

Government of Rajasthan

Presentation regarding Compliance of

Hon'ble NGT directions in O.A. No.

606/2018

**SOLID WASTE MANAGEMENT
in Rajasthan**

Directions of Hon'ble NGT Dated 31/05/22

“It is necessary that Chief Secretaries continue the monitoring and interact with this Tribunal periodically by video conferencing. Accordingly, personal appearance of the Chief Secretaries, by Video Conferencing, with the status of compliance in respect of each of the States/UTs on the subject of Solid Waste Management and Sewage Management. The data to be furnished should cover all categories of areas in the State – big cities, towns and villages.”

Management of Solid Waste in Urban Areas

Solid Waste Management in Urban Area

Total MSW generation(TPD)



Waste Processing (TPD)

Waste Processing Facilities under progress (TPD)

GAP (TPD)
Covered in SBM 2.0

Dec.2023

Dec.2024

➤ Out of 196 ULB's Total 122 ULB's are covered with processing. Rest 74 ULB's are being covered under SBM 2.0

Comparison of Year Wise Progress w.r.t NGT in 2020

	Progress as on Jan 2020	Progress as on Aug 2022	Future Plan
Solid Waste Management Bye Laws – 2019	No Bye-Laws	Prepared & Being Implemented	Prepared & Being Implemented
Action Plan	Not prepared	Prepared & Being Implemented	Prepared & Being Implemented
Total wards	5389	7500	-
Door to door Collection in wards	100%	100%	-
Segregation in Wards	55%	72%	100% by March 2023
Waste Processing	1113TPD (17.2%)	3534 TPD(54.18%)	(100%) by Dec. 2024
Operational MRF	28	122	170 by Dec. 2022
Legacy Waste Remediation (Completed/ Work Under Process/Under Tendering)	0	65.02(73.88%) Lakh Cum out of 88 Lac Cum	100% by Dec. 2023

Glimpse of Door to Door Collection



Door to door collection Jaipur



Segregated collection Udaipur



Domestic Hazardous waste collection Dungarpur



Glimpse of Composting

1399

Composting



Barmer

Lakheri

Composting machines installed by BWGs



Jaipur

Itawa



KOTA



KOTA

Glimpse of Material Recovery Facility

1400



Ratangarh



Jhalrapatan



Bhilwara



Jhalrapatan

Glimpse of Material Recovery Facility



Alwar



Dungarpur



Nokha



Pratapgarh

Transfer Station

1402



Kota South



Kota North



Udaipur



Udaipur

Few Best Practices

DLB Jaipur: Zero Waste Project

1404



- **Pit Composting:** for the wet waste from cafeteria and uneaten food with optimum use of water, bio culture and energy, commercially available microbial strains to provide **odour free** ambience.
- **Recycling facility** for dry (non-biodegradable) waste component.
- Indigenously developed **Shredder** and **Gasifier** to generate electricity from non recyclable fraction and revenue from recyclable fractions.
- **Success Story:** The Zero Waste Project is also considered to be implement in Offices, Training Institutes, Universities etc. (BWGs), of entire State of Rajasthan as a decentralized solid waste management at source.

