet waste processing	Complete Ban on SUP	60% Legacy waste Remediated

A key action is to match the status of claim on MIS vs on field



Source: Swachh Survekshan Result 2023, GoI

Checklist for collectors for monitoring the progress under SBM 2.0 and Nirmal Gujarat 2.0

To conduct monthly meeting with their respective district ULBs

Collection of waste	100% Door to Door	100% Segregated waste collected	Cleaning of public areas as per parameters	No visible SW/zero encroachment around/in drains & water bodies
Processing and Treatment	Adequate capacity of dry waste processing	Collect and process C&D waste	Sanitary Landfill	Remediation of all dumpsites
Waste reuse/events	At least one park converted as Waste to Wonder park	Zero waste events		At least 1 RRR center
	PPE to San workers Best performing worker		Bulk Waste Generators processing wet waste	
Sustaining sanitation	All properties and CTs/ PTs connected to sewer or septic tanks	STP/FSTP adequate capacity and functional		Feedback mechanism for sanitation activities

Swachh Survekshan 2024:

Low hanging fruits

Low hanging fruits under SS - 2024

Parameter	Description of parameter	Marks
1.1	Sweeping in residential & commercial areas	**60**
1.2	Clean back lanes	**50**
1.3	No large storage bins, no waste burning	**20**
1.4	No Garbage Vulnerable points	**20**
1.6	No Yellow spots in commercial & residential areas	**60**
1.7	Cleanliness of storm water drains & nallahs	**40**
1.8	Cleanliness of water bodies	**25**
1.9	Aesthetics & city beautification	**230**
1.10	Cleanliness in Slums	**80**
1.11	Cleanliness of places of tourist interest, monuments and parks	**120**
1.12	Cleanliness in schools	**75**
2.1	100% Door-to-door collection in at least 90% wards	**200**
2.3	At least 50% C&T cost covered by user charges	**120**
3.6	C&D Waste Management	**120**
3.9	Ban on SUP & plastic waste processing	**70**
3.10	Onsite wet waste processing by BWG	**100**
3.11	Safe disposal of wet & dry waste in schools	**25**

Parameter	Description of parameter	Marks
4.1	Remediation of all identified dumpsites	**230**
5.1	Connection to sewerage, septic tank, twin pit etc.	**50**
5.2	Cleanliness of CT, PT, Urinals & feedback	**100**
5.3	Availability of separate functional & clean toilets in schools for boys & girls	**50**
5.4	FSTP/STP capacity	**100**
5.5	Faecal sludge & sewage treatment	**145**
5.6	Safe disposal of liquid waste in schools	**25**
5.7	Safaimitra Suraksha - Adequate machines & equipment	**120**
5.8	Safaimitra Suraksha - Adequate workforce	**100**
5.9	Notification of Standardization of Septic Tank and ban on hazardous sewer entry, 14420 complaints resolution	**150**
5.10	Safaimitra Suraksha - 24X7 helpline & awareness campaigns	**80**
5.11	Desludging operators are trained following CPHEEO manual	**120**

Floating Wetlands

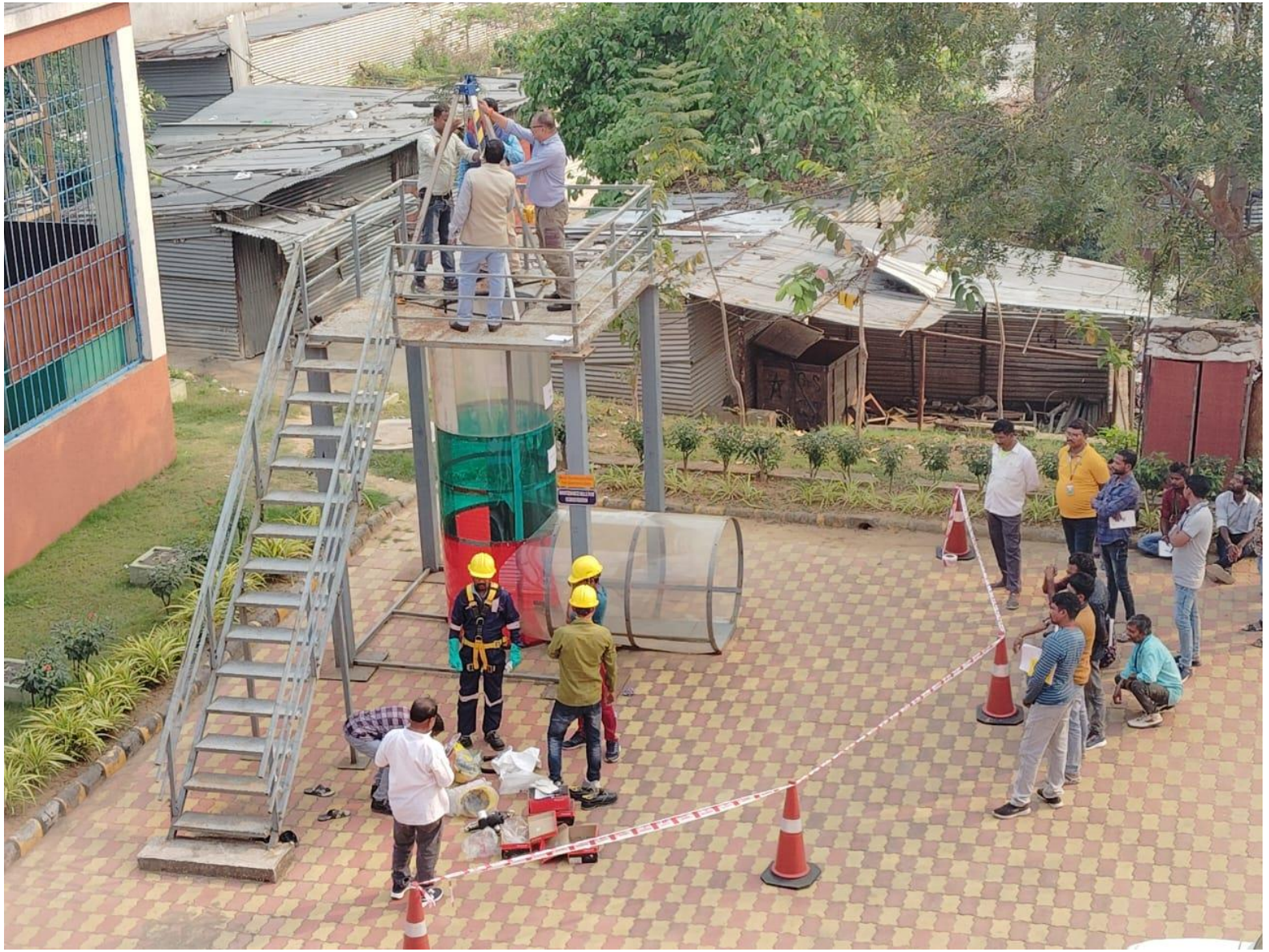
Floating wetlands for improving water quality of lakes/ ponds

Training of Sanitation Workers

Practical training for cleaning of sewer lines using safety equipment and PPE

Training of Sanitation Workers

Practical training for cleaning of sewer lines using safety equipment and PPE



RRR Centre – Halvad Nagarpalika

Good practice by Halvad in setting up RRR center

Low hanging fruits under SS - 2024

Parameter	Description of parameter	Marks
6.1	1 year of RRR center operations.	**80**
6.3	Zero waste events (at least ONE Zero Waste Functions in each month)	**90**
6.5	Promoting youth participation – Swachh Tulip	**75**
6.7	SBM-U and NULM convergence	**125**
6.8	Benefits extended to workers	**130**
6.9	Training/workshops/ seminars/peer visits	**70**
7.2	ODF, ODF+, ODF++, Water+	**725**
8.1	Citizen Feedback (Feedback on 9 questions)	**180**
8.2	Engagement of Local Brand Ambassadors & recognition of Swachhata champions	**55**
8.3	Participation of ULBs in campaigns driven by MoHUA	**100**
8.4	Single use plastic clean up drives conducted in the city and water bodies	**50**
8.5	Onsite wet waste processing by non-Bulk Waste Generators	**70**
8.6	Grievance Redressal through Swachhata/Local App	**80**
8.7	Swachh Ward ranking	**320**

4,835 / 9,500

(51% marks)

These marks can be achieved if –

- All the activities done by the ULBs are properly documented
- Documentation uploaded on the Swachhatam portal
- Documented activities are conducted on the ground as well.

Total marks easy to achieve under SS-2024

Sr. No.	Parameters	Total Marks	Expected Marks	Percentage
1	Visible Cleanliness	970	780	80%
2	Segregation, Collection, Transportation	750	320	43%
3	Solid Waste Management	1705	315	18%
4	Legacy waste remediation	230	230	100%
5	Sanitation, Used Water Management & Safaimitra Suraksha	1245	1040	84%
6	Nudge indicators	805	570	71%
7	Certification	2500	725	29%
8	Jan Andolan	1295	855	66%
Total		**9500**	**4835**	**51%**

1. Visible Cleanliness (780/970 marks)

Can achieve at least 780 marks by taking following actions

1.1 (60/60 marks)

Sweeping in residential & commercial areas

1.2 (50/60 marks)

Clean back lanes

1.3 (20/20 marks)

No large storage bins, no waste burning

1.4 (20/20 marks)

No GVP

1.6 (60/60 marks)

No Yellow spots in commercial & residential areas

1.7 (40/50 marks)

Cleanliness of storm water drains & nallahs

1.8 (25/25 marks)

Cleanliness of water bodies

1.9 (230/300 marks)

Aesthetics & city beautification

1.10 (80/100 marks)

Cleanliness in Slums

1.11 (120/140 marks)

Cleanliness of places of tourist interest, monuments and parks

1.12 (75/75 marks)

Cleanliness in schools

2. Segregation, Collection, Transportation (320/750 marks)

Goals

2.1 (200/300 marks)

100% Door-to-door collection in at least 90% wards

2.3 (120/150 marks)

At least 50% C&T cost covered by user charges

Action to be taken

✓ 2.1 - Door-to-door collection in all wards through own staff or outsourced agency.

✓ 2.3 - Operation Cost (**50% of Collection and Transportation of solid waste management charges**) should be covered by user charges.

3. Solid Waste Management (315/1705 marks)

Goals	Action to be taken
3.6 (120/120 marks) C&D Waste Management	✓ 3.6 - C&D Waste Management notification (user charge) published in two local newspapers. Awareness should be generated about the location of C&D waste collection centre. **Sale receipt of C&D waste** sold should be well maintained at the site.
3.9 (70/150 marks) Ban on SUP & plastic waste processing	✓ 3.9 – Notify ban on Single Use Plastic (SUP) and ensure its enforcement by collecting fines.
3.10 (100/100 marks) Onsite wet waste processing by BWG	✓ 3.10 - Bulk Waste Generator Notification in two newspaper & the list is updated on Swachhtam portal.
3.11 (25/25 marks) Onsite wet waste processing by BWG	✓ 3.11 - All schools under ULB jurisdiction must have compost pit for wet waste management.

4. Legacy waste remediation (230/230 marks)

Goals	Action to be taken

4.1 (230 marks)

Remediation of all identified dumpsites

- ✓ Remediation of all identified dump site.
- ✓ Remediation details updated on Swachhtam Portal.
- ✓ ***GIS mapping of legacy* waste site updated on Swachhtam Portal**

Remark – MIS details must be updated on Swachhtam Portal, otherwise it will be marked zero

5. Sanitation, UWM & Safaimitra Suraksha (1040/1245 marks)

Goals	Action to be taken
5.1 (50/50 marks) Connection to sewerage, septic tank, twin pit etc.	✓ 5.1 – Provide sewerage connections to all households, commercial institutions, CTs and PTs. In case of no sewerage network, ensure its connection with septic tank and soak pit ***(no open discharge).***
5.2 (100/100 marks) Cleanliness of CT, PT, Urinals & feedback	✓ 5.2 – *Ensure* all CTs/PTs are well maintained (caretaker must have PPE kit & present there). Toilets marked with ***Male/Female signage***. Map all CTs/PTs and the same is updated on SBM Portal. Displaying SBM messages with SS-2024 logo prominently at all CT&PTs.
5.3 (50/50 marks) Availability of separate functional & clean toilets in schools for boys & girls	✓ 5.3 – Ensure all schools have separate toilets for boys and girls and are well maintained.

5. Sanitation, UWM & Safaimitra Suraksha (1040/1245 marks)

Goals

5.4 (100/100 marks)

FSTP/STP capacity

5.5 (145/170 marks)

Faecal sludge & sewage treatment

5.6 (25/25 marks)

Safe disposal of liquid waste in schools

5.8 (100/100 marks)

Safaimitra Suraksha - Adequate workforce

Action to be taken

✓ 5.4 – Map all STP/FSTP and update the same on the Swachhatam Portal.

✓ 5.5 – Maintain STP/FSTP logbooks STP/FSTP, latest three months electricity bills, quantity of reused water / treated water, Display board mentioning capacity of the plant. State Pollution Control board test certificate of last 3 months.

✓ 5.6 - Ensure that all toilets in all the schools within the jurisdiction of the ULB are connected with sewerage system or septic tanks.

✓ 5.8 – Notify Responsible Sanitation Authority (RSA) and Sanitation Response Unit (SRU) and ensure it is operational. Deploy adequate workforce as per CPHEEO calculator.

5. Sanitation, UWM & Safaimitra Suraksha (1040/1245 marks)

Goals

5.7 (120/220 marks)

Safaimitra Suraksha - Adequate machines & equipment

5.9 (180/180 marks)

Notification of Standardization of Septic Tank and ban on hazardous sewer entry, 14420 complaints resolution

5.10 (80/80 marks)

Safaimitra Suraksha - 24X7 helpline & awareness campaigns

5.11 (170/170 marks)

Desludging operators are trained following CPHEEO manual

Action to be taken

- ✓ 5.7 – RSA and SRU notified and operational. Equipment & workforce requirement.
- ✓ 5.9 – Issue a public notification for standardization of septic tanks and ban on hazardous sewer entry in two local newspapers.
- ✓ 5.10 – Ensure ***24X7 help line number (14420) is functional in your city for receiving*** complaints. Advertise the use of toll-free number and conduct awareness generation activities for the same.
- ✓ 5.11 – Train all the desludging operators (ULB staff and private operators) as per the CPHEEO manual to ensure safe desludging operations.

6. Nudge indicators (570/805 marks)

Goals	Action to be taken
6.1 (80/80 marks) 1 year of RRR center operations.	✓ 6.1 – Establish RRR centre in the city and upload its details Swachhatam Portal. Display signage board at RRR centre and generate awareness among citizens for RRR centre.
6.3 (90/90 marks) Zero waste events	✓ 6.3 - Ensuring Zero waste event while organizing social and religious functions and photos should be uploaded on Swachhtam portal (1 govt. program, 1 social program, 1 religious program, 1 awareness campaign). Zero waste events photos should shared on social media account by the wards and ULBs.
6.5 (75/75 marks) Promoting youth participation – Swachh Tulip	✓ 6.5 – Engage at least 3 TULIP interns for supporting implementation of campaigns, citizen centric IEC and BCC initiatives, monitoring of sanitation and waste management facilities, grievance redressal etc.
6.7 (125/125 marks) SBM-U and NULM convergence	✓ 6.7 – Form new SHGs for Sanitation & Waste Management. Ensure that the SHGs have received the revolving fund.

6. Nudge indicators (570/805 marks)

Goals	Action to be taken
6.8 (130/130 marks) Benefits extended to workers	✓ 6.8 – Provide identity card, PPE kit, health insurance, health scheme to all sanitary worker & informal waste pickers. Update complete details of sanitary workers & informal waste pickers on Swachhatam portal. Recognition best performing worker in each ward in each month.
6.9 (70/70 marks) Training/workshops/ seminars/peer visits	✓ 6.9 – Conduct training of all sanitary workers on importance and use of PPE, Safaimitra Suraksha etc.

7. Certification (725/2500 marks)

Goals

7.1 (0/1375 marks)

GFC Star rating

7.2 (725/1125 marks)

ODF, ODF+, ODF++, Water+

Action to be taken

- ✓ 1 Star city - 525 marks (All ULBs apply at least one star for star rating certification, Swachhtam portal update regularly i.e. source segregation and processing managed as per GFC guidelines).
- ✓ All ULB should apply for ODF++ (All ULBs updated Swachhtam portal i.e. CT/PT seats updated)
- ✓ All CT/PTs are well maintained as per ODF++ Guidelines.
- ✓ At the time of Field verification ULB must be compliant with ODF++ Guidelines

Remark: for 1 Star achievement, 60% segregation and 60% waste processing to be done as per given timeline. Action plan for setting up 'scientific landfill site' need to be uploaded on Swachhatam portal.

8. Jan Andolan (855/1295 marks)

Goals

8.1 (180/600 marks)

Citizen Feedback

8.2 (55/55 marks)

Engagement of Local Brand Ambassadors & recognition of Swachhata champions

8.3 (100/200 marks)

Participation of ULBs in campaigns driven by MoHUA

Action to be taken

- ✓ 8.1 – All sanitation complains must get resolved within SLA period and citizen are motivated for happiness indicator on Swachhta App and mygov portal.
- ✓ 8.2 – Identify at least 1 ***local brand ambassador, 3 men and 3 women Swachhata Champions.*** Conduct at least one activity with ***engagement of them.*** *Maintain a* list of their names and contact details with photos and upload a brief note (max 50 words) describing the work done by them and on Swachhatam portal.
- ✓ 8.3 - Attend at least 40% of the campaigns conducted by MoHUA to gain 100 marks. If your city attends all the campaign then you can score 200 marks.

8. Jan Andolan (855/1295 marks)

Goals	Action to be taken
8.4 (50/50 marks) Single use plastic clean up drives conducted in the city and water bodies	✓ 8.4 – Conduct single use plastic clean up drives in the city and near near all water bodies.
8.5 (70/70 marks) Onsite wet waste processing by non-Bulk Waste Generators	✓ 8.5 – Conduct awareness campaign for practicing on-site wet waste processing by non-bulk waste generators.
8.6 (80/100 marks) Grievance Redressal through Swachhata App / Local App	✓ 8.6 – 100% complaint resolved within SLA on Swacchta App.

