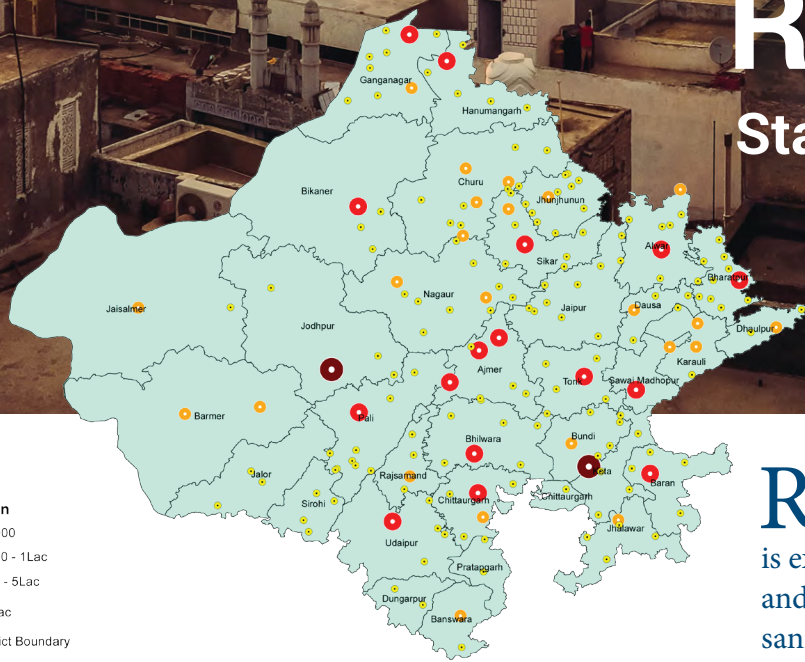


Urban Rajasthan

Status & opportunities in septage



Legend

- Population**
- <50000
 - 50000 - 1Lac
 - 1Lac - 5Lac
 - > 5Lac
- District Boundary

Total population

Source: Census of India 2011, Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India

Rajasthan has a target of constructing 5 Lakh toilets by 2017 in urban areas. It is expected to eliminate open defecation and will address the first component of the sanitation value chain. However, the issue of proper collection, conveyance, treatment and disposal of the faecal sludge/septage needs attention.



Urban population

1.70 crore

(24.78% of total population of state)

Urban settlements

222

Urban local bodies

191



Municipal Corporations	7
Municipal Councils	34
Municipal Boards	150

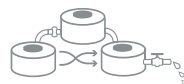


Households with individual latrine

82%

Households connected with piped sewerage network

25.63%



Urban population relying on onsite sanitation systems

53.48%

Septic tank
45.62%

Pit latrine
5.44%

Other systems
2.42%



Septage produced daily from septic tanks, public latrines and pit latrines

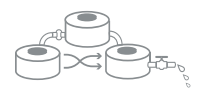
38.7 lakh litres

Human waste generated daily from open defecation

3.3 lakh litres

Faecal sludge generated from piped sewer system and service latrines

9 lakh litres



Sewage Treatment Plants (as of 2015)

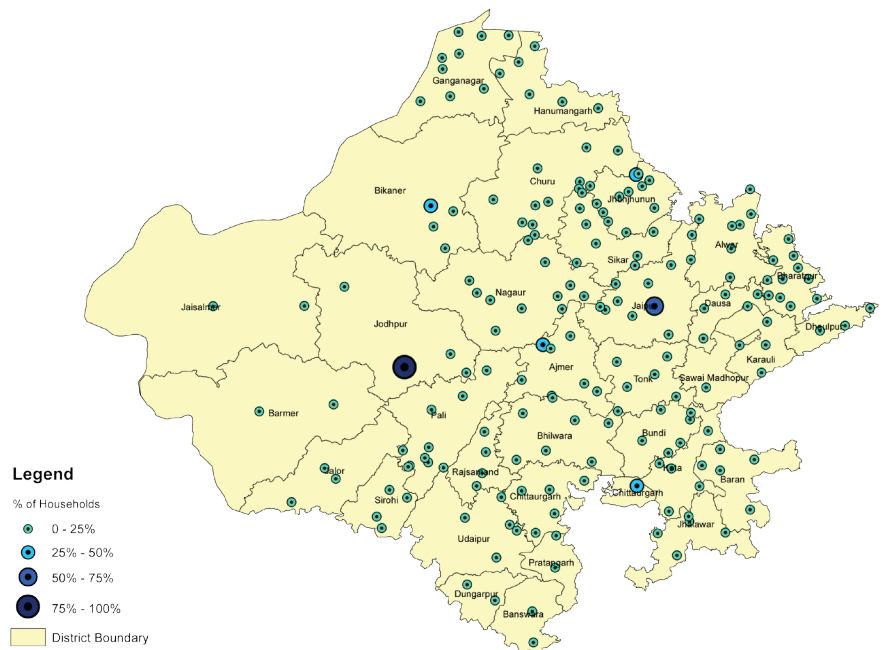
43 out of 67 either under construction or proposed

