



Data Systems for Inclusive Sanitation services

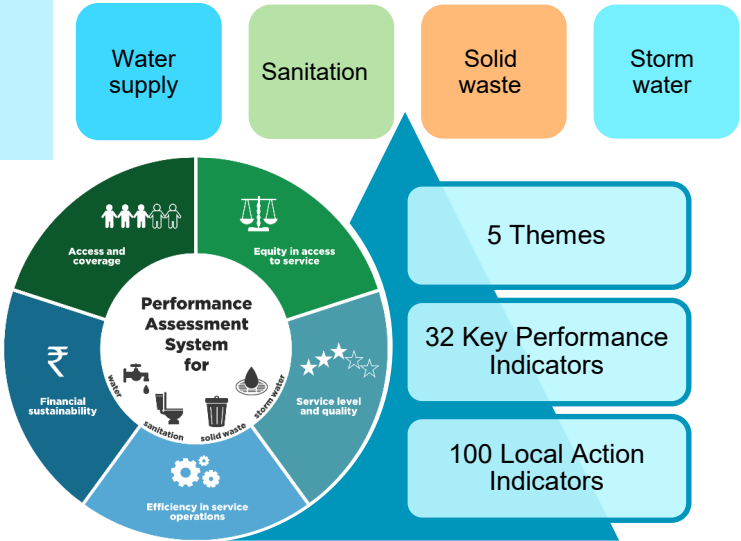
Workshop: Data systems strengthening for inclusive sanitation services

12 December, 2023

PAS is in alignment of national agreed Service Level Benchmark (SLB) framework for tracking urban water and sanitation service delivery ...

You cannot improve what you cannot measure!

PAS-SLB+ framework



NATIONALLY OWNED

National Technical Partner for SLB
Roll out with State Governments

TECHNICALLY SOUND E-PLATFORM

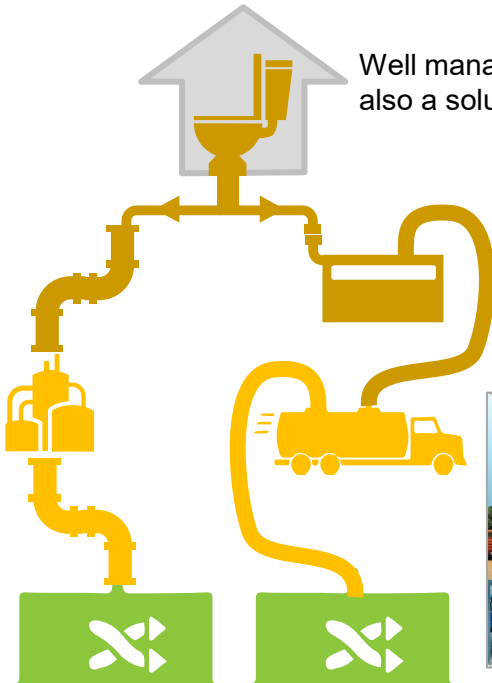
- Online module
- Inbuilt validation checks
- Automatic system for calculating indicators
- Comparative dashboards

FRAMEWORK SUITED TO OUR CONTEXT

Focus on efficiency and service quality like international frameworks but also added the lens of equity, slums and later OSS

PAS SLB+ additional outcome indicators

FSSM outcomes - SanBenchmarks



Well managed onsite systems are also a solution for safe sanitation

SanBenchmarks capture impact of service provision under both systems

Now included in National FSSM Policy



Equity in service delivery



Toilet coverage in slums?

ODF in slum households?

Network services in slums?

Connection charges for slum households?

Financial sustainability of services



Structure of charges levied – flat / volumetric / proportionate

Cost recovery in provision of services?