Waste Management in UDAIPUR

1405



BIO GAS PLANT



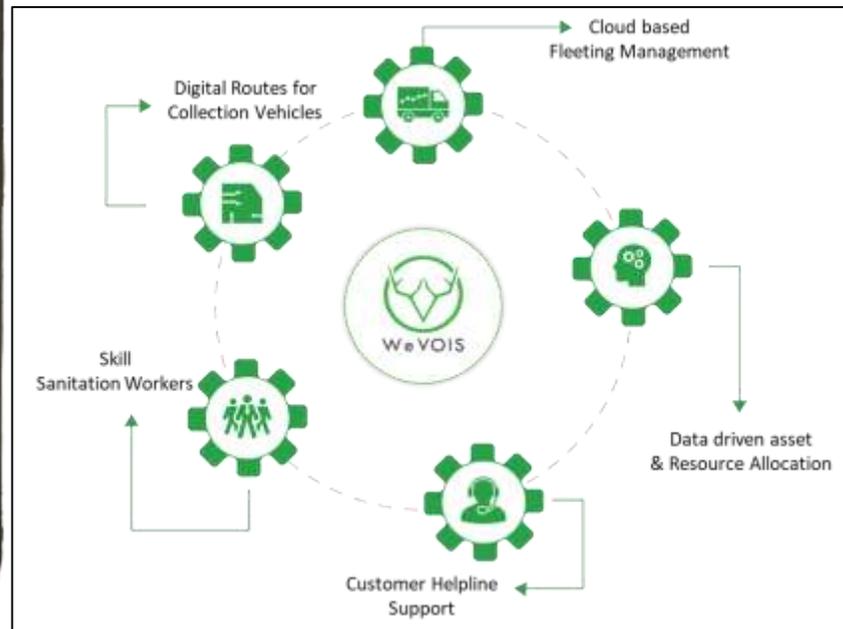
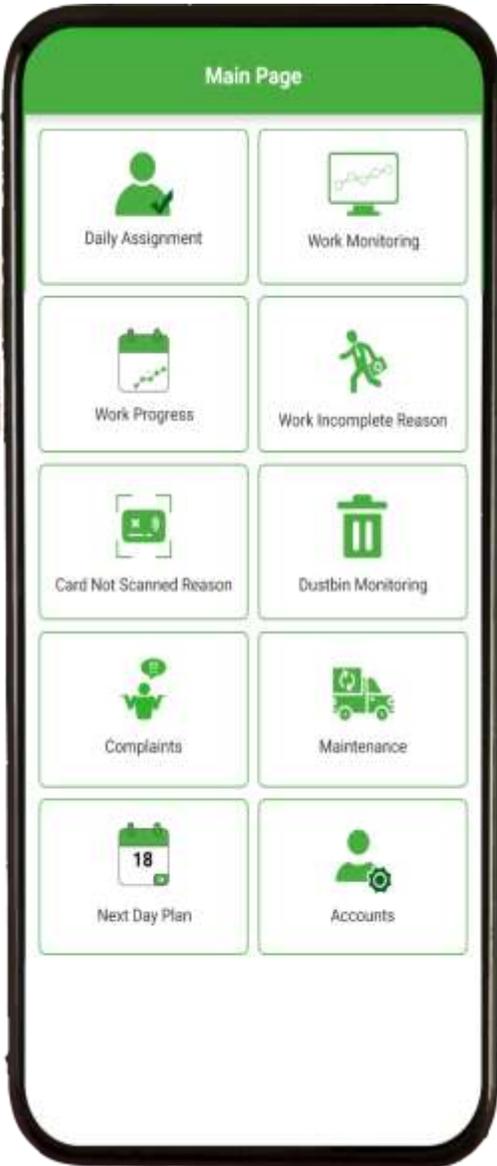
Bio Mining of Legacy wastes



C&D WASTE

ICT Based Solution - SIKAR Model

1406

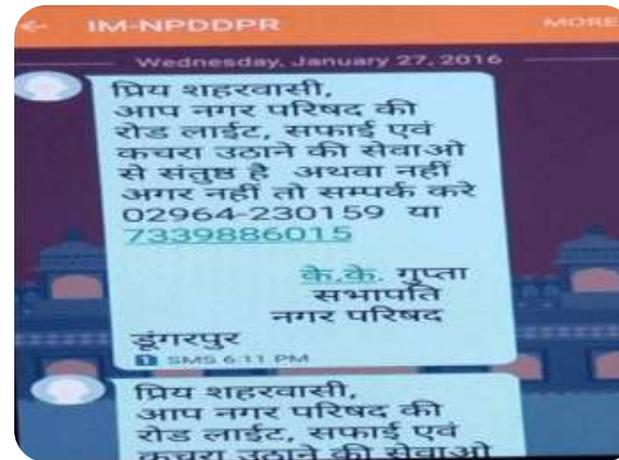


- IoT based tool 'Sikar Model' specifically for city solid waste management-since from April 2019.
- It offers wide varieties of IT tools such as
 - **Real time monitoring**
 - **Web Portal to manage different task**
 - **Citizen App**
 - **Driver and Helper App**
 - **Engineers App**

