



Swachh Bharat Mission Paving the way for a Clean India

*7th International workshop on Decentralized Domestic
Wastewater Treatment in Asia*

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Background



India has spent over **USD 20 Bn** on Sanitation projects over 20 years, before 2014

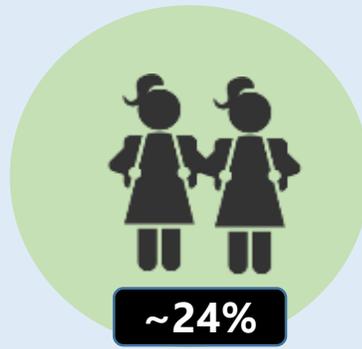


Total Sanitation Campaign (1998), National Urban Sanitation Policy (2008) undertaken before 2014

yet...



Over **18% Urban households** in India lacked individual toilets & **~12% households** still defecated in open / Only **~6% coverage** of public & community toilets



Over **24% young girls** dropped out due to lack of toilets at home or school / **~30% schools** don't have separate toilet for girls



Only **18% of Municipal Waste** was **scientifically processed** with the remaining dumped in landfills. Only **47% wards** had 100% door-to-door collection



India was losing over **USD 54 Billion** per year due to inadequate sanitation & waste Management infrastructure (health related, tourism) - **6.4% of GDP** or **~\$48 per capita**

Swachh Bharat Mission (Clean India Mission) launched in 2014 to break India's Sanitation and Waste Management status quo...

Objectives



Objectives

- 1 Eradication of Open Defecation in all Statutory towns
- 2 100% Scientific Solid Waste Management in all Statutory towns

Implementation Components

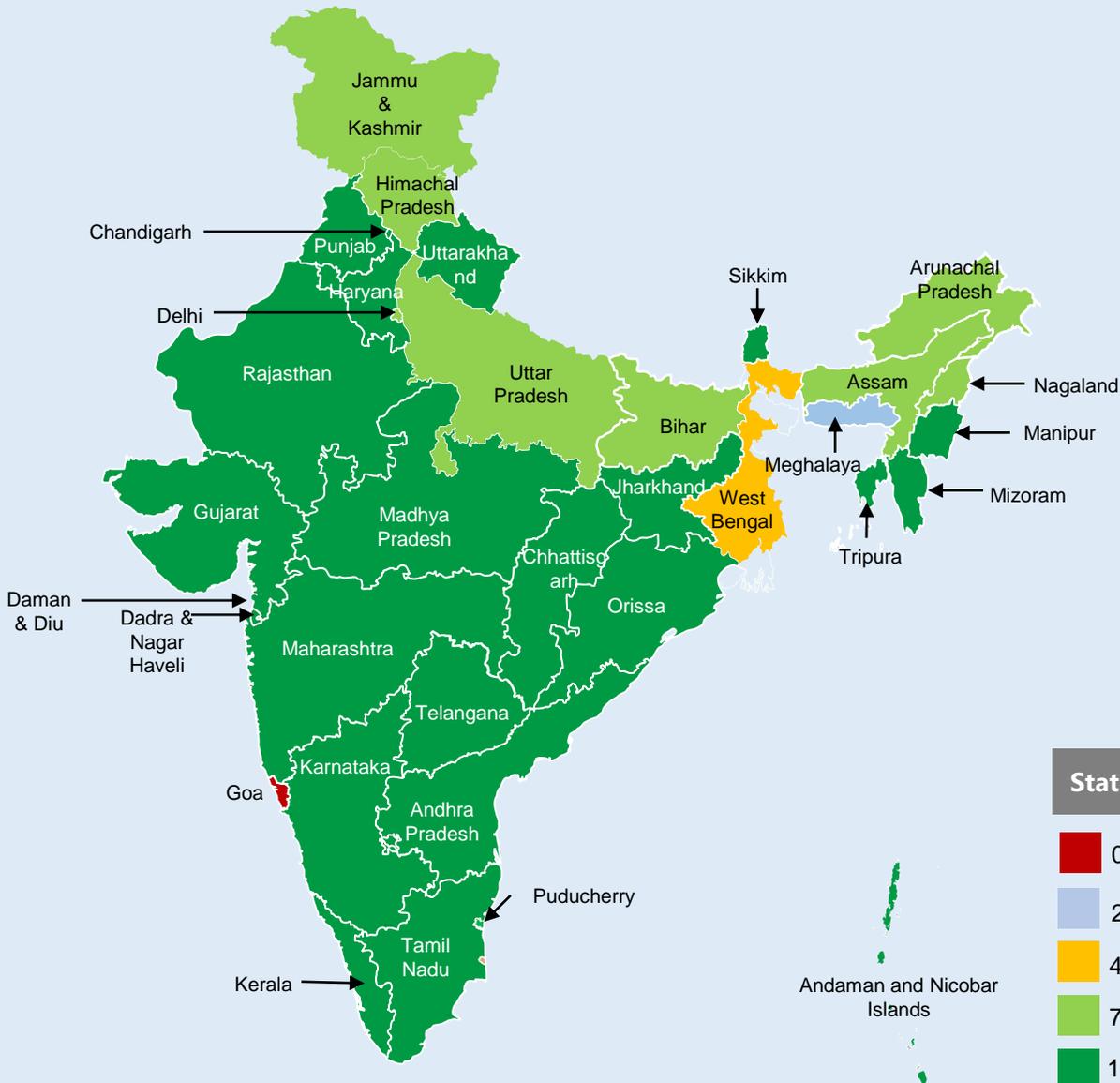
	Individual household toilets	6.6 million IHHL 0.5 million CT/PT seats
	Community toilets/Public toilets	
	Solid waste management	Awareness Outreach Advocacy
	Information, Education and Communication (IEC)	
	Capacity Building (CB)	