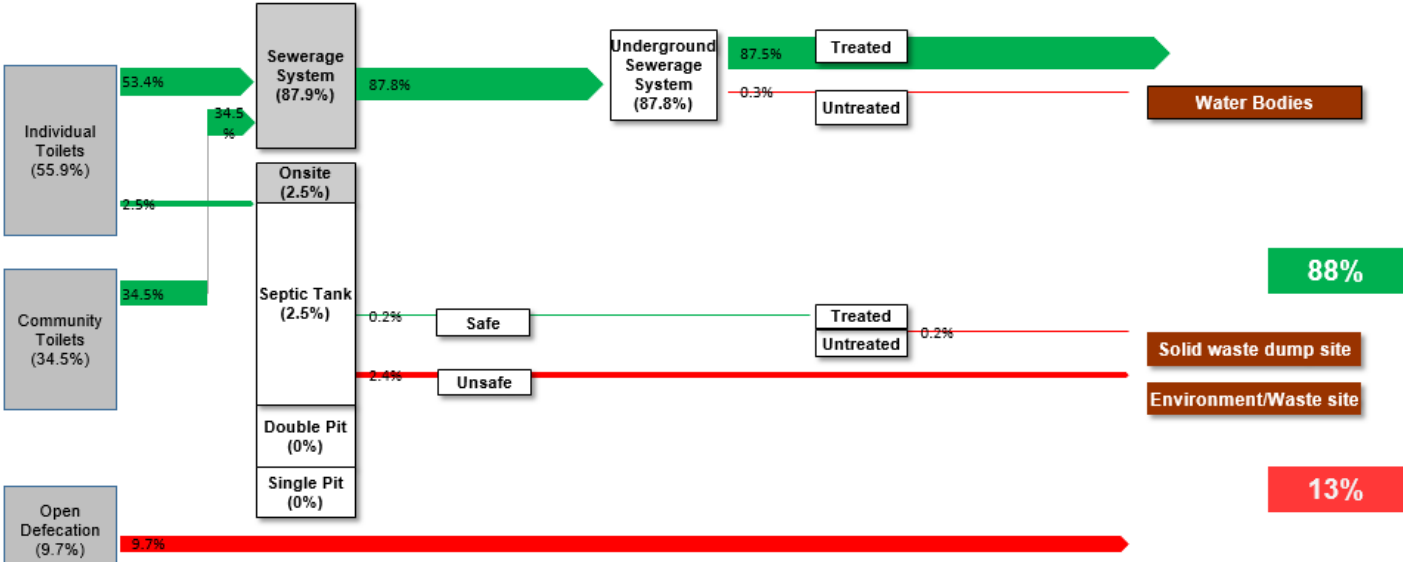
Collection efficiency for user charges?