Innovations in Dungarpur

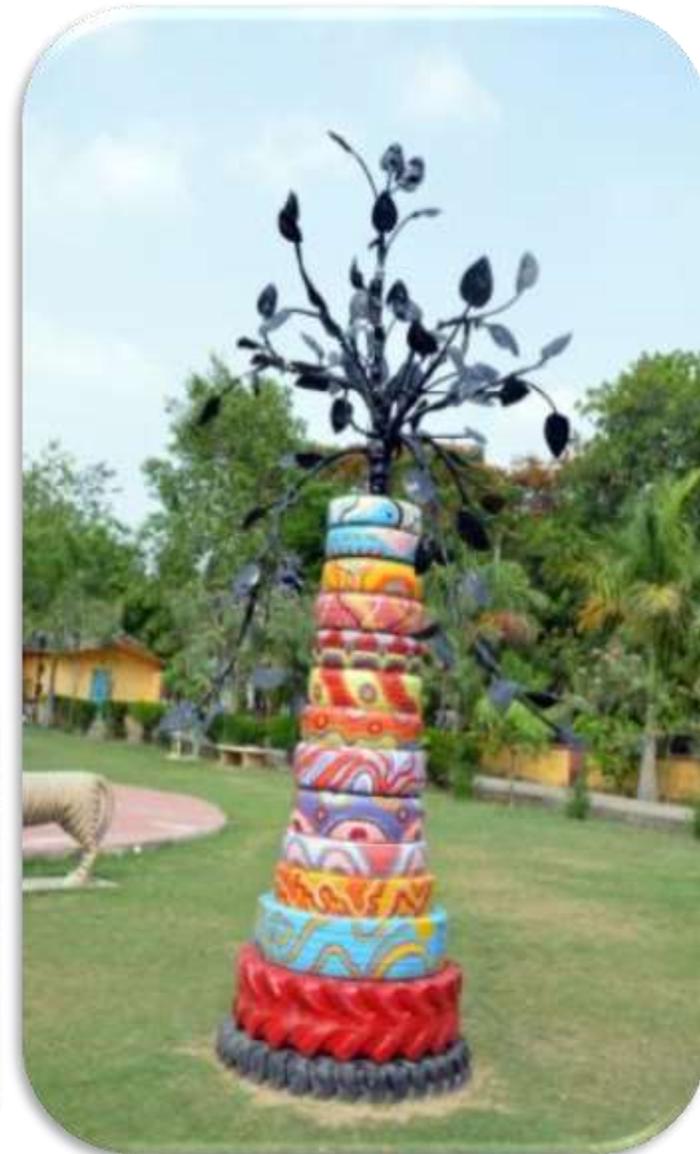
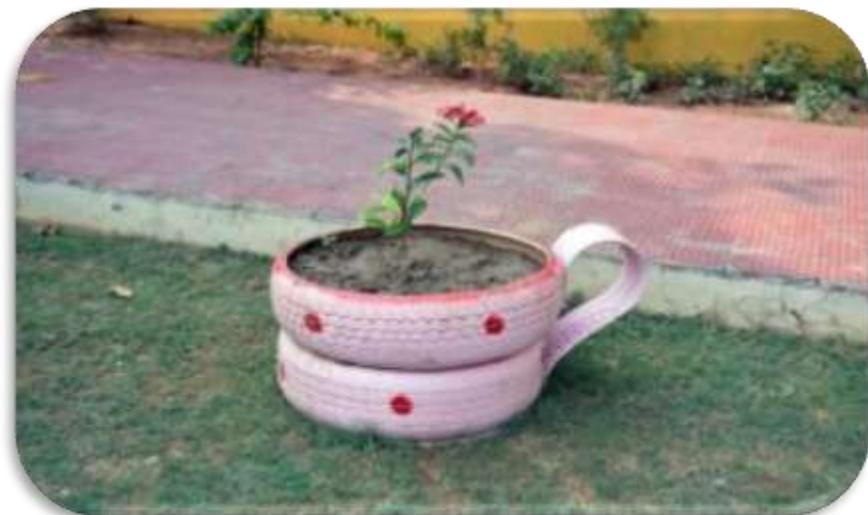
1407

- Roti Compartment in Door to Door Waste Collection Vehicle.
- Citizen Grievance
- Cloth bank -100 Women are being Employed.
- Unnati Silai Centre
- Vermi Composting-
- Waste to Art
- Home Composting