8. Jan Andolan (855/1295 marks)

Goals	Action to be taken
8.7 (320/320 marks)	✓ 8.7 – Conduct Swachh ward ranking competition in each month in hotels, schools, hospitals, government offices, RWAs etc. Upload a list of top 3 wards on Swachhatam portal. Post photos social media and upload the same on swachhatam portal.
Swachh Ward ranking	

Session 3

Swachhatam Portal

Swachhatam Portal

To centralize GIS database for different types of users

Enables government in quick decision making and to provide better facilities to the local people.

Source: uuu

Importance of Filling data on Swachhatam Portal

1. Marks linked with Swachh Survekshan 2024
2. Uploading documents related to Swachh Survekshan
3. Submitting CSAP & CSWAP for getting grants for sanitation & waste management related projects
4. Monthly progress tracking under SBM
5. Applying for Swachh Certifications (ODF/ ODF+/ODF++/Water+)
6. Applying for Garbage Free City Star Rating

Role of Chief Officer for data system strengthening

Ensure submission of timely submission of data – on or before 5th of every month

Overall supervision of quality and uniformity of data submission

Ensure correct Latitude and Longitude of municipal assets and natural body

Ensure reliable data submission that can be tracked with proper documentation proof to avoid negative marking

Points to Consider while using Swachhatam Portal

- Data filled should be same as data provided on other portals such as:
  - PAS
  - AMRUT
  - E-Nagar
  - Various ‘Patrak’ shared with Govt.

- Data should be in compliance with various regulatory authorities such as NGT orders, GPCB norms, national/ state policies etc.

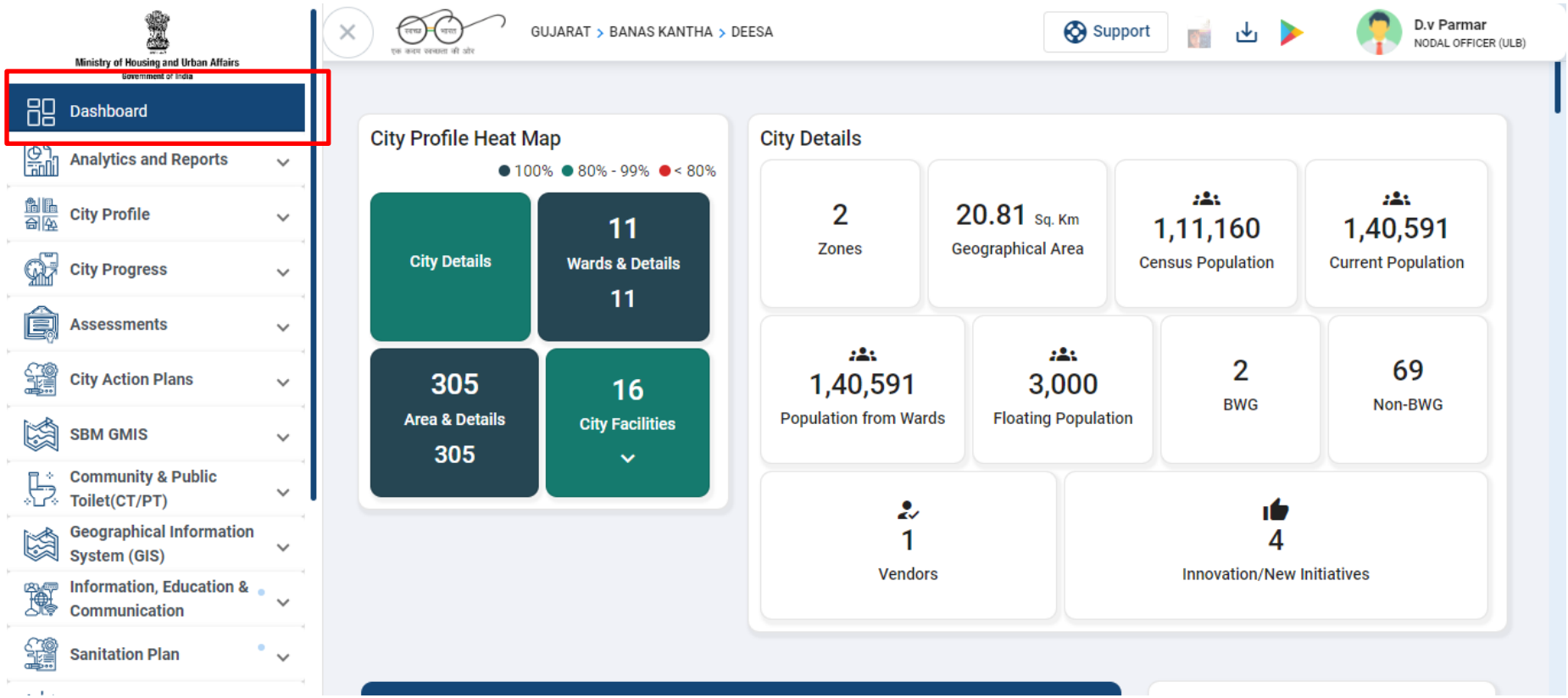
How to use the Swachhatam Portal

https://admin.sbmurban.org/u/login

User can login to this application using valid user credentials. There are two different levels of users.

- **Officials**
- **Assessors**

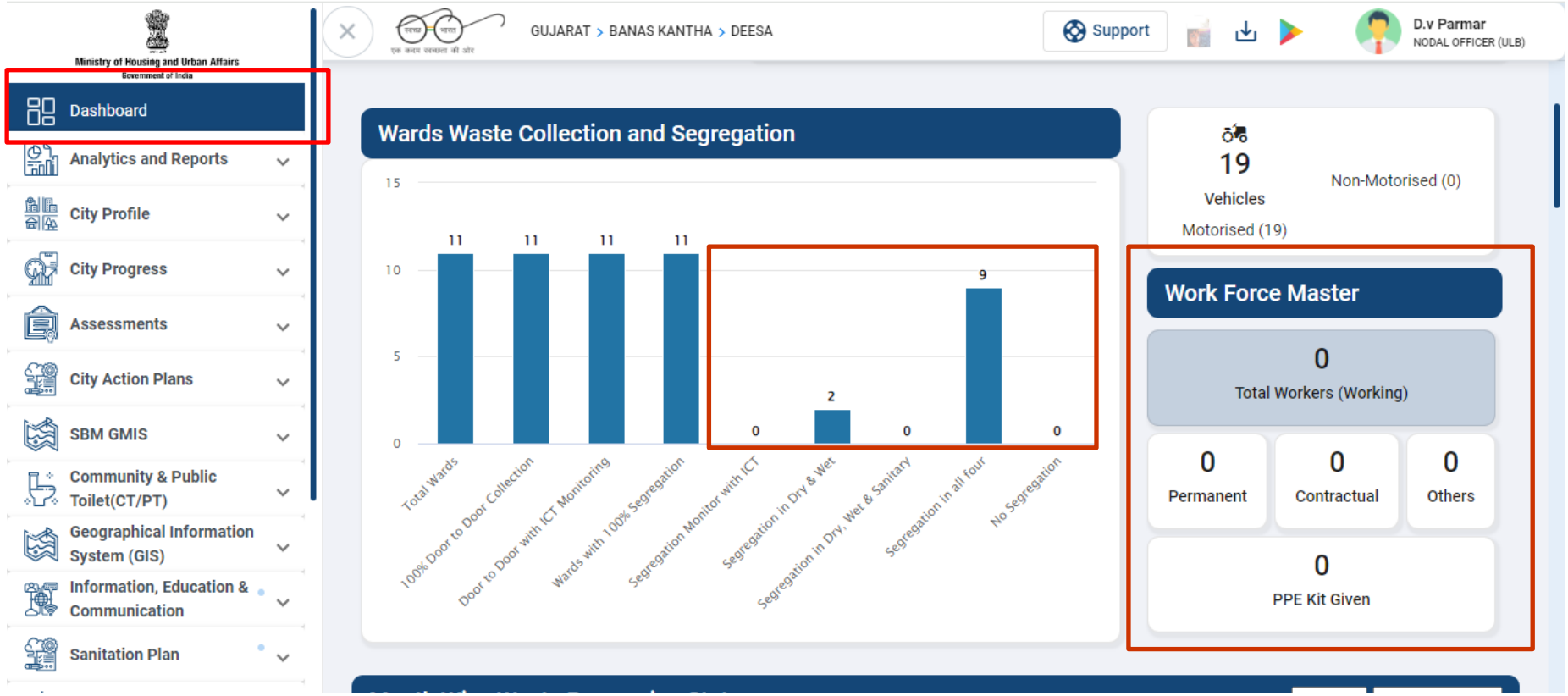
How to use the Swachhatam Portal



After successful login, following screen (Dashboard) will appear with City Information.

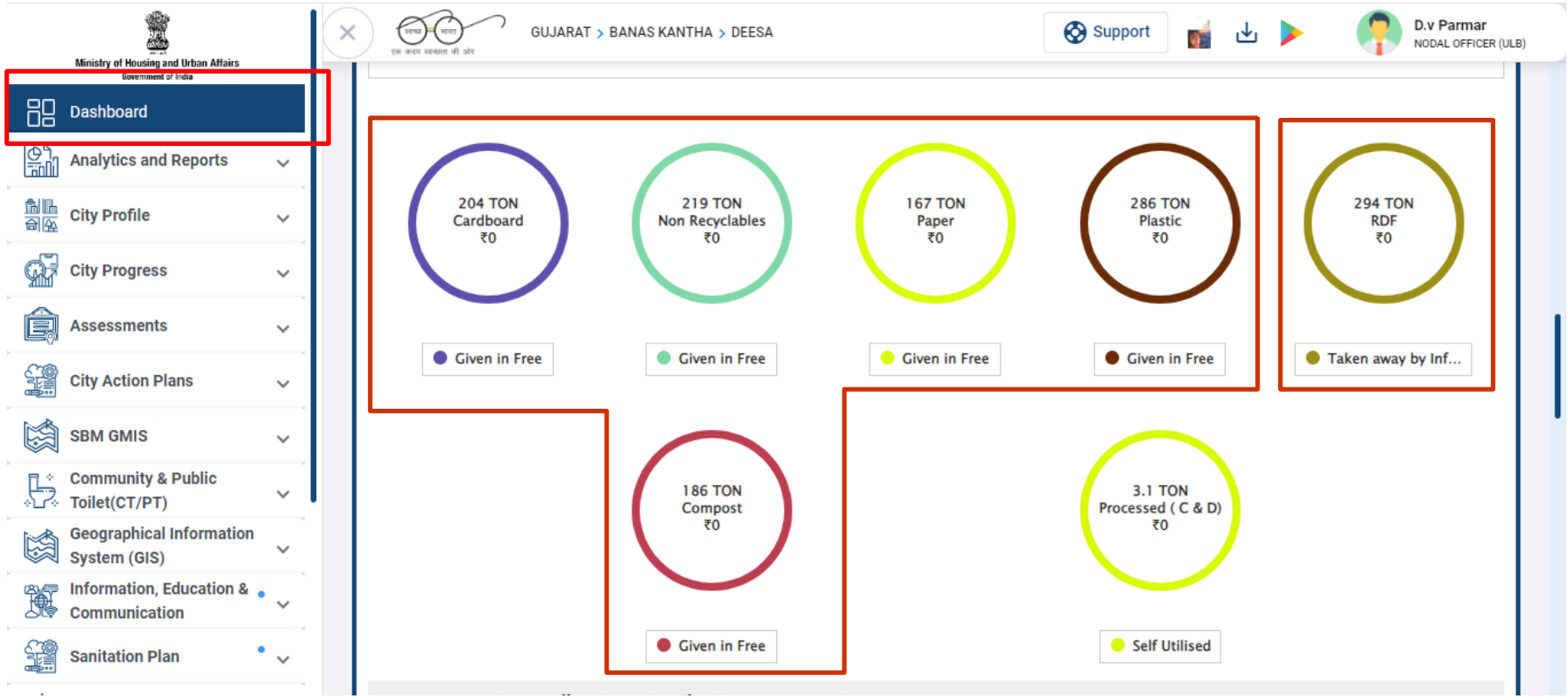
How to use the Swachhatam Portal

Gaps



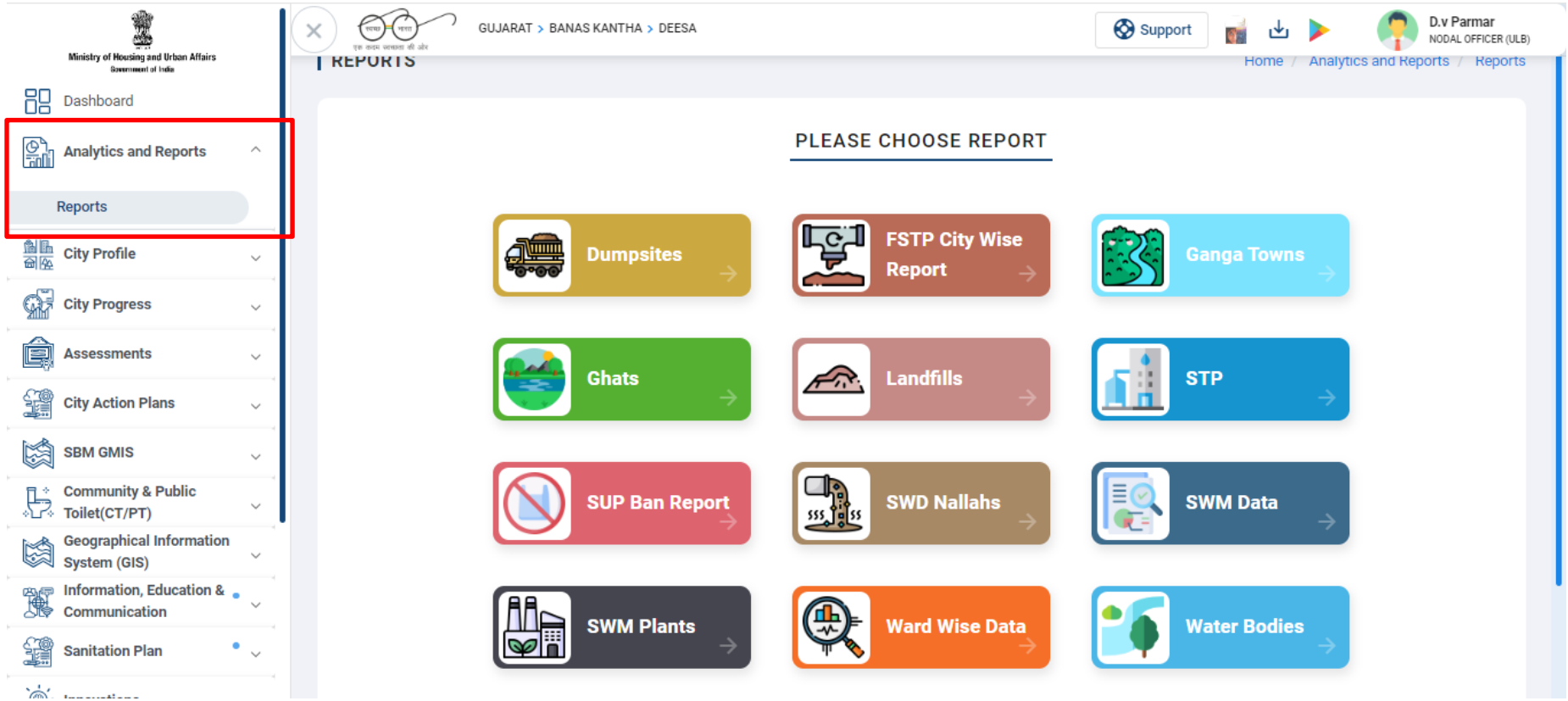
- No data for
  - Segregation monitor with ICT
  - Segregation in Dry, Wet and Sanitary
  - No segregation
- No data in Work force master

How to use the Swachhatam Portal



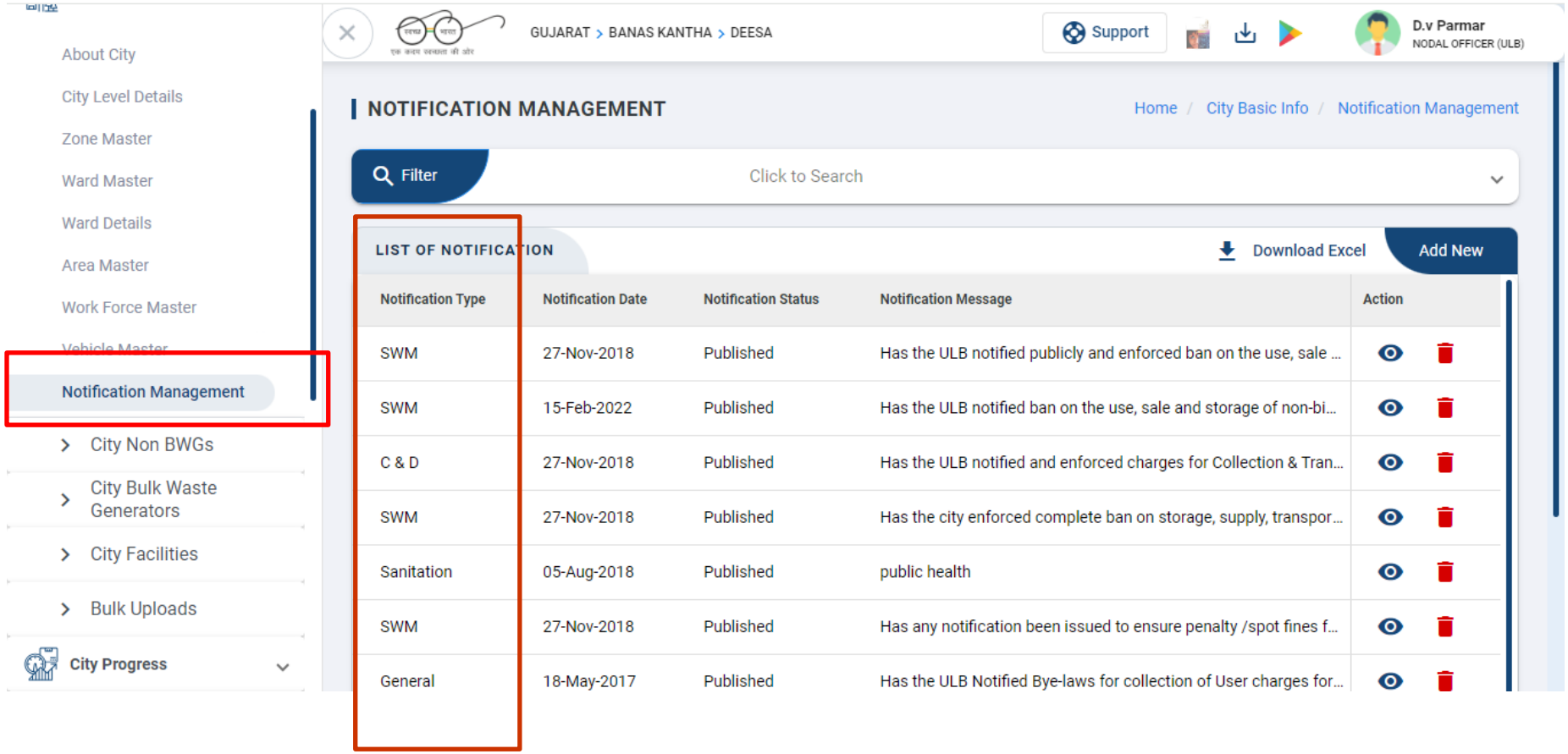
- Is it possible
  - That RDF is taken away by Informal waste pickers?
  - And rest are given for free?