Breakup of expenditures – admin, contractual, electricity and fuel, repairs etc

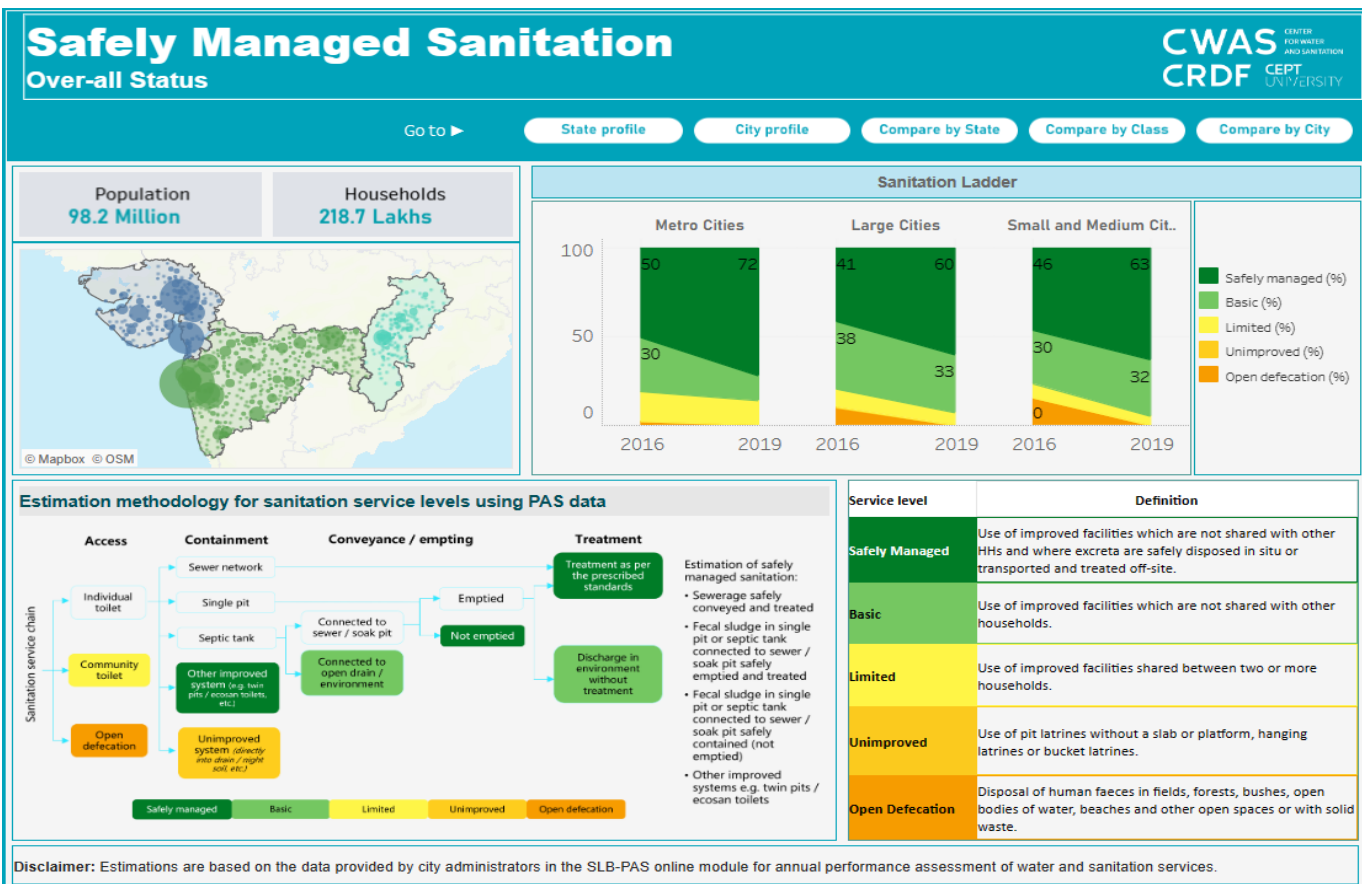
Shit Flow Diagram can be generated from PAS

SFD generation tool has been used to generate SFD diagrams using PAS data of 3 Indian states (Maharashtra, Gujarat and Chhattisgarh states)

Select City from list:

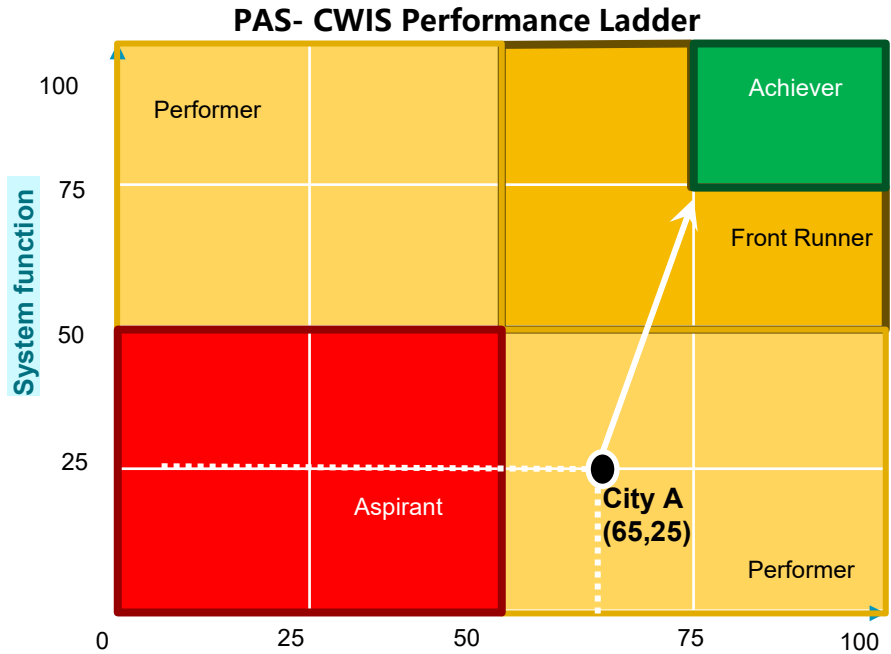


Localising SDG - Using PAS for monitoring SDG 6.2 at local level



CWIS Performance Ladder using PAS information

- It is important to plot cities 'performance on system function and service outcome in order to identify where they are placed in comparison to other cities. Such plotting would also help the city government identify areas of improvement.
- The PAS-CWIS performance ladder is designed achieve such performance assessment. For the PAS-CWIS ladder, a composite score based on cumulation of all indicators is arrived at which is plotted on the graph.



	Performance	System Function	Service Outcome
Q1	Achiever	>75%	>75%
Q2	Front Runner	< or =75% and >50%	<or =75% and >50%
Q3	Performer	<Or = 50%	<Or = 50%
Q4	Aspirant	<50%	<50%

City A has better performance in Service outcome than in System function

To become high performer city, City A need to improve Service outcome by 10% and System function by 50%

Other digital systems feed into PAS... SaniTrack - monitoring for scheduled desludging

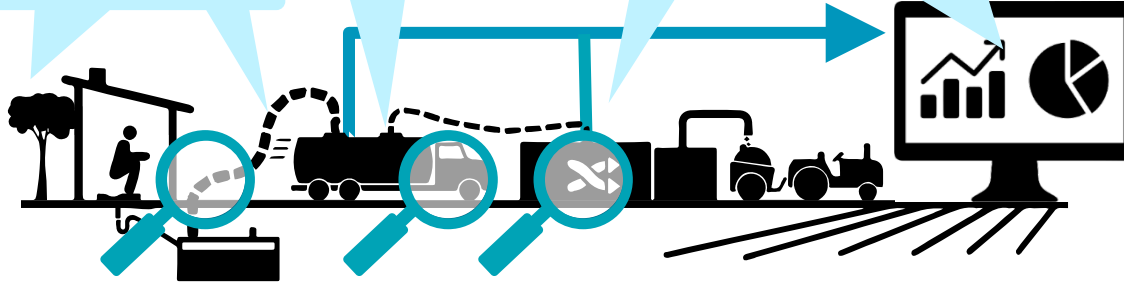
Ensure desludging at regular intervals

Safe collection of sludge by following necessary protocol

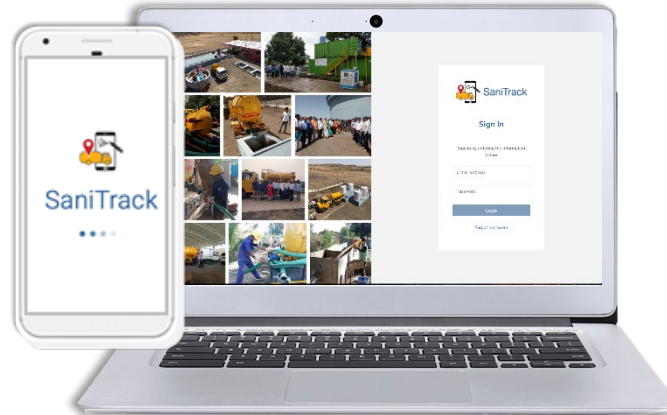
Safe conveyance to designated treatment site

Indicators for making decisions on "performance linked payments"

Ensure service to all



- ✓ Digital and realtime – no need to process paper forms for results
- ✓ Visualize geographically
- ✓ Click/select and validation checks – reduce human error
- ✓ Signatures, location and photos – customer feedback



Modules



Mobile/web: Scheduling
Assign daily schedule



Mobile: Desludging
Collect signatures and info on successful desludging and conveyance to FSTP