Some Issues & Challenges In Rajasthan

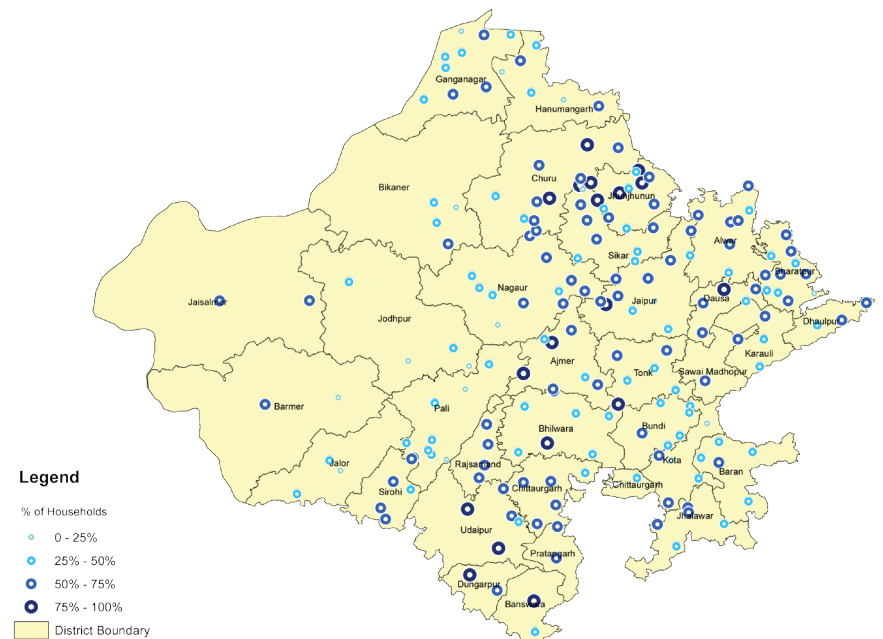
- Lack of awareness and capacities for FSSM in urban areas, especially among the residents, service providers and ULBs.
- Most stakeholders not up-to-date on modern technologies, standard construction techniques, operating procedures, safety & hygiene safeguards
- Desludging operators and service providers not properly trained and do not use safety equipment during operations
- Insufficient capacity for treatment of wastewater and faecal sludge/septage generated
- Absence of dedicated service level benchmarks for FSSM
- Limited availability of Standard Designs, Operating Procedures, Guidelines, Manuals, dedicated norms, etc for city-wide FSSM to aid ULBs
- Insufficient funds for creating and O&M of city-wide FSSM infrastructure
- ULBs not empowered to collect sanitation taxes, services charges, etc

Source: Draft Policy On Faecal Sludge and Septage Management (FSSM) 2017, Government Of Rajasthan, available at <https://rajasthan.gov.in>, retrieved on August 25, 2017

Percentage of urban households in Rajasthan having access to piped sewer



Percentage of urban households in Rajasthan having septic tanks



Source: Census of India 2011, Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India