How to use the Swachhatam Portal



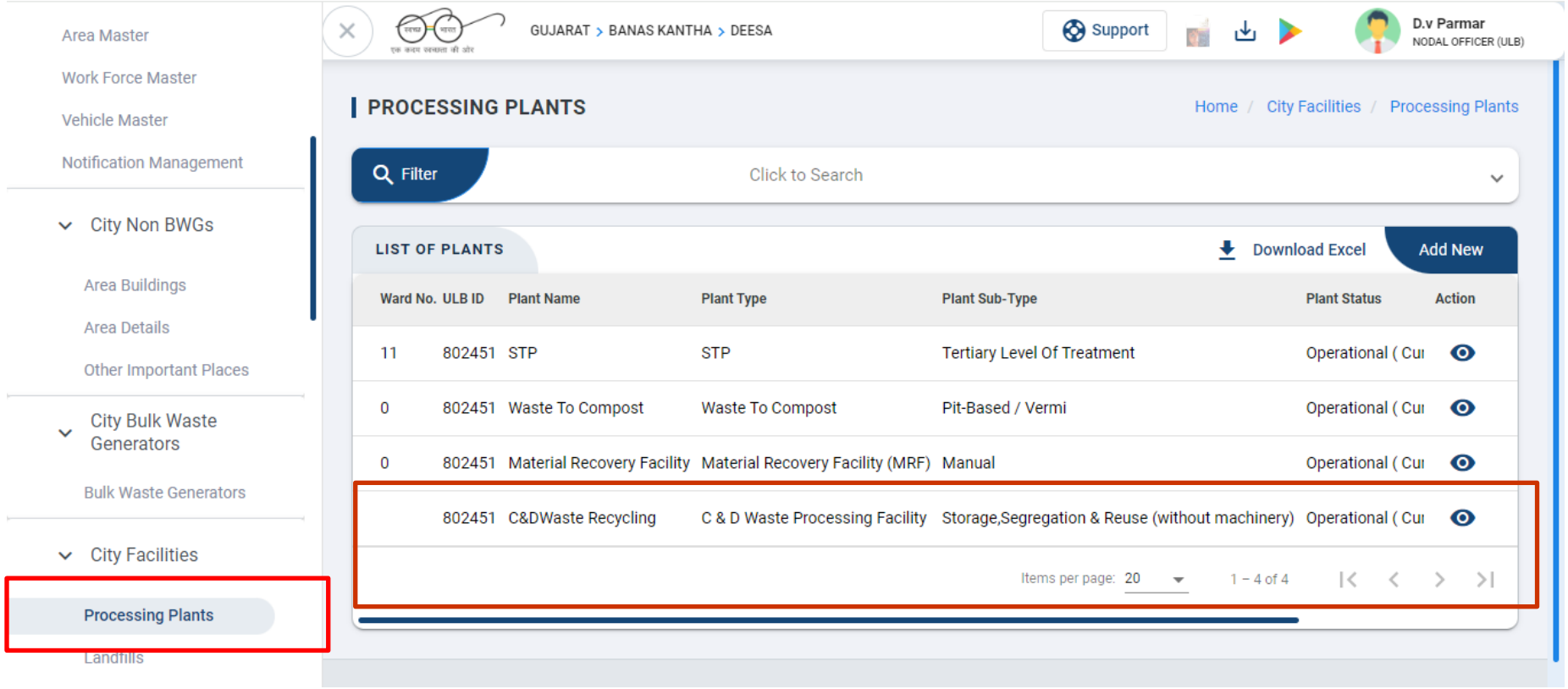
- Various reports can be accessed from Analytics and reports section

How to use the Swachhatam Portal



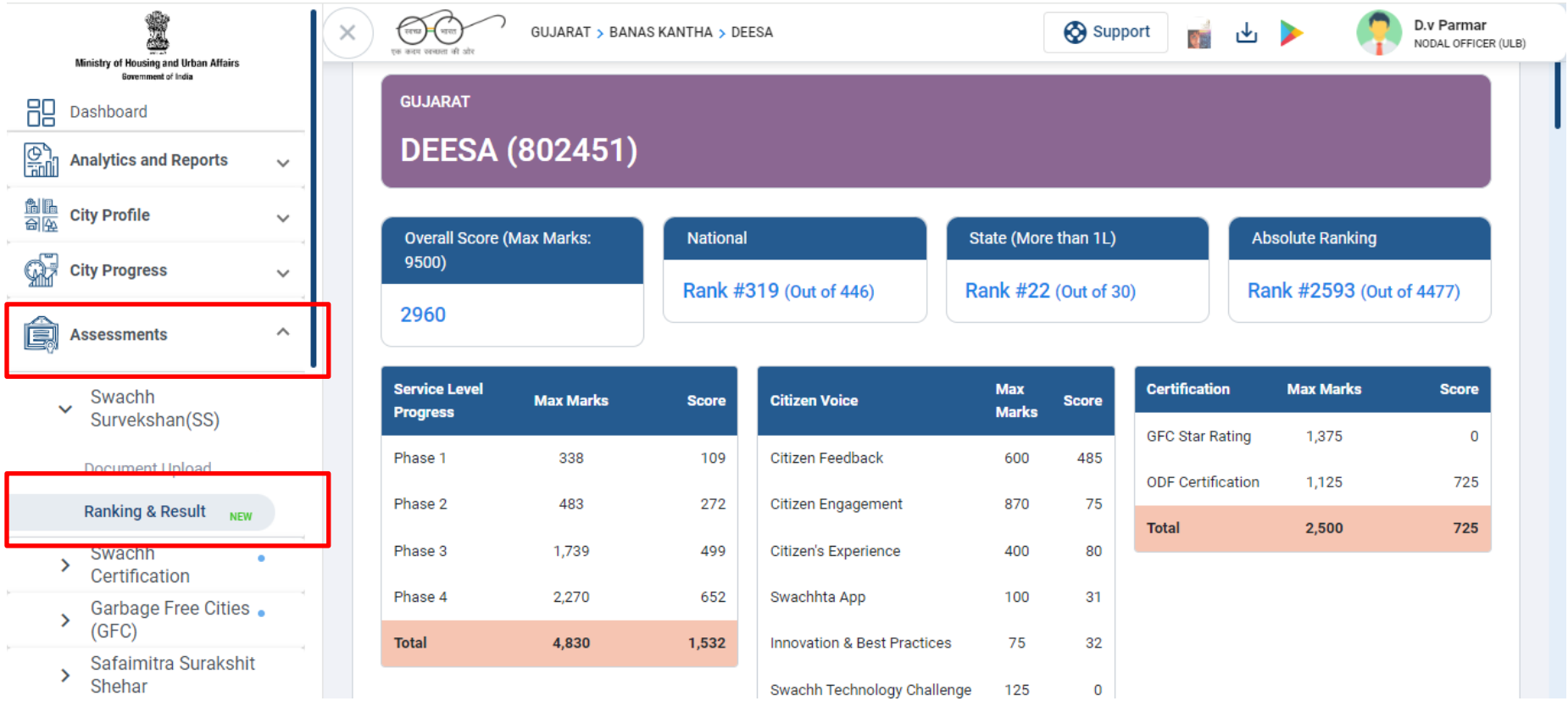
- Here in the Notification Management user can check all the list of Notification which are published by the ULB.
- They can
  - edit the information
  - add new notification

How to use the Swachhatam Portal

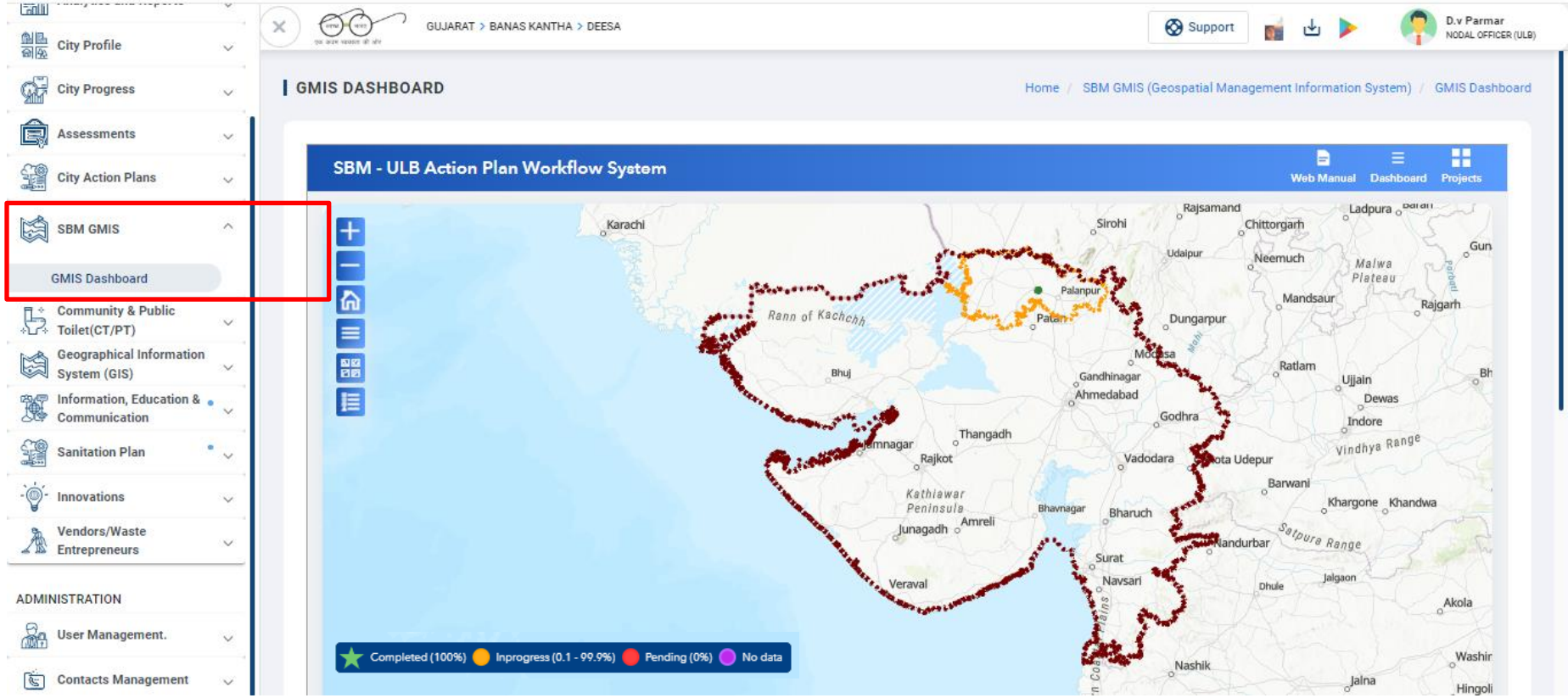


- Under the Processing Plants section user will find list of all the plants with Plant Name, Plant Type and their status with respective wards. Here, by clicking on view button user will

How to use the Swachhatam Portal



How to use the Swachhatam Portal



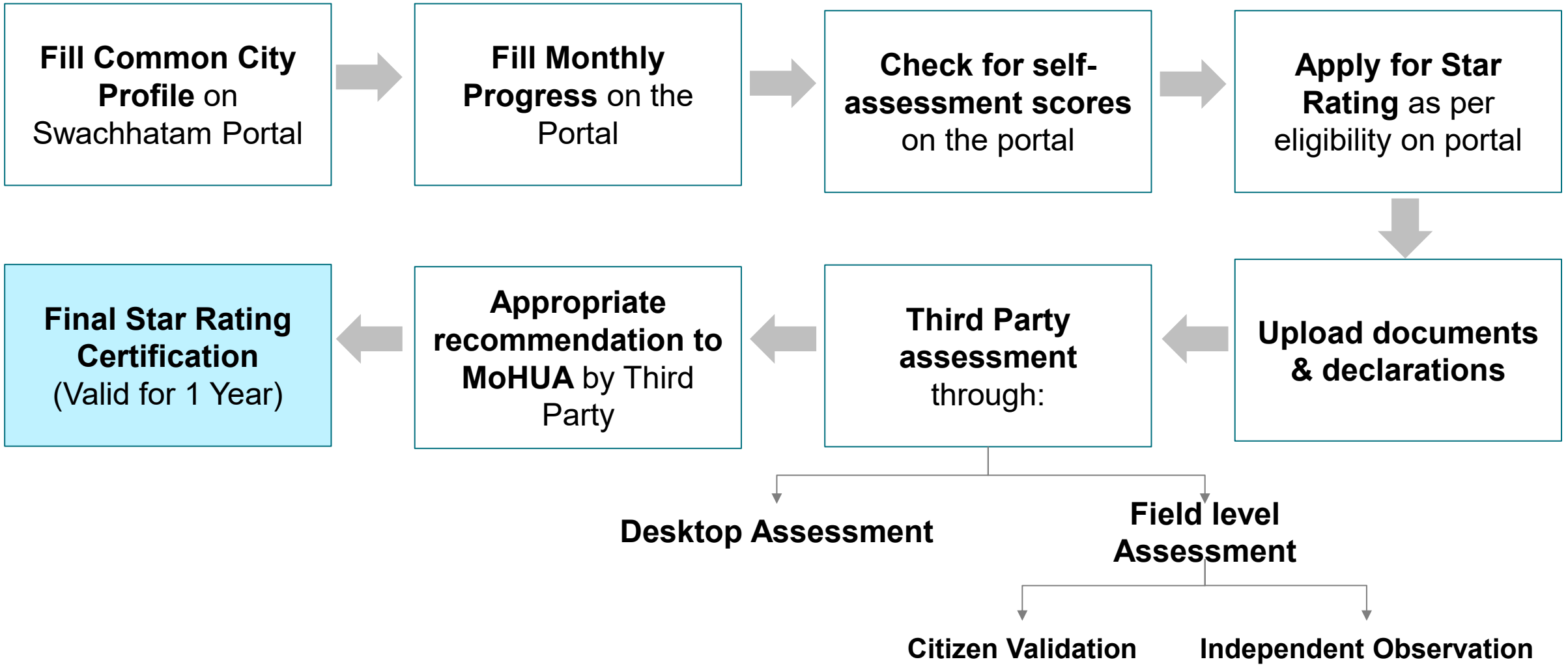
- User can view the geo-coordinates and physical progress of the city under the SBM GMIS sub section.