State admin
Onboard cities
See state level results

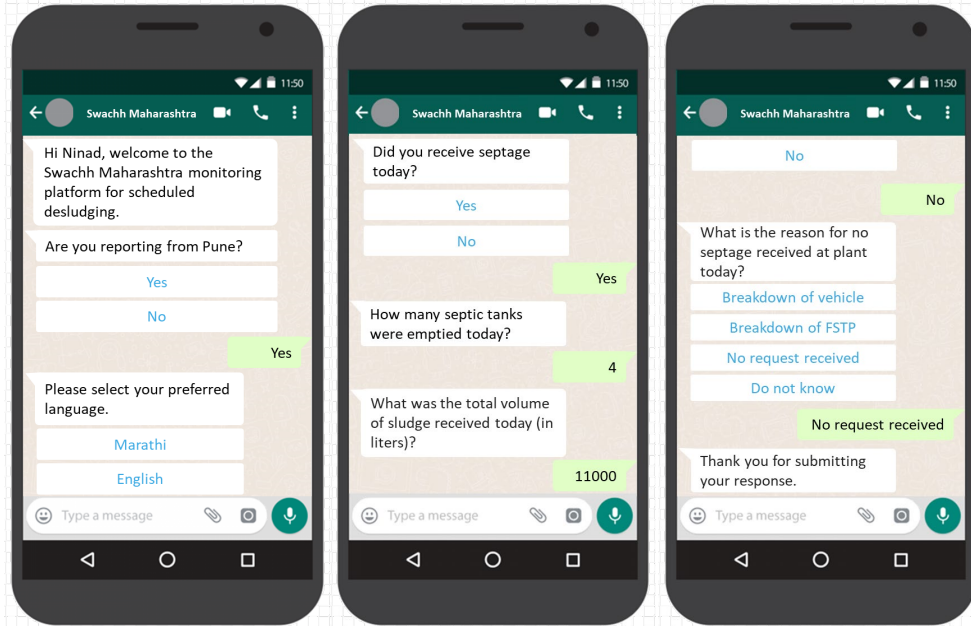


City admin
Set city parameters and users

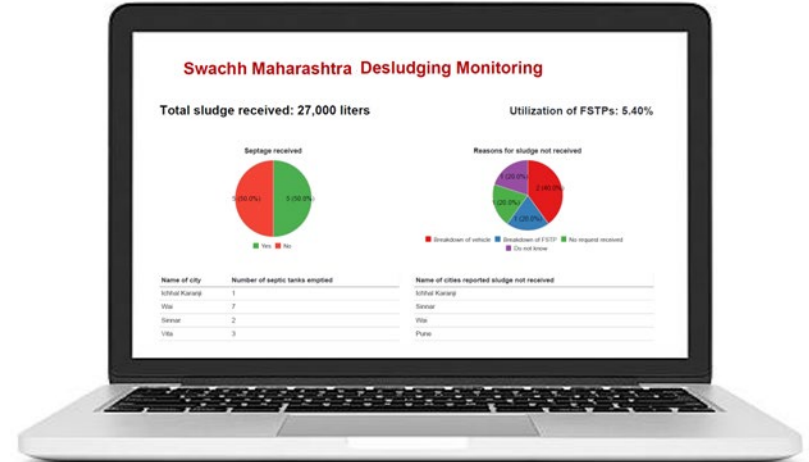


Dashboards and reports

Other digital systems feed into PAS... Exploring chatbots for demand desludging



- Daily report from FSTP operator
- FSTP operator initiated or system initiated conversations
- Was sludge received? Volume? Issues?
- State level dashboard



Way Forward – integrate Chat GPT in PAS for flexible analysis !!



Chat GPT is being integrated in Excel. This provides excellent opportunities to make PAS more user friendly and generate big data analysis as required

Thank you

CWAS CENTER
FOR WATER
AND SANITATION

CRDF CEPT RESEARCH
AND DEVELOPMENT
FOUNDATION

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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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