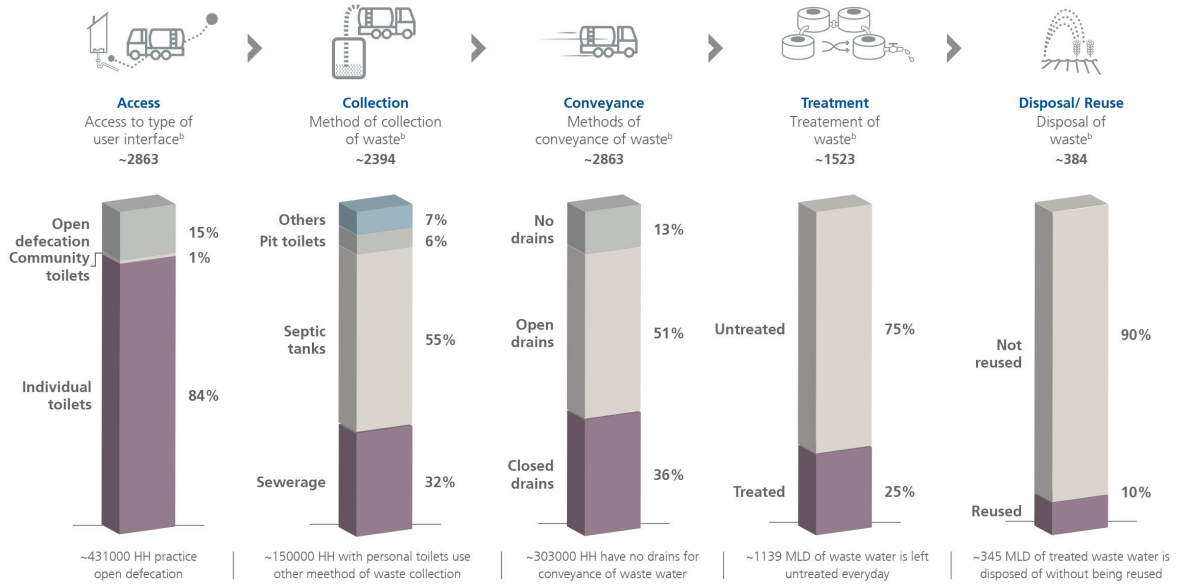
Distribution of settlements according to coverage of households by On-site Sanitation Facilities (OSSF)

% of HHs with OSS	No. of towns	% of total no. of towns	Total HHs in these towns	HHs with OSSF in these towns	OSSF as % of total HHs	Major towns in the category
>75	67	22.60	793,009	652,480	82	Ajmer, Udaipur, Bhilwara, Sri Ganganagar, Hanumangarh, Sikar
50-75	130	43.80	1,057,743	659,956	62	Kota, Jaisalmer, Alwar, Bharatpur, Tonk, Sawai Madhopur, Jhalawar
25-50	89	30	462,110	185,146	40	Pali, Bikaner
<25	11	3.70	778,078	155,497	20	Jodhpur, Jaipur

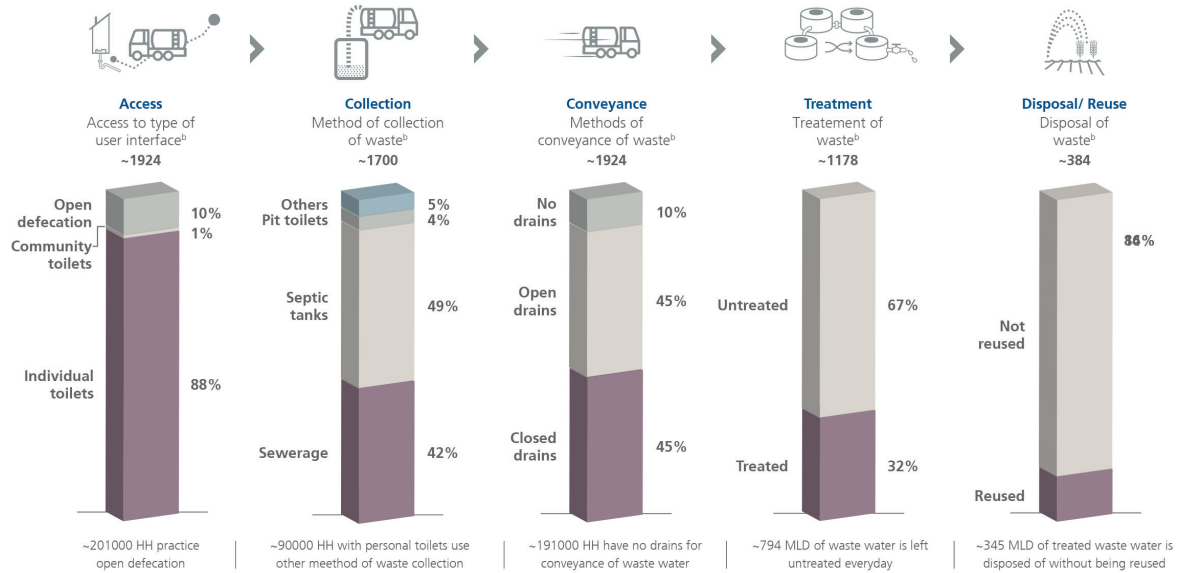
Note: A majority of the towns (66.4%) have coverage of more than 50% through OSSFs (such as septic tanks & pit latrines). More than 13 lakh households had some form of OSSF.
Source: Draft Policy On Faecal Sludge and Septage Management (FSSM) 2017, Government Of Rajasthan, available at <https://rajasthan.gov.in>, retrieved on August 25, 2017