**Estimated cost of implementation:
INR 62,009 crore (USD 8700 million)**

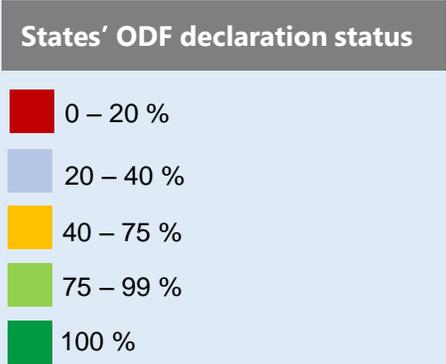
**Government of India share:
INR 14,623 crore (USD 2100 million)**

Achievements in Sanitation

Urban India will become ODF by 2nd October 2019



	2014	As on date
ODF states	0	24 (out of 35)
ODF cities	0	4284 (out of 4378)
Individual Household Toilets	1 Million	6.4 Million
Community/Public Toilets (CT/PTs)	0.1 million	0.55 million



429 cities ODF+
170 cities ODF++

52,000 PTs across 2300 cities on Google maps

Going Beyond ODF : Robust Protocols for Sustainable Sanitation



ODF+, ODF++, Water Plus protocols

SBM ODF+

ODF, plus no open urination, and Cleanliness and functionality of Community and Public Toilets

Till date, 429 cities have been certified ODF+

SBM ODF++

ODF+, plus safe containment, processing and disposal of fecal sludge and septage

Till date, 170 cities have been certified ODF++

SBM Water Plus

ODF++, plus no untreated wastewater discharged into the open environment

Launched on 13th August 2019



Star Rating Protocol for Garbage Free Cities

SEVEN STAR RATING devised to ensure **holistic evaluation across entire SWM Chain**



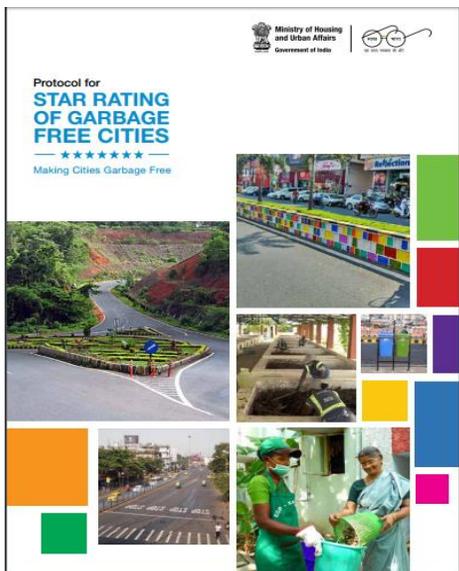
GARBAGE FREE CITIES STAR RATING

A **star rating framework** in consultation with cities to ensure no visible garbage and enhanced waste processing in all cities/towns was launched on 20th January 2018, and the modified protocol with graded scoring was launched on 28th June 2019.

Third party certification for all 4 star ratings i.e. at 1, 3, 5 and 7 star.