“Waste to Art” Selfie Points in Dungarpur

1408

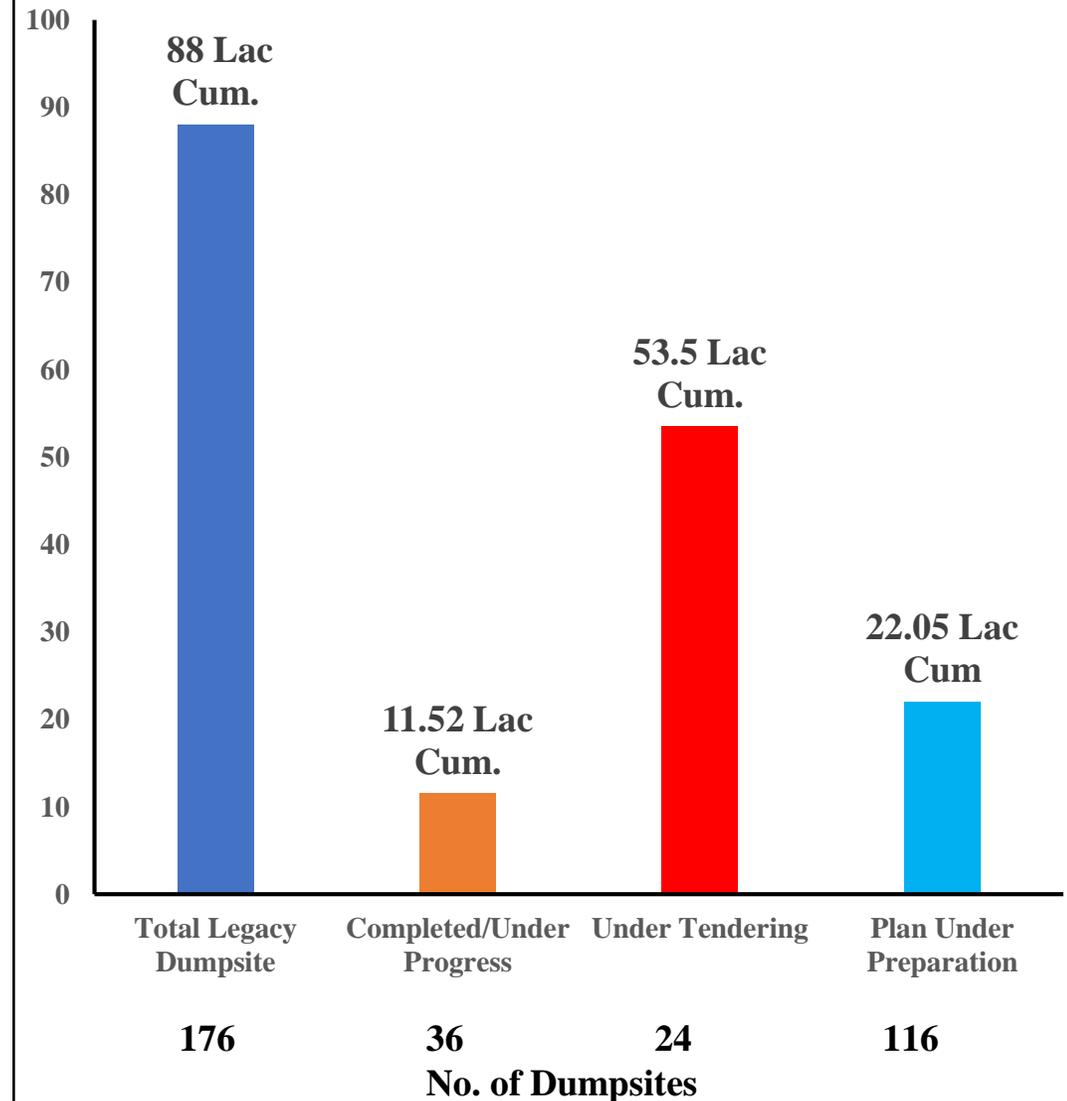


Management of Legacy Waste

Legacy Waste Remediation Status

- ✓ Total identified Dumpsite having legacy waste are 176 ULBs (88 Lac Cum)
- ✓ Work completed at 15 ULBs , (2.62 Lac Cum.)
- ✓ Work in progress at 21 ULBs, (8.9 Lac Cum.)
- ✓ Tender has been received on 07.09.2022 & is under evaluation for 24 cities (53.5 Lac Cum.)
- ✓ 116 ULBs action plans prepared and are being implemented under SBM 2.0. (22.05Lac Cum)
- ✓ Timeline for the completion of remediation work all ULBs – Dec, 2023

[Legacy Waste Remediation ULBs List](#)