Significant Gaps exist across the Sanitation Value Chain in Urban Rajasthan

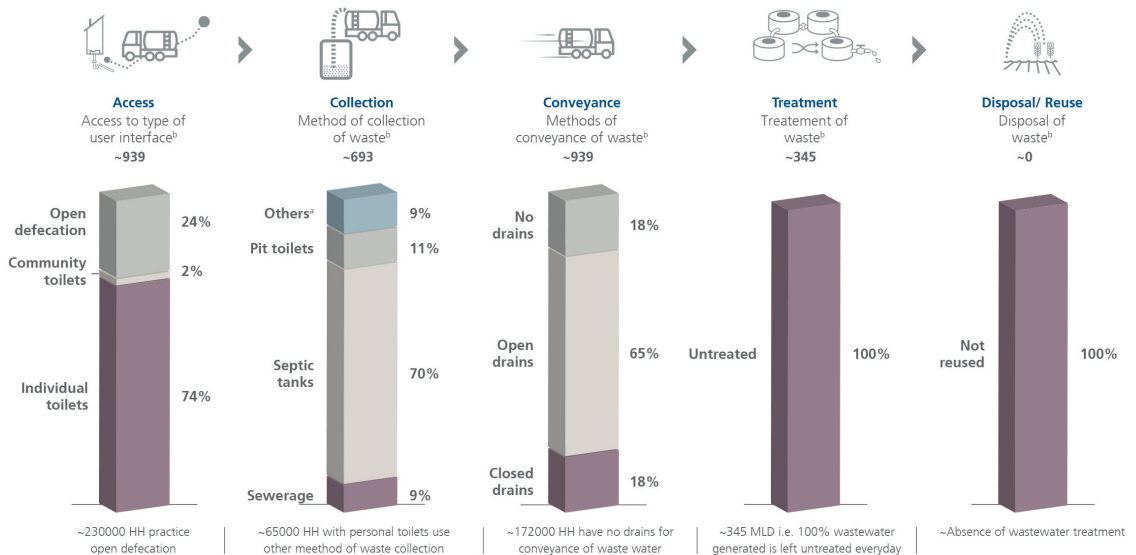
All Cities



AMRUT Cities



Non AMRUT Cities



No. of ULBs: 165



Faecal sludge disposal practices

Agriculture Farms **55%**

Water Bodies **25%**

Open Land **20%**

Source: Rapid Assessment of Faecal Sludge and Septage Situation in 100 Towns of Rajasthan, Consortium for DEWATS Dissemination Society, National Institute of Urban Affairs, Government of Rajasthan, 2017

Rapid Assessment of Faecal Sludge and Septage Situation in 100 Towns of Rajasthan, 2017

Key Recommendations

- Sewerage Treatment Plant is not the ideal solution for a state where more than 59% of the small towns studied receive only 40-70 LPCD of water that is insufficient to run sewerage system based solutions. FSTPs should, therefore, be promoted as a state level policy. Any alternative technology options including Small Bore Sewerage Systems should be assessed for its cost effectiveness and O&M vs. setting up FSTPs.
- The state should promote adoption of safe sanitation norms – lined, properly designed septic tanks as per CPHEEO standards that are viable containment and primary treatment systems. Unlined septic tanks that are large storage pits are polluting the ground water and a major health hazard of the future.
- Sewerage Treatment Plants are proposed for all AMRUT towns and towns above 50,000 population in Rajasthan. An assessment should be made of all left out urban settlements of large Corporations and AMRUT towns. Priority should be for connecting these areas with the sewerage system, if not then co-treatment of septage by emptying using vehicles and trading it in the plant should be done. If both are not possible then setting up FSTPs for left out urban settlements should be considered.
- Capacity building initiatives to support the FSM initiative for a state wide Capacity Building for FSM - basic and advanced orientation of FSM for most ULB officials, elected representatives and private sector.
- Committing funding and developing city-wise incentives for setting up FSTPs.
- A state level FSM Monitoring Dashboard will be useful to monitor implementation, city-level preparedness, incentives and use of FSM grants.

Source: Rapid Assessment of Faecal Sludge and Septage Situation in 100 Towns of Rajasthan, Consortium for DEWATS Dissemination Society, National Institute of Urban Affairs, Government of Rajasthan, 2017



Sanitation Capacity
Building Platform



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