The rating is based on **following key components:**

- **Door-to-Door Collection**
- **Segregation** at source
- **Sweeping** of public, commercial and residential areas (no visible eyesores on streets)
- Waste Storage Bins, **Litter Bins**
- Scientific Waste **Processing**, Scientific **Landfilling** and **C&D** Waste Management
- **Waste reduction** through **on-site processing of wet waste**
- **Bulk Waste Generators** compliance
- **User Fees, Penalties, Spot Fines** for littering and Enforcement of Ban on Plastic
- **Citizen grievance redressal** and feedback system
- Eradication of crude dumping of garbage and **dump remediation**
- Cleaning of **storm drains** & surface of **water bodies, and screening of Nallahs**
- Visible **beautification** in the city with a focus on its **sustainability**



3 cities have been certified with **5-Star Rating**



53 cities have been certified with **3-Star Rating**



SINGLE METRIC

MEASURABLE

ACHIEVABLE

RIGOROUS VERIFICATION

TARGETED TOWARDS OUTCOMES

SWACHH SURVEKSHAN (Sanitation Survey)

Largest Sanitation Survey in the world



IMPLEMENTATION ACCELERATOR MOVING THE NEEDLE FROM SANITATION ACCESS TO SUSTAINABILITY

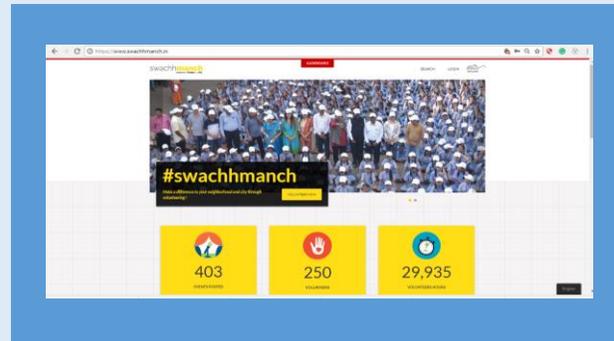
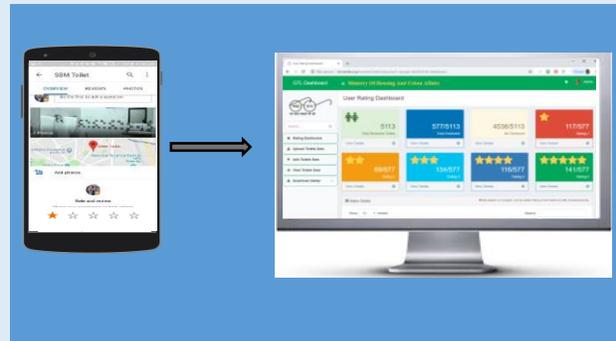
- **Annual cleanliness survey** to foster a **spirit of healthy competition among cities** aimed at **accelerating sanitation service delivery**
- **First ever Pan India Sanitation Survey** impacting around **400 Mn citizens** capturing the interest of municipal officials in **4000+ cities**
- Results & outcomes supported by **verifiable, realistic and achievable indicators**
- **Triangulated approach + third party certifications** lends **credibility** to the evaluation process

I	SS - 2016	73 Cities With Million+ population and State Capitals	No.1: Mysuru
II	SS - 2017	434 Cities With 1 Lakh+ Population and State Capitals	No.1: Indore
III	SS - 2018	4,203 Cities	No.1: Indore
IV	SS - 2019	4,237 Cities	No.1: Indore
V	SS League – 2020 3 Quarters of 2019 April-June Jul- Sep Oct - Dec	SS – 2020 Annual Jan 2020 Oct-Dec ALL CITIES	No.1: TBD



ICT INITIATIVES

Transforming Service Delivery



TOILET LOCATOR ON GOOGLE MAPS WITH TOILET MONITORING DASHBOARD

52,000+ toilet blocks from **2300+** cities uploaded on Google maps, including **500+** toilets covered by NHA

SWACHH MANCH

1.07 lakh events and 2.53 lakh photos have been uploaded on Swachh Manch, covering participation of **100 lakh+** citizens

SWACHHATA APP

An effective tool for citizens' grievance redressal
160 lakh Resolved Complaints, 93% resolution rate

1969 HELPLINE

National helpline to address queries from citizens around Swachh Bharat Mission
4.92 lakh+ calls have been answered till date

Status of Wastewater Treatment

Status of Wastewater Collection and Treatment

Coverage with Sewerage Network – **limited to 40%**

Treatment of Wastewater – **limited to 30%**

Limited number of Wastewater Treatment Plants – 1200, with poor operational efficiency

Status of Faecal Sludge and Septage Collection and Treatment

Dependence on On-Site Sanitation (without scheduled emptying) – **60% (> 4.5 crores)**

Treatment of Septage – **~ nil** (predominantly discharged in open and water bodies)

JOHKASOU in India

Ministry of Environment Japan (MOEJ) in Association with OECC-Japan & HECS-DAIKI-Chennai -- Technical Seminar on “Wastewater Treatment and Hygiene Management towards Achievement of Sustainable Developmental Goals”, Chennai.