Session 4

ODF Certifications and GFC Star Rating

Garbage Free City

Star Rating Process Flow for ULBs



Garbage Free City

Important Parameters (1 & 3 Star)

	Component/ Parameter	Ward/ City Level		Component/ Parameter	Ward/ City Level
1	Door to Door Collection	Ward	9	Plastic Ban	City
2	Source Segregation	Ward	10	Grievance Redressal	City
3	Sweeping + Litter Bins + Secondary Storage Bins	Ward	11	User charges	City
4	Processing by Bulk Waste Generators	Ward	12	IEC and Capacity Building	City
5	C&D Waste- Collection	City	13	Scientific Landfill	City
6	Waste Processing & Capacity- Wet Waste	City	14	No visible solid waste in water bodies + Screening of Storm water drains/ Nallahs	City
7	Waste Processing & Capacity- Dry Waste	City	15	C&D waste- Segregation (non-bulk waste generators)	City
8	Dumpsite Remediation	City	16	Geo-mapping of waste processing facilities, C&D facilities, landfills, dumpsites, STPs/ FSTPs	City

- **Each component has four levels**
- **Level 1 in each component to be achieved for a city to get Star Rating**

Garbage Free City

Aspirational Parameters (5 & 7 Star)

	Component/ Parameter	Ward/ City Level
17	Geo-mapping of the wards i.e. ward boundaries, drains, nallahs, water bodies	Ward
18	City Beautification	Ward
19	On-site wet waste processing	City
20	C&D waste- Processing & Recycling	City
21	C&D Waste- Use of materials	City
22	Sale of waste by-products	City
23	Processing of Sanitary and Domestic Hazardous waste	City
24	Digital Monitoring of SWM Operations (incl. City facilities)	City

Garbage Free City

Scoring and Pre-qualifying Conditions

Expected Outcome of SBM2.0- *All statutory towns are certified at least 3-star Garbage Free, or higher*

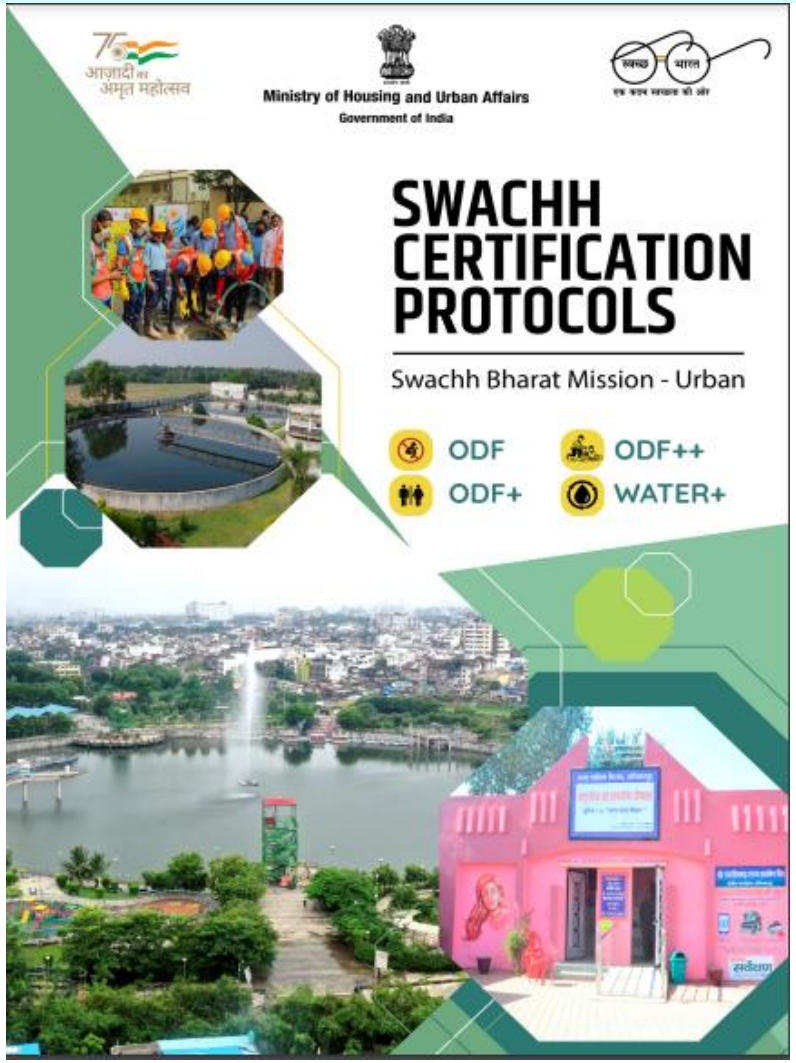
Star Rating	Pre qualifying conditions	Minimum Score	Maximum Score	Corresponding GFC Score in SS 2024
1-★	ODF	2,400	5,200	525
3-★	ODF+	3,600	5,200	725
5-★	ODF++	6,300	7,500	1,175
7-★	Water+	7,500	7,500	1,375

Swachh Certification

Swachh Certification protocols

- Swachh Certification protocols released by the Ministry in June 2022

- Swachh Certification Protocols include:
  - ODF certification
  - ODF+ certification
  - ODF++ certification
  - Water+ certification



ODF+ Protocols

Necessary Infrastructure and Regulatory Conditions to be achieved for declaring ODF+

1. Sufficient mobile toilets available for use during occasions of large gatherings in a single area
2. Carried out structural audit of CT/PTs (>15 yrs old) and conducted repairs/ renovations based on audit findings
3. All CT/PTs are to score the minimum qualifying marks as per CT/PT cleanliness scoring matrix
4. ULB has notified sanitation service level benchmarks and published the same in at least two dailies with wide reach
5. Issued and notified fines against open defecators and people urinating in open and has defined penalty
6. All CT/PTs are mapped on Google Toilet Locator
7. Digital system in place for capturing user feedback for each CT/PT via different methods like QR codes/ My Toilet App etc.
8. Cities which are ODF+ and expired will be automatically taken for re-certification for the same unless the city applies for a higher certification.
9. Cities once certified as ODF+, can apply for higher certification only after six months from the date of issue of existing certificate.

CT/PT & Urinal Cleanliness Scoring Matrix for ODF+

Parameters		Max Marks	Min Qualifying**
Mandatory Parameters			
M1	All toilet seats / urinals are clean, usable and hygienic at all times	30	16
M2	Availability of water	30	16
M3	Usable taps and fittings, with no leakage	5	2
M4	Adequate ventilation facility	15	6
M5	Litter bins should be available (either inside the toilet cubicle or outside)	10	4
M6	Wash basin clean and usable at all times	10	4
M7	Available soap / operational soap dispenser	10	4
M8	Functional bolting arrangements on all doors	10	4
M9	Staff is provided with necessary supplies of consumables, cleaning equipment & PPE	10	4
M10	Roster being maintained for regular cleaning and maintenance and a caretaker is on duty at all times during open hours	15	7
M11	Premises are well lit at all times, both within and outside	10	4
M12	Public / Community Toilet / urinal is visible on Google Maps toiletlocator as 'SBM Toilet / urinal'	10	10
M13	Premises are visible to passers by, with clear signage	10	4
M14	Entrance / accessibility (like ramp, stairs) to toilet block is barrier free	10	10
M15	Gender- segregated, separate entrances for males and female	10	10
M16	Name and contact details of supervisor displayed on toilet block	5	5
M17	Complaint registration mechanism available	10	10
M18	O&M Model present for upkeep of CT / PT	10	10
M19	Untreated faecal sludge and sewage from the toilet is not discharged or dumped in drains, open areas	10	10
Total		**230**	**140**

Parameters		Min Qualifying**
Desirable Parameters		
D19	Walls and floors are stain / graffiti free	10
D20	Toilet floor is dry and clean at all times	10
D21	Mirrors are clean and polished	5
D22	Air freshener applied /or no foul smell	5
D23	Hand dryer / paper napkin available	5
D24	Low height / Indian toilets for children	5
D25	Plants / shrubs in the vicinity of toilet	5
D26	Space earmarked for advertisement	10
D27	Ladies' toilets have vending machine / alternate mechanism for sanitary pads	10
D28	Incinerator facility / alternate mechanism in Ladies' toilets	10
D29	Functional floodlights	5
D30	SMS / any other ICT based feedback system	10
D31	Water efficient toilet (water reuse for flushing purposes, water efficient fixtures etc.)	10
D32	Energy efficient toilet (use of solar panels for electricity)	10
D33	Revenue generating O&M models (recovery of user charges via commercial activities advertisements etc.)	10
Total		**120**

To be certified as ODF++, a ULB should achieve minimum qualifying marks 140 in mandatory parameters and achieve at least 30 marks in desirable parameters.

ODF++ Protocols

Necessary Infrastructure and Regulatory Conditions to be achieved for declaring ODF++

1. All necessary conditions for ODF+ have been achieved and all functional CT / PT are well maintained as per CT / PT Cleanliness Scoring Matrix.
2. All toilets are connected to either OSS with regular emptying, treatment & disposal or sewerage network leading to STP.
3. All septic tanks should be connected to soak pits & should be geo-tagged. Mandatory to inspect septic tanks & secondary treatment systems bi-annually.
4. For space constraint for constructing soak pits, effluent from septic tanks should be conveyed through pucca municipal drains.
5. Avg. 1 out of 3 septic tanks cleaned annually. All desludging vehicles tracked by GPS & digital records maintained & linked with Swachhatam portal.
6. All septic tanks cleaning private agencies registered and licensed by ULB.
7. Adequate desludging vehicles & workforce available with ULB
8. Notified fines against persons/ desludging operators for dumping sewage in open areas. Bye-laws for mandatory desludging once in 3 years.
9. ULB has notified sanitation service level benchmarks and published the same in at least two newspaper with wide reach

ODF++ Protocols

Necessary Infrastructure and Regulatory Conditions to be achieved for declaring ODF++

10 Recovering operational expenditure of sewage & septage management through dedicated sanitation tax & user charges.

11 Awareness campaigns for safe desludging & treatment of septage.

12 Mandatory to have 14420 operationalized & dedicated call center for the same. ULBs <50K population, helpline maintained at district level.

13 Provide documentation of complete mechanized cleaning of septic tanks/ sewers in past 1 year & adequate HR & machines available.

14 Declaration of requisite mechanism for mechanized cleaning of septic tanks & sewers are in place & no informal workers engaged.

15 All districts have set up functional SRU, along with RSA notified by State as per the guidelines issued by MoHUA.

ODF++ Scoring Matrix

No.	Parameters	Max Marks	Min. Qualifying**
1	Safe discharge of sewage including septage from CT / PT / IHHL	50	35
2	Adequate treatment opacity of the sewage / septage treatment plant (70% of current population)	50	25
3	At least 1 / 3 septic tanks cleaned annually	25	15
4	Mechanized cleaning of sewer and septic tanks	50	25
5	All desludging vacuum tank operators are registered and licensed	15	15
6	Sufficient capacity of desludging vehicles and workforce	40	10
7	City has issued and notified fines against persons / desludging operators dumping untreated feacal sludge	10	10
8	Sustainable financing mechanism	20	10
9	Mandatory for city to have 14420 number to be operationalized / or other feedback mechanism	15	15
10	Functional SRU, along with RSA notified by State as per the guidelines issued by MoHUA	10	5
Total		**285**	**165**

To be certified as ODF++, a ULB should achieve aggregate 200 marks while scoring minimum qualifying marks for each parameter.

Water+ Protocols

Necessary Infrastructure and Regulatory Conditions to be achieved for declaring Water+

1. All necessary conditions for ODF++ have been achieved and all functional CT / PT are well maintained as per CT / PT Cleanliness Scoring Matrix.
2. Sewage released from all toilets is discharged into sanitary outlet (sewer/ septic tank with soak pit/ twin pit)
3. Functional capacity of STP is sufficient to treat sewage for at least 70% of current population. Ensure safe disposal of sewage from rest 30% population.
4. Adequate vehicles available for emptying septic tanks every 3 years. Monitoring with help of geo-tagging of septic tanks
5. Adequate infrastructure for mechanized cleaning of sewers & septic tanks. Logs maintained for manual entry in sewers/ septic tanks with safety gears
6. 20% treated used water is reused within ULB (cleaning of roads/ landscaping/ gardening/ construction activity etc.)
7. Municipal drains are well maintained & schedule exists to repair, clean & desilt all drains both pre & post monsoon (maintain supporting document)
8. Trash arrestor are placed before the outfall of major drains. All machine holes are covered to avoid garbage dumping.
9. Sewers and machine holes are cleaned at least once in a year (maintain supporting document)

Water+ Protocols

Necessary Infrastructure and Regulatory Conditions to be achieved for declaring Water+

10

Recovering O&M costs of sewerage, STP & FSTP through dedicated revenue streams like user charges, sale of by-product, conservancy tax etc.

11

14420 & Swachhata app used for complaint redressal for sewer choking/ septic tank cleaning/ drain cleaning etc.

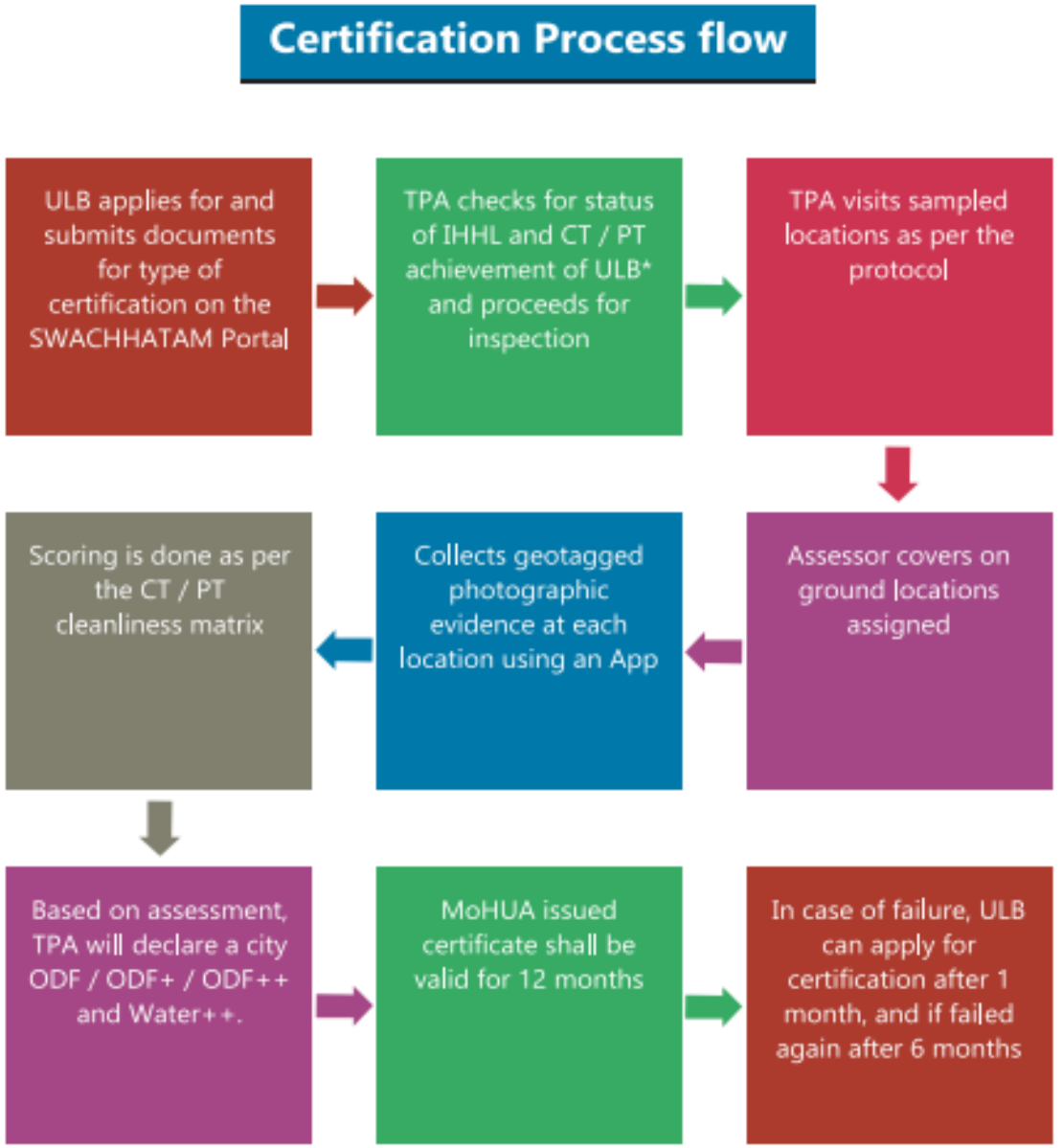
Water+ Scoring Matrix

No.	Parameters	Max Marks	Min. Qualifying**
1	Adequate treatment capacity of STP and operational efficiency	50	35
2	Safe cleaning of Sewer and Septic tanks through mechanized equipment and availability of PPEs and availability of RSA and SRU	40	30
3	Sufficient capacity of desludging vehicles and jetting machines for cleaning of septic tanks with soak pits and sewers respectively in the city	10	5
4	Safe discharge of sewage including septage from CT / PT / IHHL	50	35
5	Re-use of treated water	15	5
6	Municipal drains receiving sullage be well maintained and Bar Screens / trash arrester are placed at strategic locations	30	20
7	100 % Operations and Maintenance costs of sewer networks / STPs / FSTPs are being recovered through dedicated revenue streams / users	40	20
8	Complaint mechanism such as 14420, Swachhata App etc. available and complaint redressal status available	15	10
Total		**250**	**160**

To be certified as Water+, a ULB should achieve aggregate 175 marks while scoring minimum qualifying marks for each parameter.

Certification Process

- ULB needs to apply for certification on Swachhatam Portal
- Third party Assessment (TPA) for ODF/ ODF+/ODF++/Water+ will be done for the final certification.
- The following protocol will need to be followed for receiving the Swachh Certification:
  - Declare ODF/ODF+/ODF++/Water+ status to the state SBM Mission Directorate, which communicates it to MoHUA
  - MoHUA engages a third party to mobilize assessors for verification within 30 days upon request from the city/state.
  - The third party assesses Service Level Status and conducts Independent Observation during the initial verification.
  - Recommendations for certification are made to MoHUA based on the assessment results.
  - MoHUA issues a certificate based on the third party's recommendations.
  - Re-certification process to be done every twelve months.



* This is only applicable for ULBs which are not certified one-time under any certification. Such ULBs would need to meet 100% IHHL and CT / PT targets for assessments to be carried out.