Legacy Waste Remediation at Bharatpur

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BEFORE



AFTER



Solid Waste Management: Legacy Waste Remediation Bharatpur

1412

Video



Management of Liquid Waste

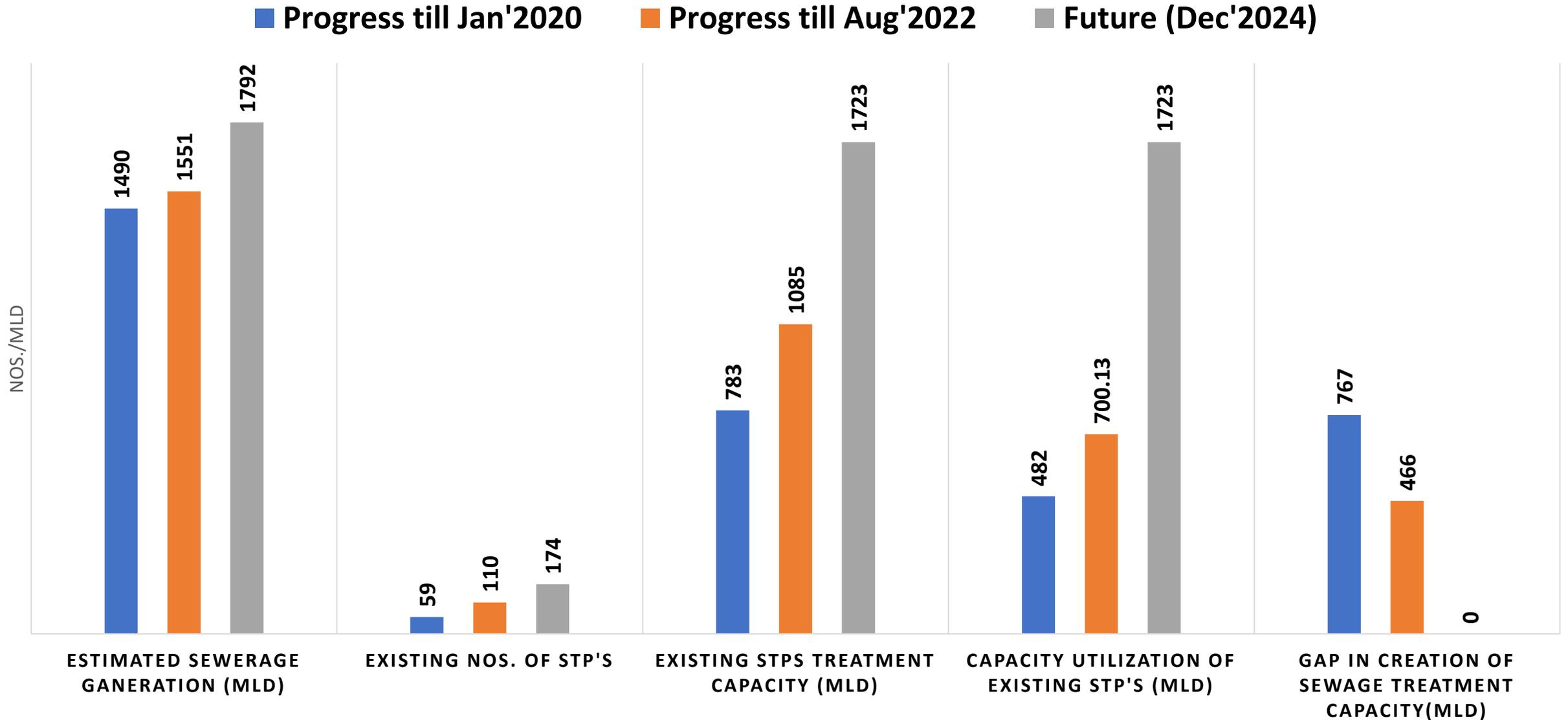
Management of Liquid Waste

1414

S. No.	Particular	Progress Till Jan 2020	Progress Till Aug 2022	Future (Dec'2024)
1.	Towns/ Cities covered under Sewerage	55	68	68
2.	Estimated Sewerage Generation (MLD)	1490	1551	1792
3.	Existing no. of STPs	59	110	174
4.	Existing STPs Treatment Capacity (MLD)	783	1085	1723
4(a)	Capacity Utilization of existing STPs (MLD)	482	700	1625
4(b).	Gap in Utilization of Existing Treatment Capacity (MLD)	302	385	98
5.	Gap in Creation of Sewage Treatment capacity(MLD)	767	466	Nil
6.	No. of Under Construction STPs	80	64	Nil
7.	Under Construction STPs Treatment Capacity (MLD)	570	638	2.0*
8.	Timeline for Completion of STPs			Dec' 2024

- *Work of One STP of 2 MLD at Khanpur, Bhiwadi is withheld due to stay by Hon'ble High Court.
- The gap in creation of sewage treatment capacity will be nil as the capacity of ongoing 64 STPs and FSSM/FSTPs is about 725 MLD.

Liquid Waste Management in Rajasthan



Utilization of Treated Waste Water

1416

- Some of the ULBs has initiated the process i.e. Udaipur, Pali, Bhilwara, Chittorgarh, Jodhpur, Sikar, Jaipur etc. The details are as below:

Place	Capacity of reuse of TWW(MLD)	Reuse of Treated Waste Water
Udaipur	45 MLD	Industry: Treated water is being used by Hindustan zinc limited as per MoU.
Bhilwara	10 MLD	Mines Industry: Treated water is being used by Jindal Saw limited as per MoU.
Chittorgarh	05 MLD	Treated water is being used by Hindustan Zinc Limited as per MoU.
Jaipur	85 MLD	62.5 MLD Treated water is being used for Agriculture use; 22.5 MLD treated water is being used by Mahindra World City and 4.9 MLD treated waste water is being used for Horticulture.
Sikar	07 MLD	Industry : UCIL (Uranium Corporation of India Limited) is using the water for Industrial use as per the MoU
Jodhpur	85 MLD	Treated water is being used for the agriculture water
Pali	15 MLD	Industrial use: Various industrial Units (200 Units).
Nawalgarh	5 MLD	Reuse in Cement Plant
Beawer	7 MLD	Reuse in Cement Plant

Glimpse of STPs

1417



13 MLD STP at Ajmer



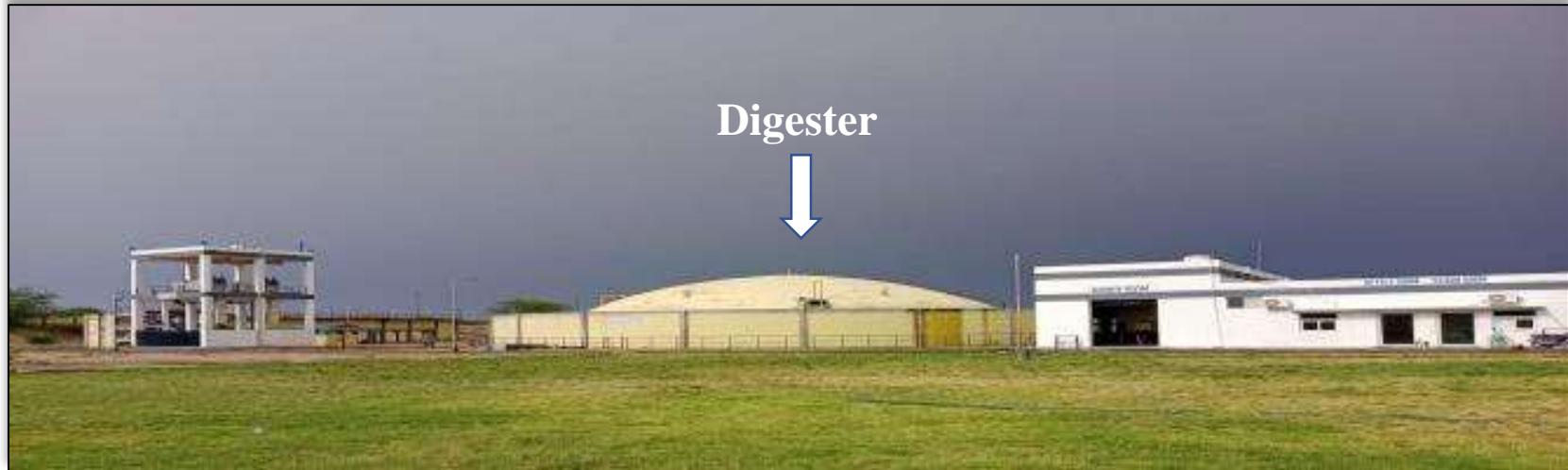
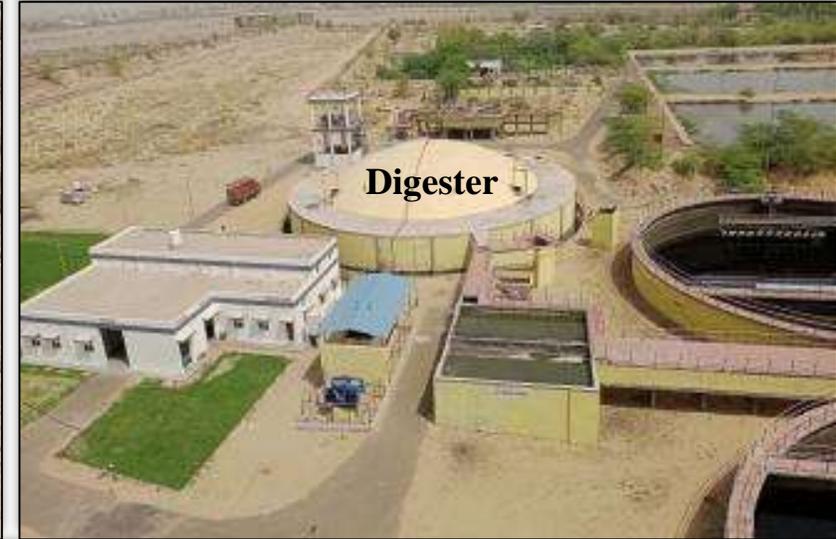
20 MLD STP at Ajmer

Glimpse of STPs

1418



20 MLD STP at Bundi



40 MLD STP at Bikaner

- Digester has been inserted between Primary Treatment Units and SBR which has resulted in decreasing load on SBR units finally less power consumption.