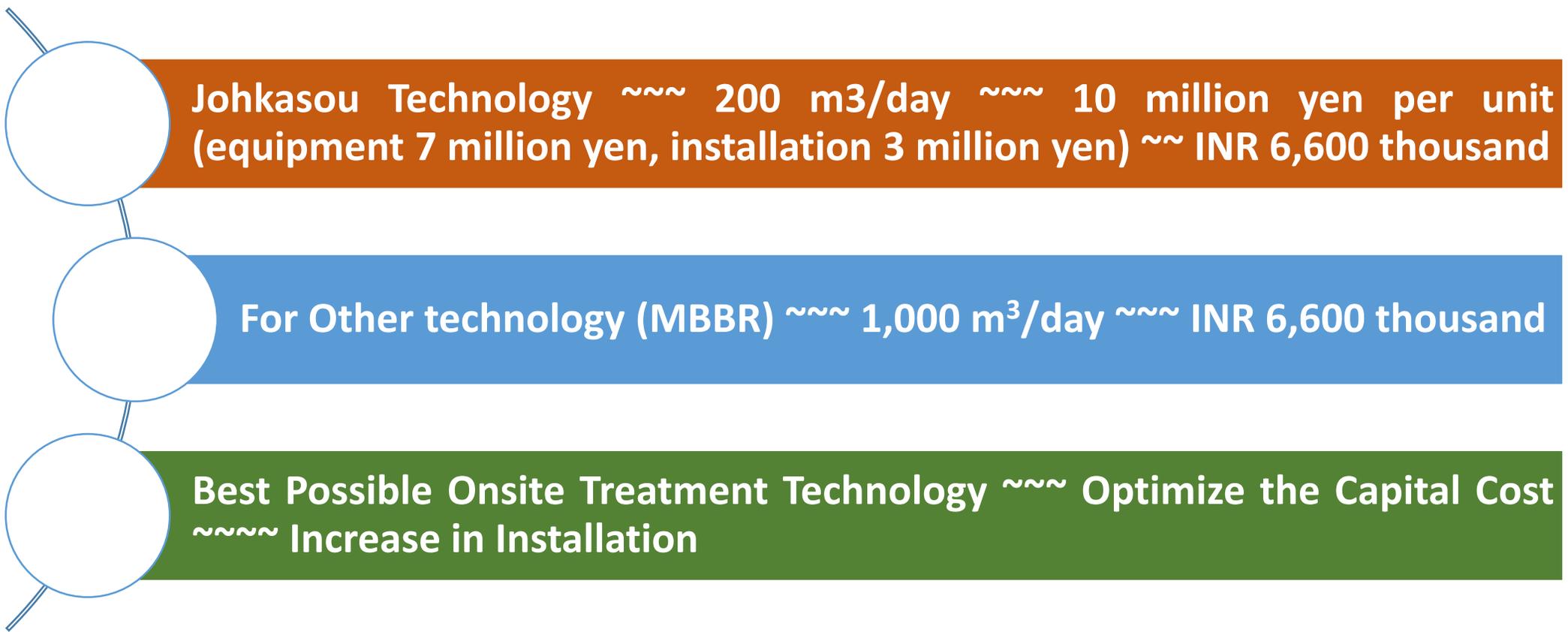
Dr. J.R. Moses (CEO, HECS) , launched Johkasou STPs in early 2018 about 50 no’s of HECS-DAIKI Johkasou STPs having been successfully installed across the Country

JOHKASOU

Indian Medical Association (IMA) collaborated with Telangana Hospitals & Nursing Homes Association (THANA) -- Seminar on “State of Art Hecs-Daiki STP Plant implementation in Hospitals”, Koti

Administrative Staff College of India (ASCI) has come forward to install at INR 2 million for waste-water treatment plant at the social welfare residential school at Madikonda

Application of JOHKASOU



Johkasou Technology ~~~ 200 m³/day ~~~ 10 million yen per unit
(equipment 7 million yen, installation 3 million yen) ~~ INR 6,600 thousand

For Other technology (MBBR) ~~~ 1,000 m³/day ~~~ INR 6,600 thousand

Best Possible Onsite Treatment Technology ~~~ Optimize the Capital Cost
~~~~ Increase in Installation

**Thank You**