ODF and ODF+ Locations to be visited by Assessor

Location	No. of locations per city >10 lakh+		No. of locations per city (1-10 lakh)		No. of locations per city < 1 lakh	
	ODF	ODF+	ODF	ODF+	ODF	ODF+
 Slum	8	16	4	8	4	8
 School	4	4	4	4	4	4
 Roads and streets	4	8	4	8	4	8
 Public Area and Toilets	16	16	12	12	8	8
 Commercial Area and Toilets	8	16	4	16	4	12
 Residential Area	8	8	4	4	4	4

ODF and ODF+ Locations to be visited by Assessor

Location	No. of locations per city >10 lakh+		No. of locations per city (1-10 lakh)		No. of locations per city < 1 lakh	
	ODF	ODF+	ODF	ODF+	ODF	ODF+
 Transport Hub	4	4	2	2	1	1
 Water Bodies	4	4	2	2	1	1

If that number of locations are not available in smaller town, then the available all location types will be inspected

ODF++ & Water+ locations to be visited by Assessor

Location	No. of locations per city >10 lakh+		No. of locations per city (1-10 lakh)		No. of locations per city < 1 lakh	
	ODF++	Water+	ODF++	Water+	ODF++	Water+
 Slum	40	64	20	24	12	16
 Construction Site	NA	24	NA	24	NA	16
 Roads and streets	40	64	20	24	12	16
 Public Area and Toilets	32	48	16	24	12	16
 Commercial Area and Toilets	40	64	20	24	12	16
 Residential Area	40	64	20	24	12	16

ODF++ & Water+ locations to be visited by Assessor

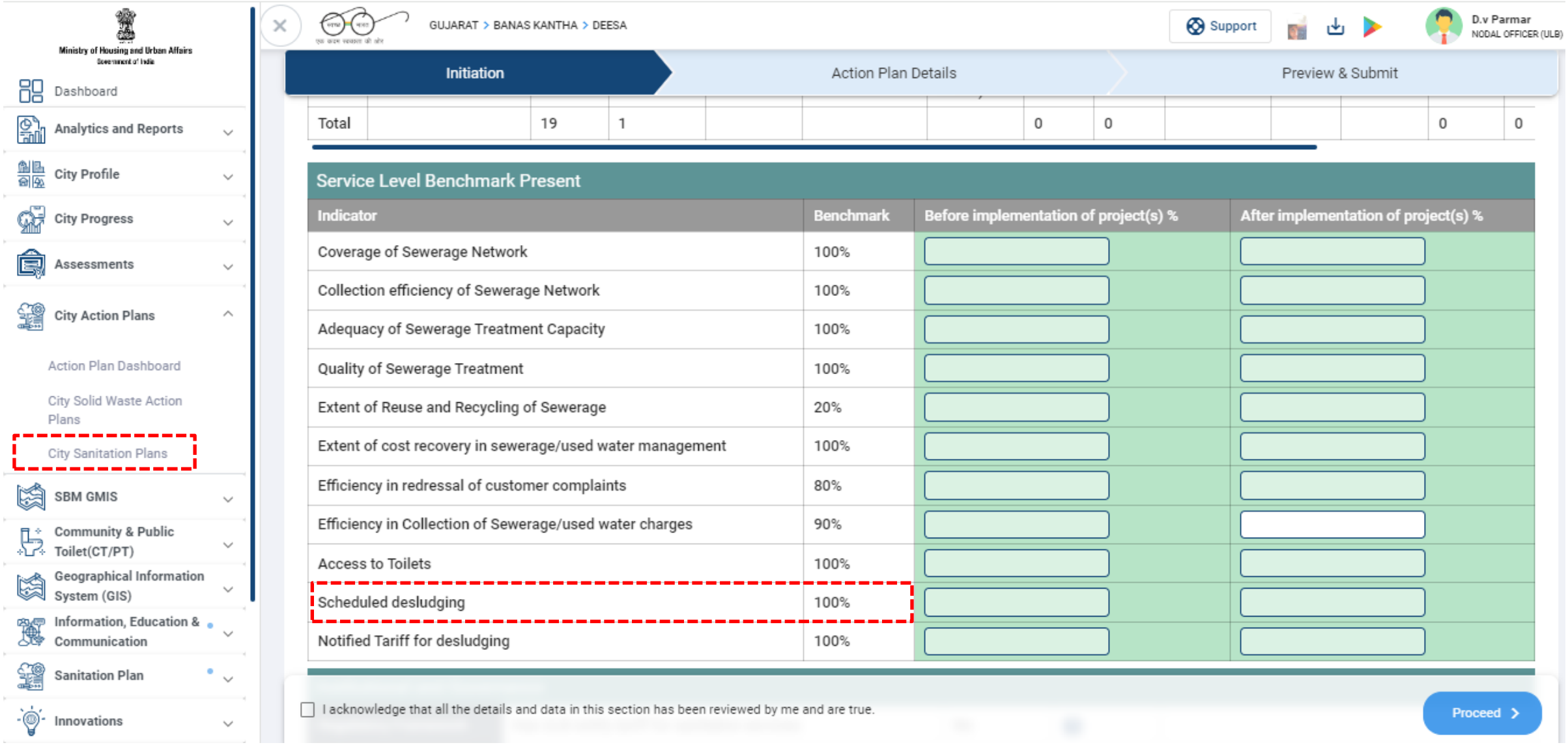
Location	No. of locations per city >10 lakh+		No. of locations per city (1-10 lakh)		No. of locations per city < 1 lakh	
	ODF++	Water+	ODF++	Water+	ODF++	Water+
 Transport Hub	4	6	2	4	3	4
 Water Bodies	4	6	2	4	1	3
 Industry	NA	48	NA	24	NA	16
 Desludging Vehicle	NA	12	NA	8	NA	4
 RRR Point	NA	12	NA	8	NA	4
 Barren area	32	40	8	12	4	8

ODF++ & Water+ locations to be visited by Assessor

Location	No. of locations per city >10 lakh+		No. of locations per city (1-10 lakh)		No. of locations per city < 1 lakh	
	ODF++	Water+	ODF++	Water+	ODF++	Water+
	All STPs and/or FSTPs in the city to be covered					
Barren area						

If that number of locations are not available in smaller town, then the available all location types will be inspected

Scheduled Desludging



Need for Scheduled Desludging

- Prevailing common practice to empty only when it is **full and overflows**
- Tendency to build **oversized septic tanks** to avoid frequent emptying
- Not emptying for long durations leads to **reduced efficiency** of septic tanks
  - **Sludge hardens at bottom and is difficult to remove.**
  - **Effluent quality degrades.**
  - **Increased chances of manual scavenging**
- Regular emptying advised by authorities

Central Public Health Engineering and Environmental Organization (CPHEEO) suggests –

"***Yearly desludging of septic tank is desirable***, *but if it is not feasible or economical, then* ***septic tanks should be cleaned at least once in two - three years***, *provided the tank is not overloaded due to use by more than the number of persons for which it is designed*"

Pg 9-22, CPHEEO Manual

Low desludging frequency
= poor efficiency of septic tank
= poor quality of supernatant / effluent overflow being released in rivers

How to plan scheduled desludging service in city?

1. Understanding Sanitation coverage and Database

2. Scheduling and infrastructure assessments

3. Financial assessments and tariff calculations

4. Identify the model for service provision

5. City council resolution for Institutionalization

6. Develop Balanced Performance based Contract

7. Financing Model Performance linked annuity model

8. Performance monitoring linked to Payments

9. Awareness activities for implementation of services

Key steps for planning, implementation and monitoring of scheduled desludging

Scheduling and infrastructure assessments . . .

- Decide the desludging cycle (3 years)
- Number of zones – based on Property tax ward, administrative ward
- Number of septic tanks to be emptied daily
- Number of trucks required (Nos.) – Big / Small
- Human resource requirement
- Volume of septage to be treated (cum/day)

Year	Zone	Septic tanks to be cleaned annually (no)	Days required
Year 1	Zone 1	1889	201
	Zone 2	947	101
	Total	2836	302
Year 2	Zone 2	1262	135
	Zone 3	1582	169
	Total	2844	303
Year 3	Zone 3	2762	294
	Total	2762	294

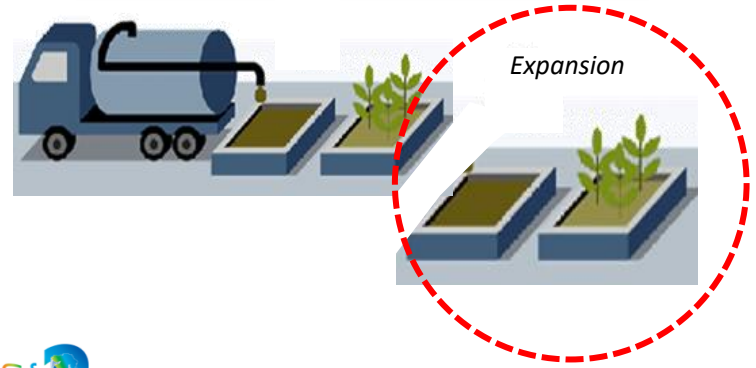
Based on the above calculation, city also need to **assess the augmentations required in terms of truck and treatment infrastructure**

Treatment infrastructure . . .

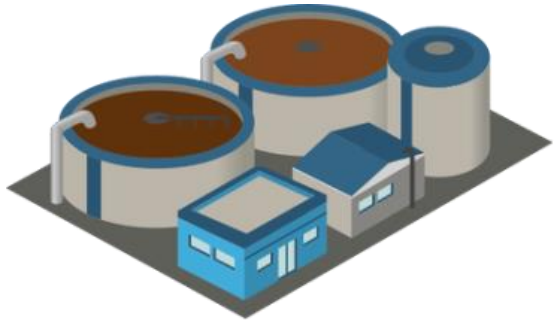
Based on number of septic tanks to be desludged daily and estimated volume.

Plan for treatment infrastructure

New FSTP
or
Expansion of existing FSTP



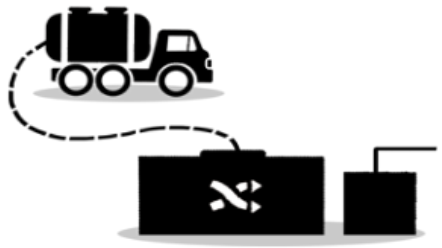
Co treatment with own city STP
or
Nearby city STP



Financial assessments and tariff calculations . . .

Identify the model for financing the operations:

- **Calculate the O&M cost for provision of the service**
  - Fuel cost
  - Repair and maintenance cost
  - Salaries of human resource etc.



- **Calculate the capital cost for provision of service**
  - Based upon who will be providing the service

- **Calculate the tax value**
  - Sanitation tax per property (Differential / Flat tax)
  - Levy it as a % of property tax

Identify the model for service provision . . .

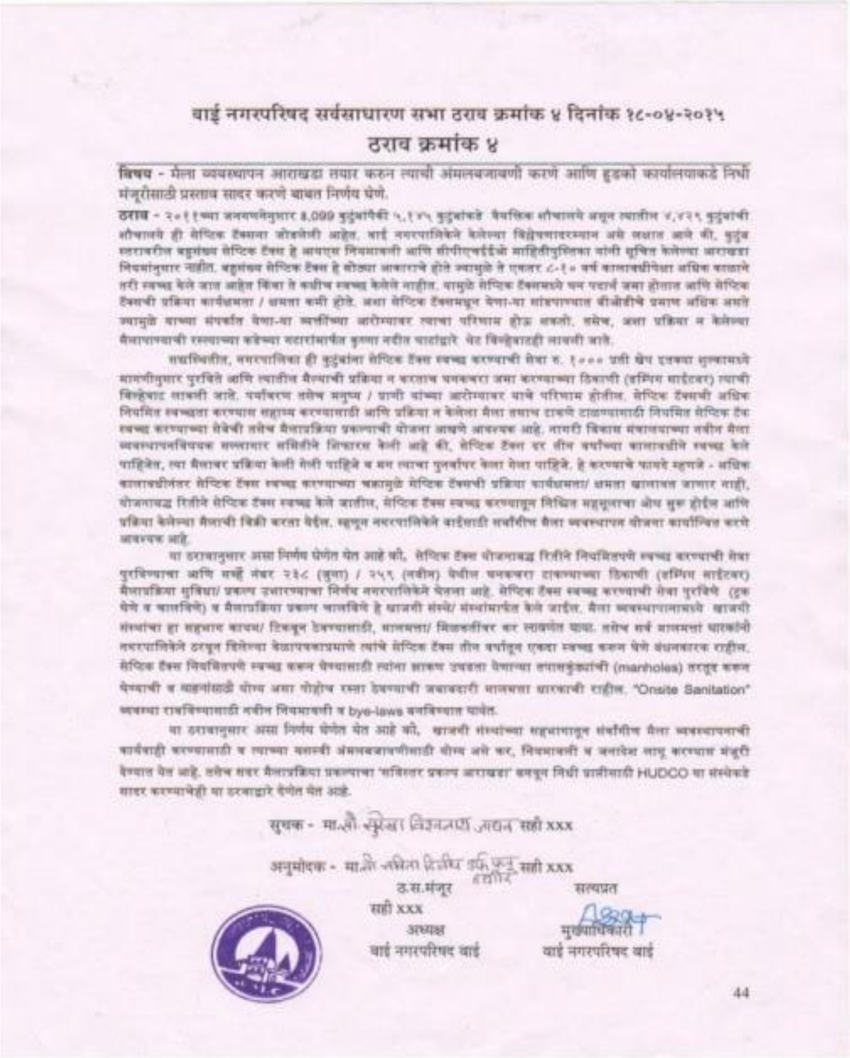
- **ULB Model :** Capex of trucks and Opex by ULB
- **PPP Model :** Capex of trucks and Opex by private operator
- **Private Sector Participation (PSP) model :** Capex of trucks by ULB and Opex by private operator
- **Integrated scheduled desludging and FSTP O&M model :** PPP / PSP
- **Involving SHGs in desludging activities :** PPP / PSP

City council resolution for institutionalization . . .

A city level resolution is an expression of opinion or intention of the local body to :

- Undertake FSSM activities
- Confirm the financial model
- Confirm the service provision model

The city level resolution for provision of service is important for sustaining it in the long run.


वाई नगरपरिषद सर्वसाधारण सभा ठराव क्रमांक ४ दिनांक १८-०४-२०१५

ठराव क्रमांक ४

विषय - मैला व्यवस्थापन आराखडा तयार करुन त्याची अंमलबजावणी करणे आणि हुडको कार्यालयाकडे निधी मंजूरीसाठी प्रस्ताव सादर करणे बाबत निर्णय घेणे.

Session 5
For city officials

Orientation on Nirmal Gujarat 2.0

Nirmal Gujarat 2.0

Mission & Objectives

- To become a **Garbage Free State**

Mission

- To have **visible cleanliness** all around through synergies of efforts between **Government, Civil Society & Citizens**

Objective

Nirmal Gujarat 2.0

Strategy to achieve the Aim

01 Citizen Centric Cleanliness Activities

02 Competition and Recognition

03 Safai Mitra Suraksha

04 Safai Vera Protsahan

05 Door to Door Collection: D2D MIS

06 Financial Support

07 Capacity Building

08 Community Involvement and BCC

09 Monitoring

Nirmal Gujarat 2.0 converges with SBM 2.0 and encourages cities to become Garbage Free Cities

Sr. No	Activity name	Fund provision (In crore)
1	Safai Vera Protsahan Yojna	60
2	Cleanliness- Beautification on Iconic / Approach Road	111
3	Removal of GVPs in ULB	16
4	Toilet construction grant support	15
5	Strengthen Human resources and Door to Door collection	10
6	Waste to Energy Project – Support on transportation	8
7	Award to best sanitation workers	4
8	Award to best Clean City of Gujarat	16
	Total	**240**

Nirmal Gujarat 2.0

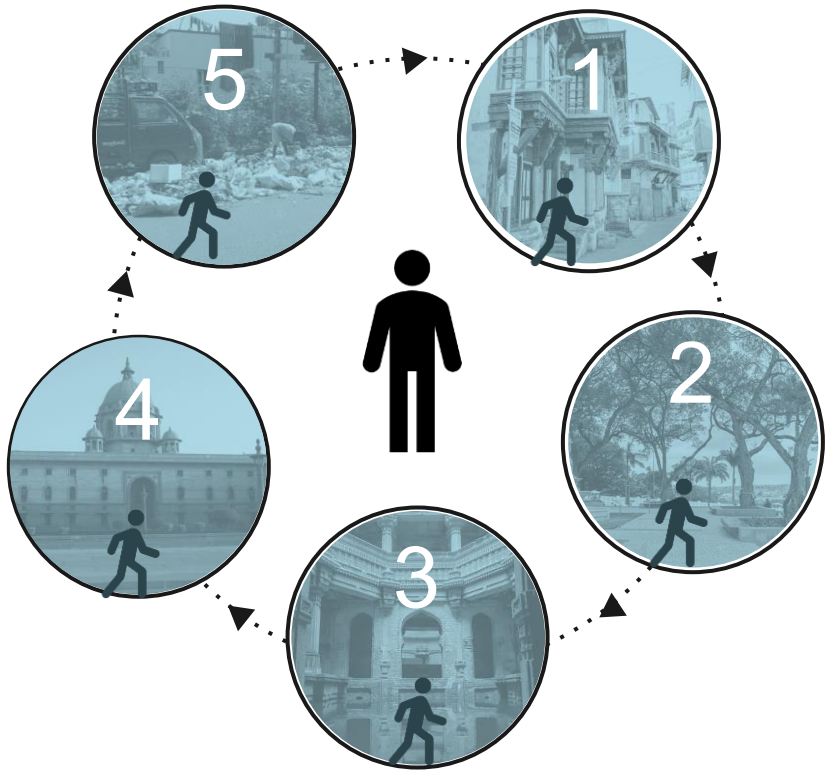
1. Citizen Centric Cleanliness Activities- Solid Waste

5. Grievance Redressal

- State-wide Swachhta App for Grievance Redressal
- Monthly tracking of grievance resolution in ULB

4. Government Offices

- Monthly calendar of cleaning
  - PHC/CHC & Hospitals
  - Schools
  - APMC
  - Offices
- Renovation of structures



Jan Aandolan

Monthly Calendar

1. Household

Door-to-door collection

- *Strengthening*
- *Monitoring*

2. Public Place/ Market

- Regular cleaning
- Removal of GVPs/ Red spots/ Grey spots
- Plastic cleaning campaign

3. Tourist Places

- Regular cleaning of tourist sites
- Cleaning of public toilets

Nirmal Gujarat 2.0

1. Safai Vera Protsahan Yojna

To enhance the financial stability and sustainability of ULB

- For ensuring timely salary, Health, O & M of vehicles, and ensuring equipment for cleanliness.

(A)

MATCHING GRANT:

- **Equal grants provided to ULBs who collect Cleanliness tax (Safai vero)**

(ULB has to submit the request with detail collection of tax against demand)

Source: Nirmal Gujarat Guidelines

Nirmal Gujarat 2.0

1. Safai Vera Protsahan Yojna (60 Crore)

To enhance the financial stability and sustainability of ULB

- For ensuring timely salary, Health, O & M of vehicles, and ensuring equipment for cleanliness.