Management of Solid Waste in Rural Areas

Solid and Liquid Waste Management in the Rural Sector 1420

- SBM (G) Phase -I implementation period was from year 2014-2019.
- SBM (G) Phase II will be completed in 2024-25.
- Phase II focuses on Solid, Liquid and Plastic waste management.



IHHL

Upto Mar. 2020 – 77,23,517
From Apr. 2020 – 5,45,325
Total – 82,68,842



CSC

Upto Mar. 2020 – 2304
From Apr. 2020 – 20,508
Total – 22,812



SLWM villages

Upto Mar. 2020 – 0
From Apr. 2020 – 5,512
Total – 5,512



EXPENDITURE

Upto Mar. 2020 – 5986.22 cr.
From Apr. 2020 – 1644.93 cr.
Total – 7631.15 cr.

Major Components of Rural Sanitation

1421

Individual Household Latrines (IHHL)

Community Sanitary Complex (CSC)

Solid Waste Management (SWM)

Liquid Waste Management (LWM)

Plastic Waste Management (PWM)

GOBAR-Dhan

Faecal Sludge Management (FSM)

As per AIP target of FY22-23, 14159 villages to become ODF plus this year

2020



Till date

0 Villages with SLWM activities

5512 Villages with SLWM activities



Works initiated in 11,000 villages



Verification and regular inspection of ODF plus villages



IEC and Capacity Building Statewide



Priority to Bigger villages. Model Plan and focus on the religious/tourists places



Aggressive convergence different schemes and b/w communities

Achievements of Rural Sanitation under the SBM -G

1423

S. No	Components	Progress			Remarks
		Upto Mar. 2020	From Apr. 2020	Total	
1	IHHLs	7723517	545325	82,68,842	50 % of villages is targeted with SLWM arrangements upto March, 2024
2	CSCs	2304	20508	22,812	
3	Number of soak pits constructed (Magic pits , Leach pits)	0	39381	39381	
	Waste Collection and segregation Sheds constructed	0	511	511	
	Community Compost pit constructed	0	2231	2231	
	Drainage Channels constructed	0	4011 km	4011 km	
4	Village covered with SWM arrangements	0	1512	1512	
5	Village covered with LWM arrangements	0	5361	5361	
6	Door-to-door collection has been started	0	650 villages.	650 villages.	
7	Plastic Waste Management Units -No. of Blocks		<ul style="list-style-type: none"> At Kelwara, Rajsamand and one at Khairwara, Udiapur under operation Construction started in 2 districts Karauli, Mahaveer ji and at Ramdevra , Jaisalmer) 		
8	GOBAR-dhan Projects	–	<ul style="list-style-type: none"> 5 districts, Bikaner, Jaipur, Bhilwara, Karauli and Tonk districts have been selected for pilot of Individual GOBAR-dhan Project 		
9	Faecal Sludge Management (FSM)	–	<ul style="list-style-type: none"> A joint advisory letter along with draft MoU between ULBs and GPs has been submitted for co-Treatment of faecal sludge at 3 existing FSTPs of Rajasthan located at Lalsot (20KLD), Khandela (10KLD) and Phulera (20KLD). 		

Initiative taken by the State

1424

Light House Initiative

- ⑩ Integrated waste management complex (NADEP, RRC and PWMU) launched.
- ⑩ 26 Tourist/ Mostly religious places are taken as the pilot for end to end SLWM activities.

Model plan for Village having population of 2000

- ⑩ Guidelines for Prioritizing larger villages having population of 2000 prepared.
- ⑩ Model plan for faster implementation.
- ⑩ Training of CEOs/BDOs/Program Coordinators.

Corporate Social Responsibilities

- ⑩ CSR Conclave to accelerate SBM(G) progress with support of corporate.

Faecal Sludge Management (FSM)

- Proposal submission to Department of Drinking Water and Sanitation (DDWS), GOI to get fund from Swachh Bharat Kosh (SBK) for different innovative. Technologies for Black Water, Grey Water and FSM with total amount of Rs. 75,37,89,599.
- FSM convergence/Co-treatment at Lalsot (20KLD), Khandela (10KLD) and Phulera (20KLD).

Waste to Wealth

- Pilot of Individual GOBAR-dhan Projects in 5 districts Bikaner, Jaipur, Bhilwara, Karauli and Tonk districts proposed.
- Slurry and fuel requirement to be catered from the GOBAR-dhan.