(B)

Incentivise against enhancement of tax recovery:

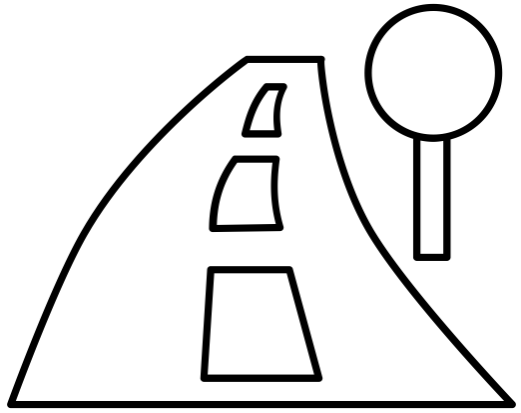
(All ULB have to submit the request with detailed collection of tax against demand and evidence to SBM-U Gandhinagar office up to month of June)

ક્રમ	નગરપાલિકાઓ	નગરપાલિકાઓમાં સફાઈ વેરા વસુલાતની ટકાવારી			
		૬૦-૭૦ %	૭૧-૮૦%	૮૧-૯૦%	૯૧-૧૦૦%
૧	અ અને બ વર્ગની નગરપાલિકા	–	૫૦%	૧૦૦%	૨૦૦%
૨	ક અને ડ વર્ગની નગરપાલિકા	૫૦%	૧૦૦%	૨૦૦%	૩૦૦%

Source: Nirmal Gujarat Guidelines

Nirmal Gujarat 2.0

2. Cleanliness- Beautification on Iconic / Approach Road (111 Crore)



Develop at least one Iconic / Approach road in all ULBs.

Within 5 km boundary

Municipal Corporation

Within 2 km boundary

Nagarpalika

Source: Nirmal Gujarat Guidelines

(B)

Incentivise against enhancement of tax recovery:

Equal grants provided to ULBs

Submit DPR by May 30, 2024

ક્રમ	સ્થાનિક સ્વરાજની સંસ્થા	સહાયનું ઘોરણ રૂ. લાખમાં
1	મહાનગરપાલિકા – અમદાવાદ,સુરત,વડોદરા, રાજકોટ	૨૦૦.૦૦
2	મહાનગરપાલિકા – ભાવનગર, જુનાગઢ, જામનગર, ગાંધીનગર	૧૫૦.૦૦
3	"અ"વર્ગની નગરપાલિકા	૧૦૦.૦૦
4	"બ" વર્ગની નગરપાલિકા	૭૫.૦૦
5	"ક" વર્ગની નગરપાલિકા	૫૦.૦૦
6	"ડ" વર્ગની નગરપાલિકા	૫૦.૦૦

- All ULB have to upload GIS mapping road information on Nirmal Gujarat MIS portal
- 80% grant- to develop iconic/Nirmal Path & 20% for visible cleanliness

Garbage Vulnerable Points (GVP) removal from ULBs

3. Removal of GVPs in ULB (16 Crore)

Submit DPR by May 30, 2024

No.	Class of Municipality	No. of ULBs	Maximum no. of GVP allowed under this scheme per ULB	Total GVP that are allowed	Amount available as grant for complete removal of GVP (In Lakh) (Rs. 1 lakh/GVP)
1	Class "A"	22	17	374	374
2	Class "B'	30	13	390	390
3	Class "C"	60	8	480	480
4	Class "D"	46	6	276	276
	Total	**158**		**1520**	

Source: Nirmal Gujarat Guidelines

Permanently Removal of Garbage Vulnerable Points (GVP) in ULB

(B)

- **Beautification at GVPs:**
  - Plantation
  - Sculptures
  - 3D painting

Nirmal Gujarat 2.0

4. Toilet grant support (15 Crore)

GoG support for IHHL, PT/CT, Urinal, and Aspirational toilet construction

GoI structure for allocation of grant:

ક્રમ	U L B ની વસ્તીનું ઘોરણ	કેન્દ્ર સહાય (%)	રાજ્ય મેચિંગ ફાળો (%)	U L B નો ફાળો (%)
૧	૧૦ લાખથી વધુ	૨૫	૧૬	૫૯
૨	૧ લાખથી ૧૦ લાખ	૩૩	૨૨	૪૫
૩	૧ લાખથી ઓછી	૫૦	૩૩	૧૭

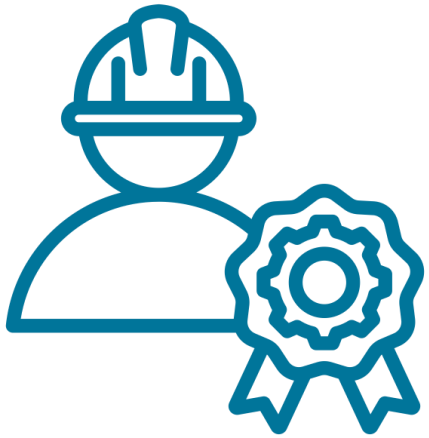
GoI structure for allocation of grant:

ક્રમ	મનપા/નપાની વસ્તીનું ઘોરણ	કેન્દ્ર સહાય (%)	રાજ્ય મેચિંગ ફાળો (%)	નિર્મળ ગુજરાત ૨.૦ ફાળો (%)	મનપા/નપાનો ફાળો (%)
૧	૧૦ લાખથી વધુ	૨૫	૧૬	૦	૫૯
૨	૧ લાખથી ૧૦ લાખ	૩૩	૨૨	૨૦	૨૫
૩	૧ લાખથી ઓછી	૫૦	૩૩	૧૭	૦

Source: Nirmal Gujarat Guidelines

Nirmal Gujarat 2.0

5. Award to best sanitation workers (4 Crore)



Monthly one award in all Municipal Corporation and Nagarpalika

- **In Municipal Corporation**
  - Award INR 10,000/-
  - (Selection responsibility by Dy. MC)
- **In Nagarpalika**
  - Award INR 10,000/-
  - (Selection responsibility by Chief Officer)

મનપા/નપા	વોર્ડ/નપા મુજબ	સમયગાળો	સંખ્યા	કર્મચારી દીઠ સહાય	કુલ સહાય
મહાનગરપાલિકા	વોર્ડ દીઠ	માસિક ધોરણે	૧૭૦ વોર્ડ (૮ મહાનગરપાલિકા)	૩.૧૦,૦૦૦/-	૨૦૪.૦૦ લાખ (૧૭૦ x ૧૨ x ૧૦,૦૦૦)
નગરપાલિકા	નગરપાલિકા દીઠ	માસિક ધોરણે	૧૫૭ નગરપાલિકાઓ	૩.૧૦,૦૦૦/-	૧૮૮.૪૦ લાખ (૧૫૭ X ૧૨ X ૧૦,૦૦૦)

Source: Nirmal Gujarat Guidelines

Parameters of award to safai kamdar (sanitation worker)

ક્રમ	વિગત	ધોરણ	મળવાપાત્ર ગુણ	મેળવેલ ગુણ
૧	હાજરીની નિયમિતતા	૧૦૦%	૧૦	
		૮૧% થી ૯૯%	૦૮	
		૬૧% થી ૮૦%	૦૬	
		૬૦% થી ઓછી	૦૦	
૨	ગણવેશ/ એપ્રન/ હાથમોજા/ બુટ નિયમીત રીતે ઉપયોગ	હા	૧૦	
૩	સેફ્ટી ઈક્વિપમેન્ટનો નિયમીત ઉપયોગ	હા	૧૫	
૪	અન્ય સફાઈ કર્મચારીઓ તેમજ અન્ય સ્ટાફ સાથે વર્તણુક	હા	૧૦	
૫	સફાઈ પ્રત્યે જાગૃતતા	હા	૧૫	
૬	નાગરીકો સાથે વર્તણુક અને વ્યવહાર	હા	૧૦	
૭	કચરાના વર્ગીકરણ અંગે જાણકારી	હા	૧૦	
૮	સરકારી યોજનાનો લાભ મળેલ છે? (પ્રધાન મંત્રી જન આરોગ્ય યોજના, પ્રધાન મંત્રી સુરક્ષા બીમાં યોજના, પ્રધાન મંત્રી આવાસ યોજના, ઉજ્વલા યોજના, પ્રધાનમંત્રી જીવન જ્યોતિ યોજના, પ્રધાન મંત્રી જનધન યોજના, વ્યક્તિગત શૌચાલય યોજના, ઉજાલા યોજના, રાશન કાર્ડ સહાય, વિગેરે)	લાભ મેળવેલ કુલ યોજના	ગુણ	
		૫	૨૦	
		૪	૧૫	
		૨	૧૦	
		૧	૦૫	

- Safai Kamdar Award will be directly transferred to his/her account
- Safai Kamdar cant get award more than one time in a year
- Photo of awarded Safai Kamdar should be displayed at the workplace
- Photo of awarded Safai Kamdar should also be displayed on Nagarpalika’s LED screen

Source: Nirmal Gujarat Guidelines

Nirmal Gujarat 2.0

6. Award to best Clean City of Gujarat (16 Crore)

Award structure for ULB

ક્રમ	શહેરો	રકમ રૂ.લાખ
1	> ૧૦ લાખ થી વધુ વસ્તી ધરાવતી મહાનગરપાલિકા	૫૦૦
2	< ૧૦ લાખ થી ઓછી વસ્તી ધરાવતી મહાનગરપાલિકા	૪૦૦
3	"અ" વર્ગની નગરપાલિકા	૩૦૦
4	"બ" વર્ગની નગરપાલિકા	૨૦૦
5	"ક" વર્ગની નગરપાલિકા	૧૦૦
6	"ડ" વર્ગની નગરપાલિકા	૧૦૦

1. Award to Best Clean City of Gujarat

Source: Nirmal Gujarat Guidelines

** Award Guidelines will be issued shortly*

Nirmal Gujarat 2.0 – Survekshan led by GoG

- SBM (U), Gujarat office appointed QCI for Nirmal Gujarat Survekshan
- Nirmal Gujarat Survekshan will be conducted on quarterly basis
- 1st Quarter assessment will begin from June 1, 2024 onwards
- City officials will start receiving calls for the Nirmal Gujarat Survekshan Asssesment

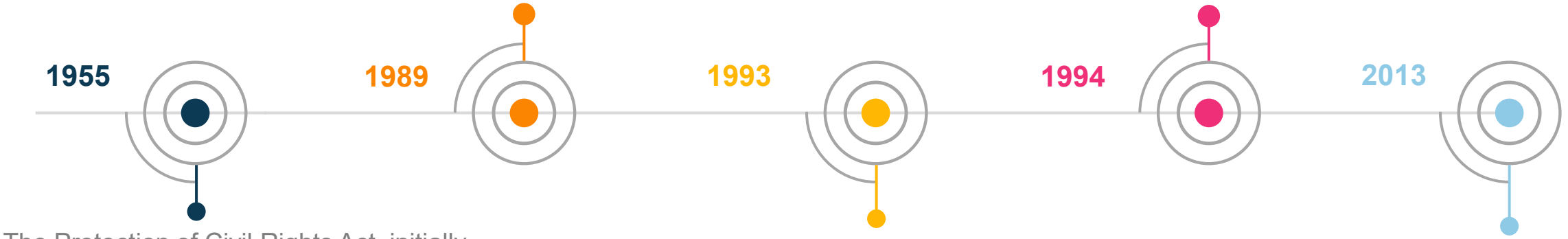
Source: Nirmal Gujarat Guidelines

Session 6
For city officials

National Action for Mechanized Sanitation Ecosystem (NAMASTE)

Legal Framework

Timeline: Banning manual scavenging in India



- Bans manual scavenging
- Mandates use of machines for cleaning of on-site sanitation systems and sewer lines
- Has provision of PPE to sanitation workers by employers
- Declared engaging sanitation workers for manual cleaning a punishable offence

NAMASTE

Aim

1. Ensure occupational safety and dignity of sanitation workers
2. Provide access to entitlements livelihoods support to reduce the vulnerabilities of sanitation workers
3. Behavior change amongst stakeholders to demand safe sanitation services
4. Mechanized cleaning of sewer lines and septic tanks

NAMASTE

A joint initiative of MoSJE and MoHUA

Target Group

Septic Tank/pits Cleaners

Sewer network / maintenance holes Cleaners

Stakeholders

- MoSJE (NSKFDC) & MoHUA
- Consumers of Sanitation Services
- Sewer and Septic Tank Workers (SSWs)
- Urban Local Bodies (ULBs)
- Private Sanitation Service Organizations (PSSOs)

NAMASTE

Intended Outcomes

Zero fatalities in sanitation sector

No direct contact with human faecal matter

Recognition as skilled workers

Access to livelihoods

SHG and sanitation enterprises formation

Increased awareness among citizens

Regulation and Enforcement

NAMASTE

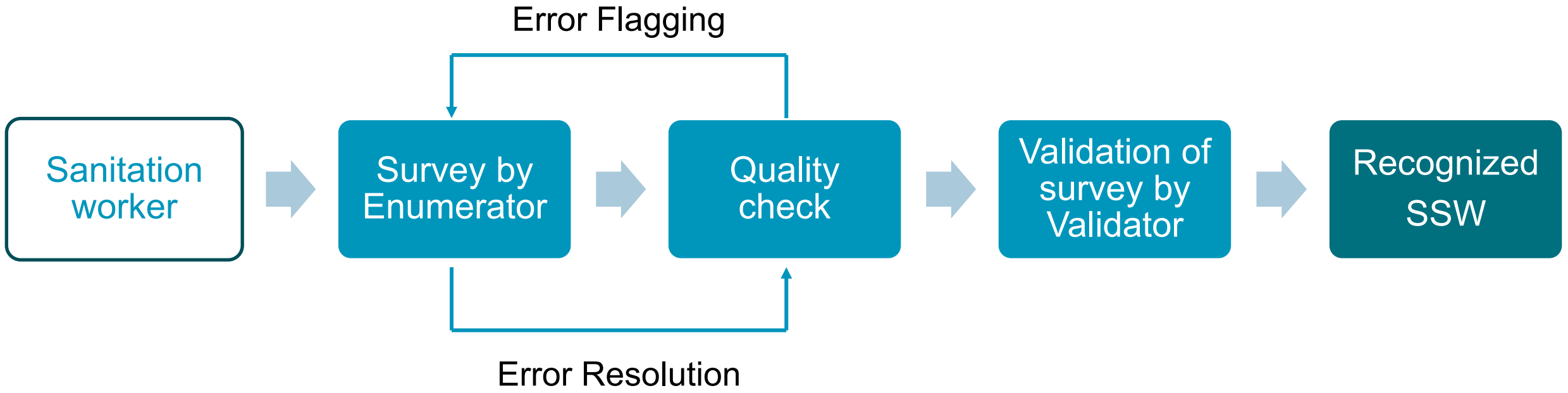
Scheme Components

1. **Profiling of SSWs** in ULBs through digital tools (~ 1 lakh SSW to be identified)
2. **Health Insurance** of SSW under PM-JAY
3. **Occupational safety training** of SSWs and SRUs for NAMASTE
4. **Capital Subsidy** up to Rs. 5.00 lakh and interest for procurement of Sanitation Related Vehicles/ Equipment
5. **Distribution of PPE** to SSWs
6. **Distribution of safety devices to ERSU**
7. **IEC Campaign** for awareness on SSW safety and dignity

State NAMASTE Coordinators: States/UTs would be authorized to engage PMU staff to support the Mission Director of State for implementation of NAMASTE scheme

IT infrastructure: Dedicated NAMASTE portal for scheme implementation and monitoring

NAMASTE Survey Process



Session 7
For city officials

Business model options for Sanitation System
- SWM
- LWM

Business Models of Sanitation system

Sewerage, Onsite sanitation and Solid waste management

1

Full Government model

Capex by government and Operations by government

2

Government-owned vehicles and leased to private players/SHGs for operations

Infra capex by government and Operations by private/SHGs

3

PPP model

Infra capex and Operations by private with performance-based annuity contract with local government

Why are private partnerships needed / beneficial?

Urban Local Body

Mandate to ensure service provision

- Limited funds, human-resource, equipment
- Low technical know-how
- Have to focus on other sector responsibilities

Private sector

Looking for business opportunities

- Good access to technical knowhow
- Competitive prices
- Many times, already active in the field
- Fast track implementation - agility and innovation

Win-Win situation

- ✓ Reduced burden on ULB staff ….
- ✓ …able to focus on monitoring and ensure better quality service
- ✓ Citizens get timely services at competitive prices
- ✓ Entrepreneurs get business opportunities

Source: adapted from CWAS, Intellicap

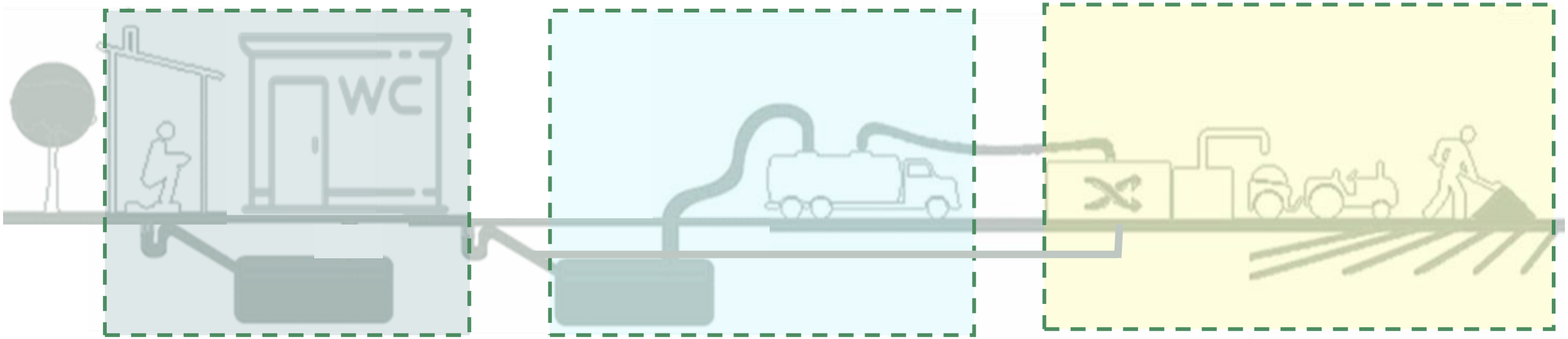
Municipality owned and operated; Municipality owned and community operated models

Options	Purpose	Main Actors	Role Of City Municipality	Advantages	Constraints
Model 1: Municipality owned– Municipality operated	• Reducing cost of transportation, centralised treatment, and disposal of waste inlandfills • Local employment opportunity	• Municipality	• Investment provider • Implementing and monitoringagency	• Cost saving in transportation, centralised processing, and disposalof waste • Profitable use of waste • Job opportunities for the unemployedyouth • Entrepreneurship development	• Lack of suitable land • Objection from the neighbourhood • Occasional problems of odour • Operating inefficiency and lack of marketing potential • Lack of coordination between departments regarding the use of the compost products within the ULB
Model 2: Municipality owned– community operated	• Community involvement in management of primary waste collection and treatment • Capital cost borne bylocal body • Local employment opportunity • Entrepreneurship development • Nonprofit seekingmodel	• Municipality,local community, NGOs RWAs	• Making capital investments • Supporting communitiesin finding or allotting land • Collection and disposal of residual waste • Monitoring agency	• Cost saving in transportation and centralised processing and disposal • Profitable use of waste • Job opportunities for the unemployedyouth • Entrepreneurship development • Reduction in municipal burden due to community participation. • Improvement of MSWM throughvoluntary participation	• Lack of community awareness and interest indecentralised project • Lack of informal leader among the community to leadthe cause of the project • Lack of skilled labour and entrepreneurs

Municipality owned and privately operated; privately owned and privately operated models

Options	Purpose	Main Actors	Role Of Municipality	Advantages	Constraints
Model 3: Municipality owned–privately operated	• Profit seeking model • Full cost recovery (from collection feesand compost sales) • Cost reduction through lower transportation and disposal costs	• Municipality, Private sector, NGO	• Funding capitalexpenditure • Identify and allot land for composting, • Contracts out the operation and maintenance • Monitors performance of contractors	• Reduction of municipal burden of waste management through private sector participation • Know-how and efficient management through private sector • Partnership with private entrepreneurs	• Lack of community awareness and interest • Need for a reliable and skilled partner with sense of entrepreneurship • Inefficient contract management
Model 4: Privately owned–privately operated	• Profit seeking enterprise based on compost market conditions (Income is generated throughsale of products • like compost and through collection ofcharges)	• Private sector	• Selecting a private operator through a transparent process • Formulation of transparent regulations forPPP • Cooperation in supply of raw waste anddisposal of residues • Synchronising centralised anddecentralised systems	• Reduction of the municipal burden of waste management through private sector participation • Investment of funds and know-how through private investors • Partnerships with private entrepreneurs • Creation of employment and business opportunities	• Lack of private land • Lack of vital compost markets

Possibilities of engaging SHGs in the sanitation value chain

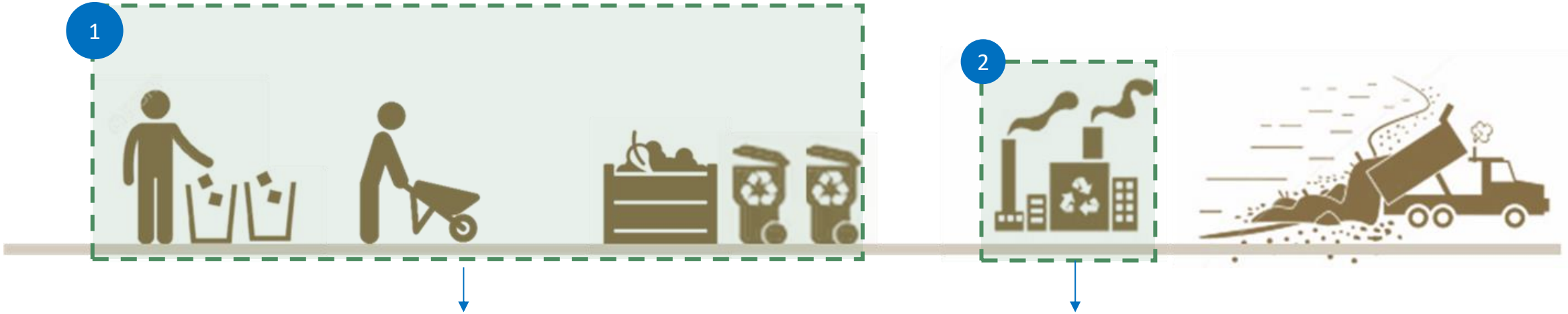


1. Operations and maintenance of CT/PTs
2. Assessment of Community/public toilets
3. Identification and Mobilisation of the need for public/ community toilets

1. SHGs using Government-owned vehicles for operations for scheduled desludging
2. SHGs filling data in monitoring apps during desludging activity
3. SHGs leasing government owned vehicles for demand desludging activity
4. SHGs independently running demand based desludging services

1. SHGs operating Sewage Treatment Plants
2. SHGs performing landscaping and urban forestry work at STPs
3. SHGs operating sanitation resource center at STP site
4. Composting at the STP site

Possibilities of engaging SHGs in the sanitation SWM value chain



1. IEC for HH level segregation of waste;
2. Awareness generation for Garbage free cities by Sanitation Sub Committees;
3. Mobilization of waste collection system at slum level
4. Service providers for Door to door collection and transportation
5. Monitoring of SWM services in the city –effective usage of PPE, check for no open garbage dumps
6. Support in Plastic bans
7. Suppliers for cloth bags

1. Processing of Waste

   O&M of material recovery facility and composting centres

Surat- sustaining resources and reusing treated usedwater

- **Surat Municipal Corporation (SMC)** has converted the wastewater generated in the city into the resource by establishing 4 Tertiary Treatment Plants with installed capacity of 116 MLD thereby reducing dependency on fresh water resources & creating treated wastewater as an economic resource, to promote Sustainability and circular economy. Total 1018 MLD is treated at 11 STPs in the city, of which 330 MLD is being reused.

Areas of reusing treated used water	MLD
Textile Clusters	115 MLD
Rejuvenation of Lakes	2 MLD
Bio-diversity park	0.5 MLD
Dream City Project	0.5 MLD
Land Fill Closer – Ecological Park	5 MLD
Waste to Compose Facility	1 MLD
Agriculture – Mass Plantation	28 MLD
Industrial Use	112 MLD
Reuse in Treatment Process at STPs	49 MLD
Gardening, Traffic Circles, Road dividers etc through Tanker Filling Station	17 MLD
Construction Purpose, Metro Rail Project, Biodiversity park, Watering of Trench Lines, Rejuvenation of Lakes with heavy water Board	20 MLD

Source: SBM 2.0, https://sbmurban.org/water-plus-cities-trailblazers; available at https://cdn.cseindia.org/attachments/0.84371800_1709877539_surat-municipal-corporation.pdf

Financial Model for reusing treated used water- Surat

- Total O&M cost towards maintaining complete sewerage system : ~ Rs.180.00 Cr (Including O&M and Electricity Cost)
- Total Tertiary Treatment Plant Capacity : 115 MLD (40+35+40) plus 10% additional capacity on demand
- Capital Project Cost : Rs. 314.39 Cr
- Operation & Maintenance Cost for 3 TTPs : Rs. 300 crore (For 10 Years)
- Total Recycle water Supplied to Industries till Jan- 2024 : 1,73,129 ML
- Total Revenue Generated till Jan - 2024 : Rs. 496.23 Cr
- Started with Rs. 18.20 per KL in year 2014, rate increased yearly based on actual increase in O & M cost & RBI indexation, present rate of Tertiary Treated Waste Water is @ Rs.36.22 per KL.
- Annual Revenue Generation : @ Rs. 120 Cr

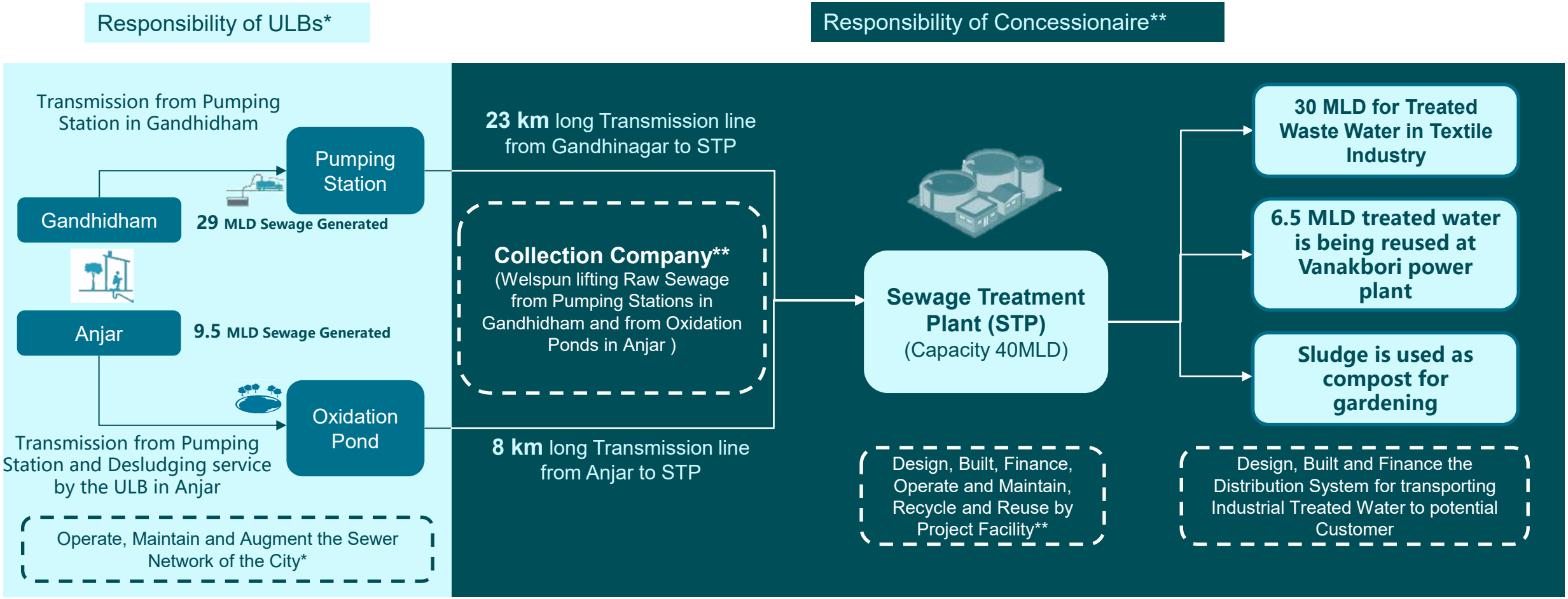
Source: SBM 2.0, https://sbmurban.org/water-plus-cities-trailblazers; available at https://cdn.cseindia.org/attachments/0.84371800_1709877539_surat-municipal-corporation.pdf

Roles and responsibilities of various stakeholders

SMC	USER	OPERATOR
• Conceptualization of project • Preparation of detailed design, invitation of tender and selection of operating agency • Project funding • Land allocation • Project execution • Payment of electricity bill	• End consumer • Assurance to purchase committed quantity for well defined time duration • Acceptance of the rate structure as mutually agreed • Agreed to price variation corresponding to RBI index • Regular payment to support the system	• Monitoring of inlet and outlet parameters • Construction of plant to meet the desired parameters • Complete O&M of the plant including all major/minor repairs, replacements including spares • Comprehensive treatment responsibility from collection point to disposal point

Source: SBM 2.0, https://sbmurban.org/water-plus-cities-trailblazers; available at https://cdn.cseindia.org/attachments/0.84371800_1709877539_surat-municipal-corporation.pdf

Reuse of treated wastewater in Anjar and Gandhidham in Gujarat



Revenue: 61.9 Lakh per Annum at the rate of Rs. 0.4/KL Sewage Collection

- The respective ULBs* ensure that Sewer generated by citizens is free from Industrial waste, hazardous material, prohibited and restricted material
- **Welspun Infrastructure Ltd** and Technology Providing Partner **Ion Exchange Ltd** (Concessionaire**).
- Sewage Pumping Station other than GNP Facility, network of bulk transmission of sewage from Designated location to STP proposed by Concessionaire.

શહેરી વિકાસ અને શહેરી ગૃહ નિર્માણ વિભાગ ગુજરાત સરકાર

Source: Field Visit and Discussion with Municipality and Welspun officials

Tirupati- revenue generating STP model

- Declared as Water Plus, it is also a front runner when it comes to developing a self-sustaining model for an STP.
- 50 MLD STP was built at Thukivakam with the cost of Rs. 19 Crores. It serves 10,4057 households.
- A volume of 24 MLD of treated STP water is reused. By selling 5 MLD of treated used water to Srikalahasthi Pipes Ltd., the plant is able to generate a net revenue of Rs. 6 Lakhs per month.
- Additionally 18 MLD of treated used water is supplied to farmers for agriculture purpose free of cost and another portion is reused by the ULB for road/street cleaning, watering road medians and parks and gardens in the city.
- The unique measures adopted for ensuring sustainable O&M of the STP is worth emulation by other ULBs.

Source: SBM 2.0, https://sbmurban.org/water-plus-cities-trailblazers

Chandigarh reusing treated used water for agriculture purpose

- Chandigarh is fully covered with sewerage facility and provided with the 100% sewerage treatment facility.
- As per 2020 estimates, utilizable treatment capacity of the city is 25% more than the quantity of sewage generated.
- Recognizing the importance of water, Chandigarh had, earlier in 1991, initiated tertiary treatment of wastewater at Diggian STP (45 MLD) and later supplied it for the non-potable uses such as irrigation of gardens, green belts & lawns, washing cars etc., to different sectors.
- Presently, the installed capacity for tertiary treatment is 90 MLD at Diggian STP which is treating 45 MLD water on average.
- The Tertiary Treated (TT) Water SCADA project is being implemented to monitor the quantity and quality of recycled water to save the precious water resources being used for irrigation purposes in the city.
- Presently, the TT Water is being supplied to all the sectors without any automatic monitoring resulting in the non-equitable distribution of TT Water.
- The proposed SCADA system will include monitoring of BOD, COD, TSS, pH, DO, residual chlorine, as well as flow measurement, pressure measurement, etc. by installing various analyzing equipment and sensors (NIUA, 2023)

Energy transition approaches to reduce O&M expenses & contribute to climate mitigation actions

- ULBs have taken the initiative in **moving towards the use of clean energy in WASH services.**
- Karad Municipal Corporation (Maharashtra) has set up Solar based energy generation to operate its STP.
- It piloted solar plant to generate 72 kW against its requirement 280 kW
- This has led to **cost reduction by 20 % in monthly electricity bill. 43 tons of CO2 eq. emission reduction** over one year of installation
- The city plans to scale up the solar energy plant to cover 100% of its electricity expenses
- Surat Municipal Corporation has taken an **innovative approach to finance energy transition in WASH services.**
- Adaptation of different alternatives like **methane recovery from anaerobic digestion** at STP, **heat recovery and reuse**, and **nutrient recovery** at STP

ગુરુવાર તા.૧૮ જુલાઈ ૨૦૨૪ ગુજરાત ગાર્ડિયન

સોલાર, વીન્ડ પાવર, પાણી પુરવઠા સહિતની યોજના માટે ૨૦૦ કરોડ ઉભા કરવા સુરત મનપા IPO લાવશે

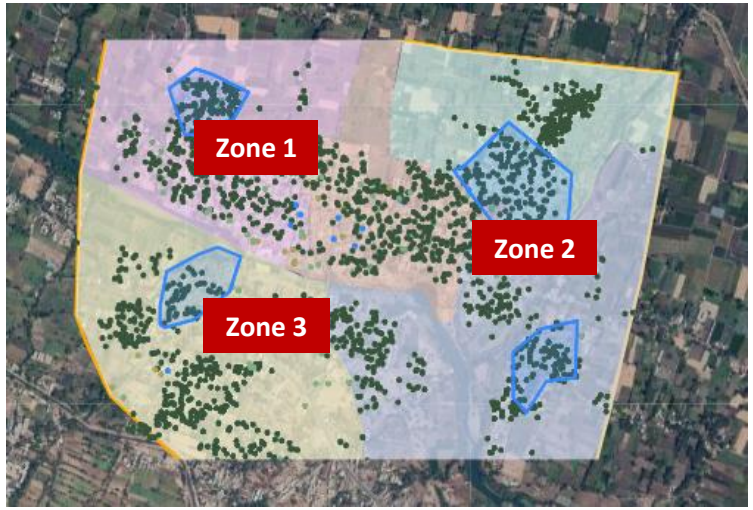
સુરત, તા.૧૭ ... સુરત મનપા દ્વારા અગાઉ જે રીતે મ્યુનિસિપલ બોન્ડ દ્વારા પ્રાઈવેટ પ્લેસમેન્ટ થકી ૨૦૦ કરોડનું ફંડ ઉભું કરાયું હતું. હવે મનપા મૂડીબજારમાં દાખલ થવા જઈ રહી છે. કેપિટલ માર્કેટમાં દાખલ થઈને જાહેર ભરણું (આઈપીઓ-ઈનીશીયલ પબ્લિક ઓફરિંગ) બજાર પાડનાર સુરત મહાપાલિકા પ્રથમ સ્થાનિક સ્વરાજ્યની સંસ્થા હશે. મનપા દ્વારા ૨૦૦ કરોડના ગ્રીન મ્યુનિસિપલ બોન્ડ થકી જાહેર માર્કેટમાંથી ભંડોળ એકત્ર કરવાની તજવીજ હાથ ધરવામાં આવી છે. મનપાના બજેટમાં જ આ અંગેની જોગવાઈ કરવામાં આવી હતી. આ બોન્ડની ફેસ વેલ્યુ ૧ હજાર રહેશે, અને બજાર દર નક્કી કરવાની સત્તા મનપાની રહેશે.