Few Best Practices

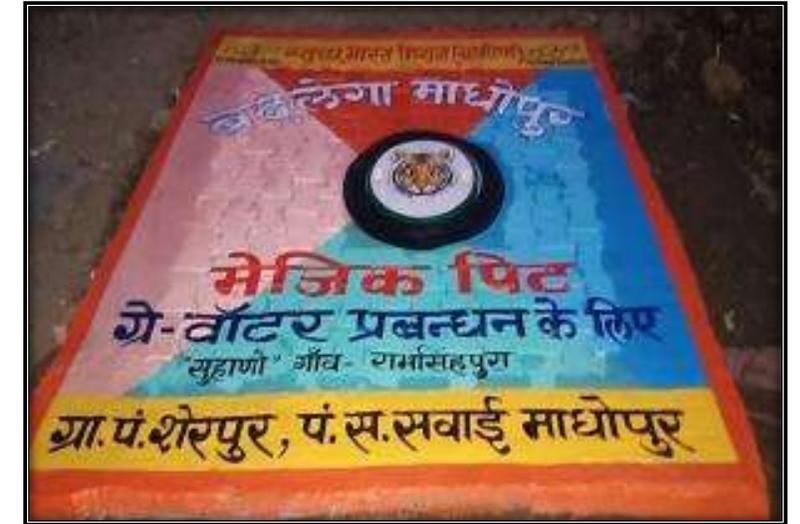
Community Compost pit, Community Soak pit and RRC Centre ¹⁴²⁶



RRC at Kishangarh, Ajmer



RRC at Kelwara, Rajsamand



Magic pit at Sherpur, S.Madhopur



NADEP at Judawal, S.Madhopur



NADEP at Khanipura, Jaipur

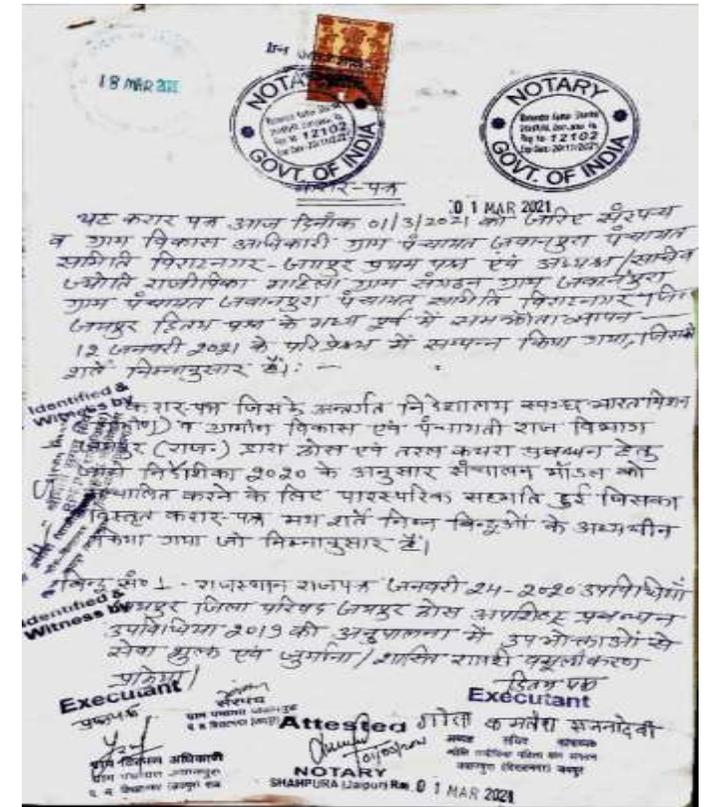


Magic pit at Jhalawar

Jawanpura SHG Model

- Jawanpura village falls under Viratnagar Block, Jaipur District.
- Jawanpura is SHG (Self Help Group) Model.
- Gram Panchyat has given contract to Jyoti Rajeevika group to regularly monitor and maintain SBM-G Activities in village.

[Documentary of Jawanpura](#)



Jahota – User Fee and Community Model

1428

- Jahota village falls under Jaaloo Block, Jaipur District.
- Jahota is **first ODF Plus Village of Rajasthan.**
- Jahota works on **user fee and Community Model.**
- User fee is regularly being collected by Gram Panchayat which makes this model successful and sustainable.



[Documentary of Jahota](#)

Kelwara NGO Model

1429

- Kelwara Village fall under Kumbhalgarh block, Rajsamad district.
- Gram Panchayat has done contract with Seva Mandir for Plastic Waste Management in Kelwara Village.
- Seva mandir regularly monitor and carry out various IEC activities to make this model successful and sustainable.



[Documentary of Kelwara](#)

Thank You