આ અગાઉ મનપાની સામાન્યસભામાં ગ્રીન મ્યુનિસિપલ બોન્ડનું ફંડ પ્રાઈવેટ પ્લેસમેન્ટથી એકત્ર કરવા માટેની પોલીસી નિર્ધારિત થયેલી છે. પરંતુ કન્સલ્ટન્સીના અભિપ્રાય તથા બોન્ડના બજારના ૬૨ નક્કી કરવાની સત્તા ડોઈપણ મનપા દ્વારા પ્રાઈવેટ પ્લેસમેન્ટ હાથમાં રાખવાના મુખ્ય હેતુ સાથે હવે મારકતે જ બોન્ડ થકી ભંડોળ એકઠું મનપા દ્વારા ગુજરાતમાં જ નહીં દેશમાં કરવામાં આવ્યું છે.

જાહેર માર્કેટમાંથી ભંડોળ એકઠું કરવા તજવીજ હાથ ધરવામાં આવી: સુરત મનપા દેશમા ગ્રીન બોન્ડ લાવનારી પ્રથમ બની રહેશે

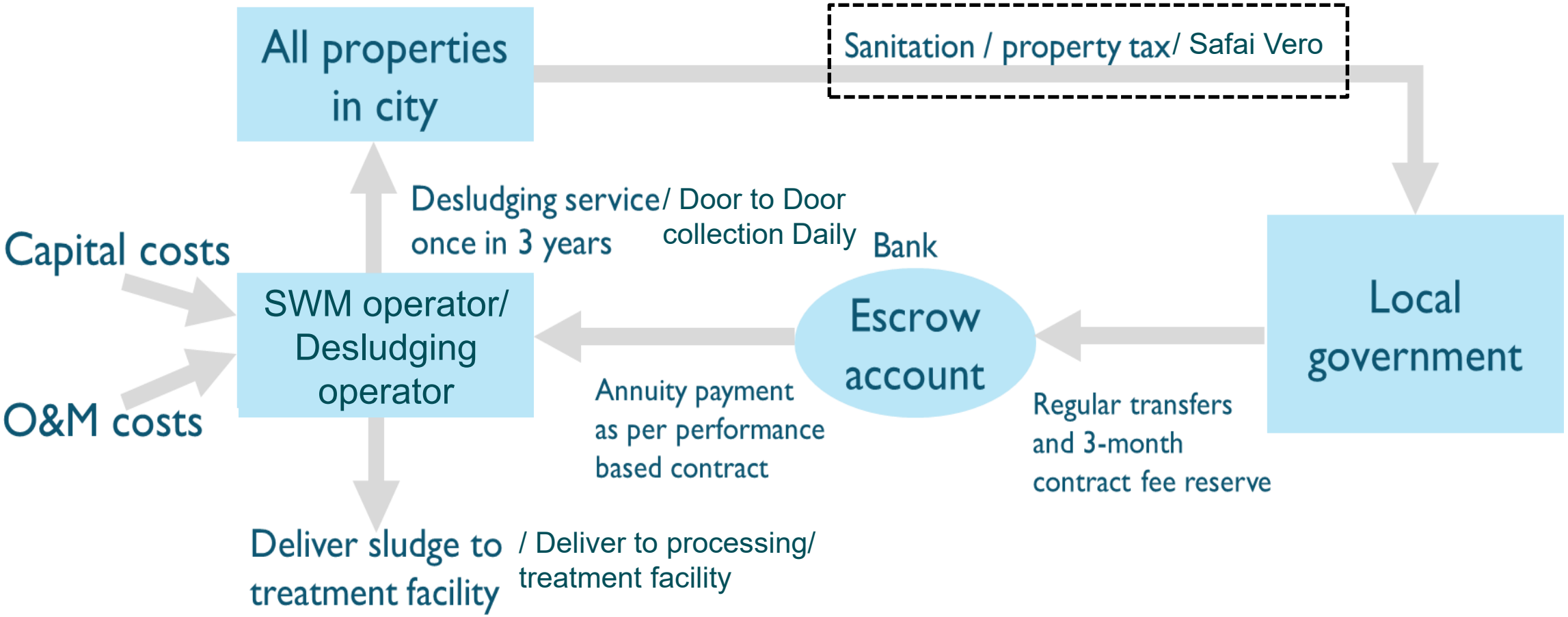
પ્રથમ વખત ગ્રીન બોન્ડ આઈપીઓ જાહેર ભરણા દ્વારા આ રીતે હાલ બજાર પાડવાની તજવીજ હાથ ધરાઈ સ્થાનિક સ્વરાજ્યની કોઈ સંસ્થાએ પરવામાં આવી છે. આજદર સુધી દેશની આઈપીઓ બજાર પાડ્યો નથી.

Scheduled desludging of septic tanks- Case of Wai, Sinnar, Maharashtra



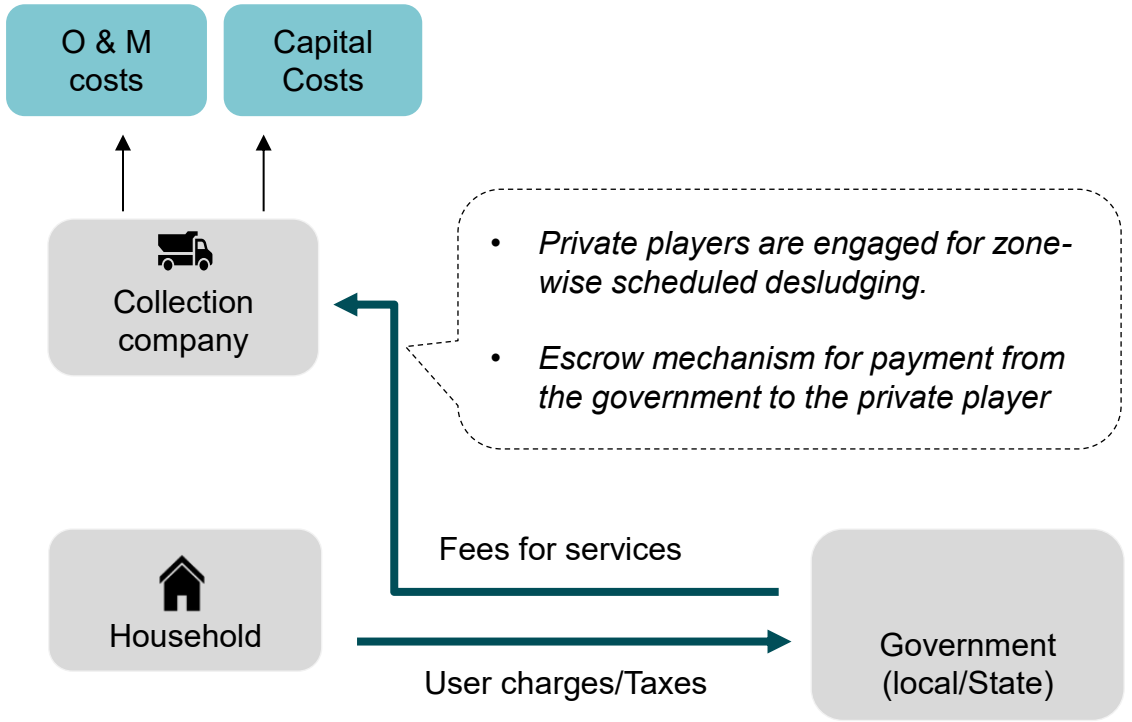
Performance Linked Annuity Model (PLAM)

Video (3 min): https://www.youtube.com/watch?v=ijrz3CPJME8



PPP Model- Performance based Annuity Model

- Private service provider bring trucks and operate through a **performance based contract** to carry out scheduled desludging.
- The **city collects a special tax** or a surcharge on water/property tax to cover the payment of fees.
- For large cities and for metropolitan areas where **partial sewerage network** is present, scheduled desludging model can be explored for areas with **onsite sanitation systems.**
- These could be through **zonal contracts** with private operators.



Benefits

- **Reduces the capex burden** for ULBs
- **Generates revenue** through taxes to pay for service
- **High service levels** through performance based contract
- Can induce **higher private sector participation**

Challenges

- Requires **high-levels of monitoring** of private operations
- Significant **behaviour change needed** to mobilize the tax
- Requires **high levels** of **ULB capacity**
- **Limited Government Capacities** to design & implement services

Applicability

- Presence and willingness of private sector to **invest in trucks capex** and take on contracts.
- Local government has capacity to **monitor operations**

Types of contracts for Solid waste management

1. **Service contract** (door-to-door collection and transportation of waste)
2. **Management contract** (door-to-door collection, construction and demolition [C&D] waste collection, secondary storage, and transportation of waste)
3. **Build and transfer** (transfer station, sanitary landfill)
4. **Build-Operate-Transfer (BOT)** (biomethanation, composting, sanitary landfill)
5. **Build-Own-Operate (BOO)** (composting, refuse derived fuel [RDF], incineration)
6. **Design-Build-Own-Operate-Transfer (DBOOT)** (large compost plants, RDF plants, incineration, and sanitary landfill)
7. **Design-Build-Finance-Operate-Transfer (DBFOT)** (large compost plants, RDF plants, incineration, and sanitary landfill)

Surat Municipal Corporation SWM

D2D collection | Secondary collection | Transportation | Treatment and reuse | Disposal

- Door to Door collection -**Five different private parties**
- Sweeping by **SMC**
- Night scraping & brushing-**SMC**
- Hotel-Kitchen waste management- collected and transported- **Private Hotel association**

- Secondary transportation – container lifting in some wards-It was BOO- now service is provided by SMC staff

Compost plant for treating mixed MSW through 400 TPD plant implemented with PPP. Another 400 TPD plant is in pipe line

SMC has constructed a sanitary landfill to handle rejects from waste treatment

Areas of Waste Management	Responsible Agency
Door-to-door Collection	Private operators-**Service contract**
Street Sweeping	SMC Staff
Drain Cleaning	SMC Staff
Primary Collection of waste @commercial places	Private operator
Transportation of waste and maintenance of semi closed type transfer station (TS)	Private operator – **BOO contract**
Secondary Collection SMC	only one ward is handled by private operators
Waste transportation	Private operator
Waste treatment	Private operator
Waste Disposal and reuse	Private operator

D2D collection and Transportation

- **Adopted PPP model - Service Contract** – leveraged through five private agencies.
- **Arrangement between parties:** The agencies are paid tipping fee against D2D services. The private operator is responsible for the capital as well as the entire O&M expenses for the system during the concession

Treatment of municipal solid waste

- Adopted PPP model – **BOOT** on 2008 for 30 years
- Arrangement between parties: SMC allotted land on a token rent of Rs.1/- per sq.mt. per annum and free of cost MSW at the tipping floor of plant. The capital and O&M are being borne by the concessionaire, the rights to sell the end products in the open market is with the concessionaire.
- Tipping Fee Paid: concessionaire shall pay royalty to SMC against the quantity of waste supplied. The royalty will be Rs.30/MT, with an increment of 5.4% every year

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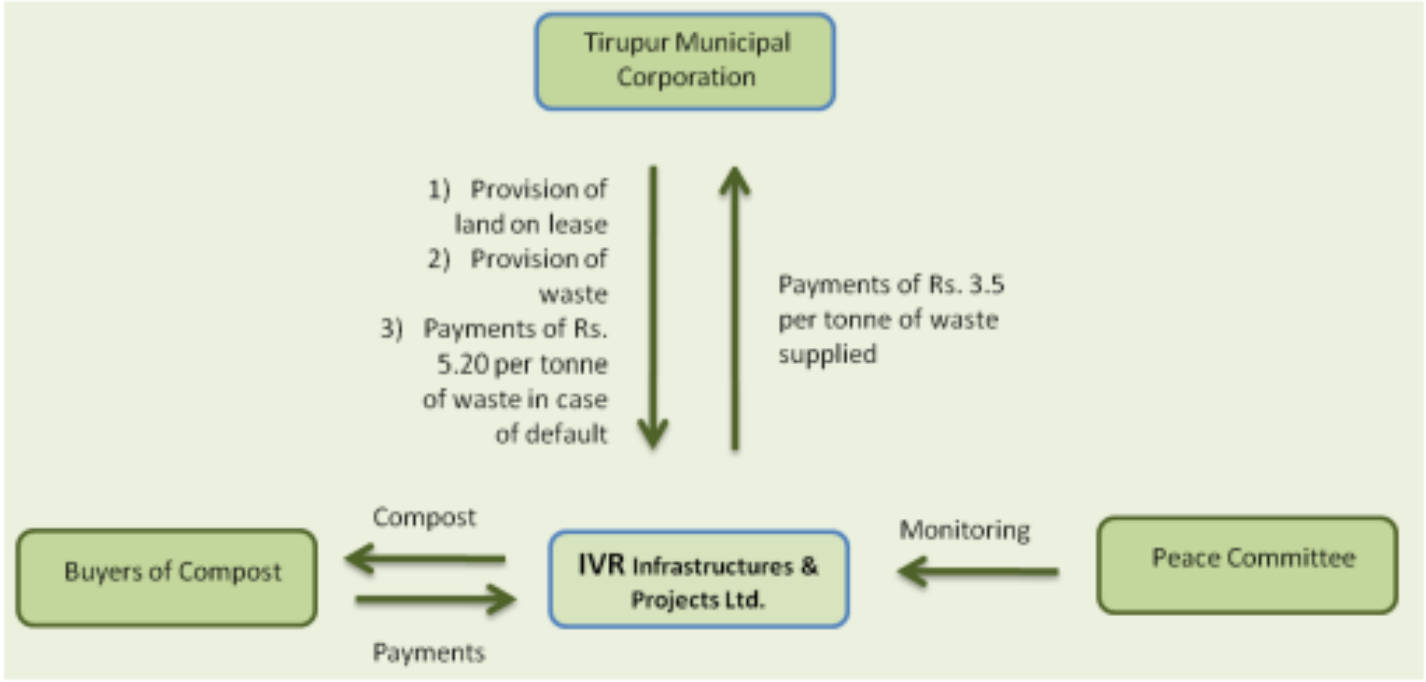
Source: SMC website, https://www.suratmunicipal.gov.in/Departments/SolidWasteManagementApproaches AND https://www.nswai.org/docs/City%20Report%20on%20Surat%20SWM%20Project%20under%20JNNURM.pdf

Making Solid Waste Solid services energy-neutral

- **Reducing fossil fuel consumption is essential to mitigate the emissions** from SWM and wastewater service.
- **Efficient route planning with land use replacement of old vehicles, and electrification of vehicles** can be adopted for reducing the emissions from SWM service.
- **Surat, Bangalore, Visakhapatnam, Mysore, Gurugram, Hyderabad, Indore Pune** have taken up initiatives to electric SWM fleets
- Shifting towards electric vehicles **reduces air and noise pollution, reduces emissions, and reduces fuel cost**

BOOT mode for treatment of SWM waste

Tirupur Solid Waste Management



- As per the concession agreement TMC was supposed to provide 100 MT of mixed waste per day to the private concessionaire, of which at least 40 MTD would be bio-degradable waste.
- The concessionaire would pay Rs 3.5 per ton of waste sold to it. If the municipality defaults in providing the concessionaire the waste, it would compensate the concessionaire by paying it Rs 5.20 per ton of waste not supplied.
- This meant that the demand risk was completely borne by the TMC.

Session 8
For city officials

Good Initiatives taken by Gujarat and other state ULBs

Good Initiatives by Surat Municipal Corporation

Swachhta app download instructions distributed to hotels, corporate offices

Mapping of notified commercial areas and placing of 2 bins

Good Initiatives by Surat Municipal Corporation






Good Initiatives by Surat Municipal Corporation

Plastic Waste Management

- Project is being operated on PPP mode with 25 years concession period
- SMC provided 2-acre land on token rent located at Bhatar.
- Tie up with SUMUL Dairy under EPR for collection of plastic bags used for milk packaging. Daily 1.5 lac milk bags are collected and processed.
- A Toll-Free No. 1800 233 3002 has been designated for plastic waste collection
- Road construction: SMC has started utilizing plastic waste for road construction, approximately 32.56 km of the roads have been built using plastic waste material in the last year, itself.
- Daily 20 MT Pellets have been produced from waste plastic,
- Fabric from Plastic: Private Operators are manufacturing Textile Material from Plastic PET bottles, which is used in textile industries for weaving process.

Good Initiatives by Surat Municipal Corporation

Tertiary Sewage Treatment Plant

Good Initiatives by Petlad and Hyderabad

Good Initiatives by Ahmedabad Municipal Corporation

RRR initiatives by Ahmedabad Municipal Corporation

Digital initiatives for Swachta by Ahmedabad Municipal Corporation

Post Rath Yatra Cleaning Drive

Transformation of Dumping Site into Ecological Park

- Waste Quantum- 24,15,490 MT
- Area of Park- 3,44,300 Sq. mt
- Area Reclaimed - 2,67,000 Sq. mt
- 20% of air pollution reduction was achieved in the nearby vicinity due to this project
- Increased the green cover area of the Surat city by 0.2%
- Ecological park - recreational areas, Development of Cycle Track for public use
- Trapping of Green house gases

PAST

PRESENT

FUTURE

City Beautification

Thank you

CWAS CENTER FOR WATER AND SANITATION

https://cwas.org.in

About us

The Center for Water and Sanitation (CWAS) at CEPT University carries out various activities – action research, training, advocacy to enable state and local governments to improve delivery of services.

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About us

Urban Management Centre provides professional assistance to local governments for sustainable solutions that improves quality of life for all.

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