



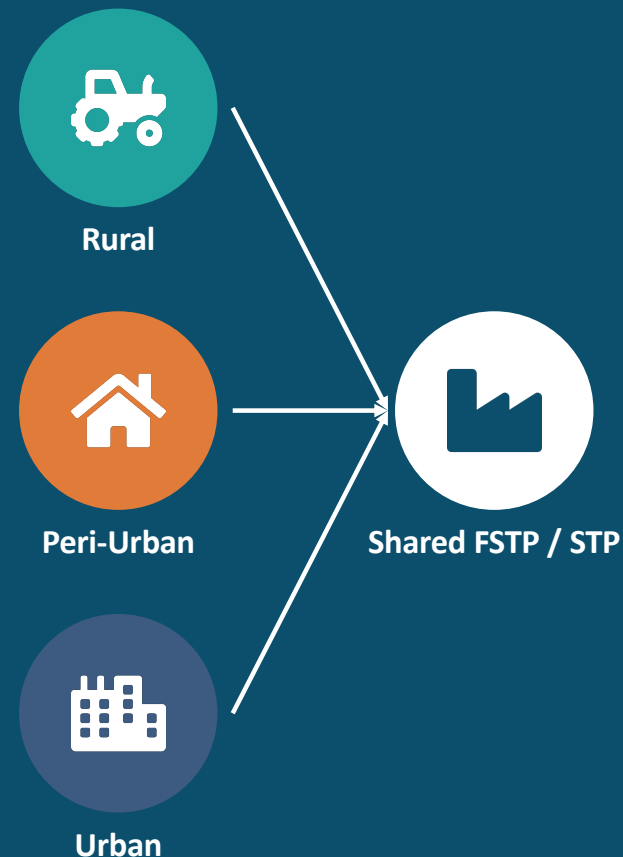
Strategy for Rural–Urban Convergence for Sustainable FSM

*Integrated Sanitation Beyond Administrative
Boundaries*

Swachh Bharat Mission (Grameen)

Panchayati Raj Department, Government of Rajasthan

October 2026



Why Rural–Urban FSM Convergence?

Rural · Peri-Urban · Urban



Sludge ignores boundaries

Faecal sludge is generated in rural, peri-urban and urban areas alike



Rising rural desludging demand

Rural and peri-urban containments increasingly need regular emptying



Rural treatment gap

Rural areas often lack dedicated FSM treatment infrastructure



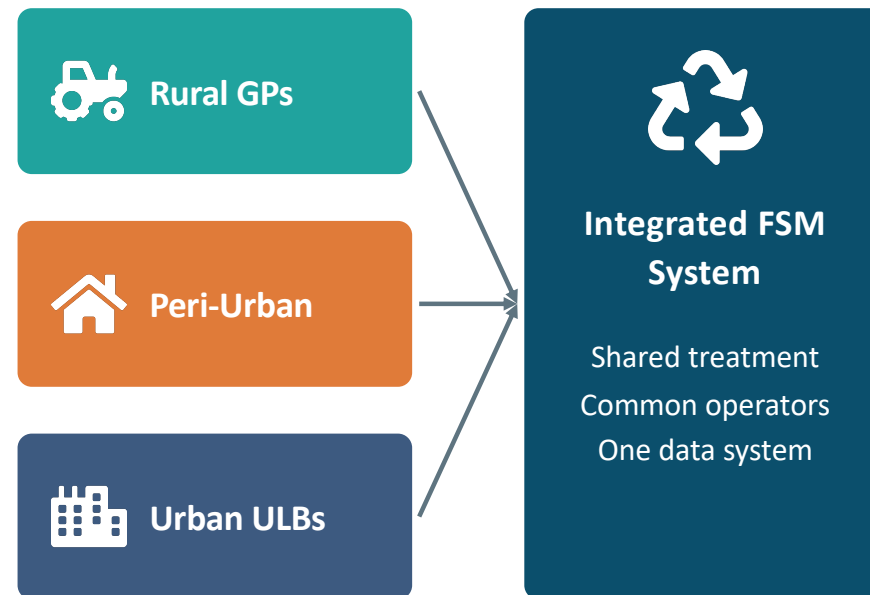
Urban capacity exists

Existing FSTPs/STPs may have available or expandable capacity



Convergence pays

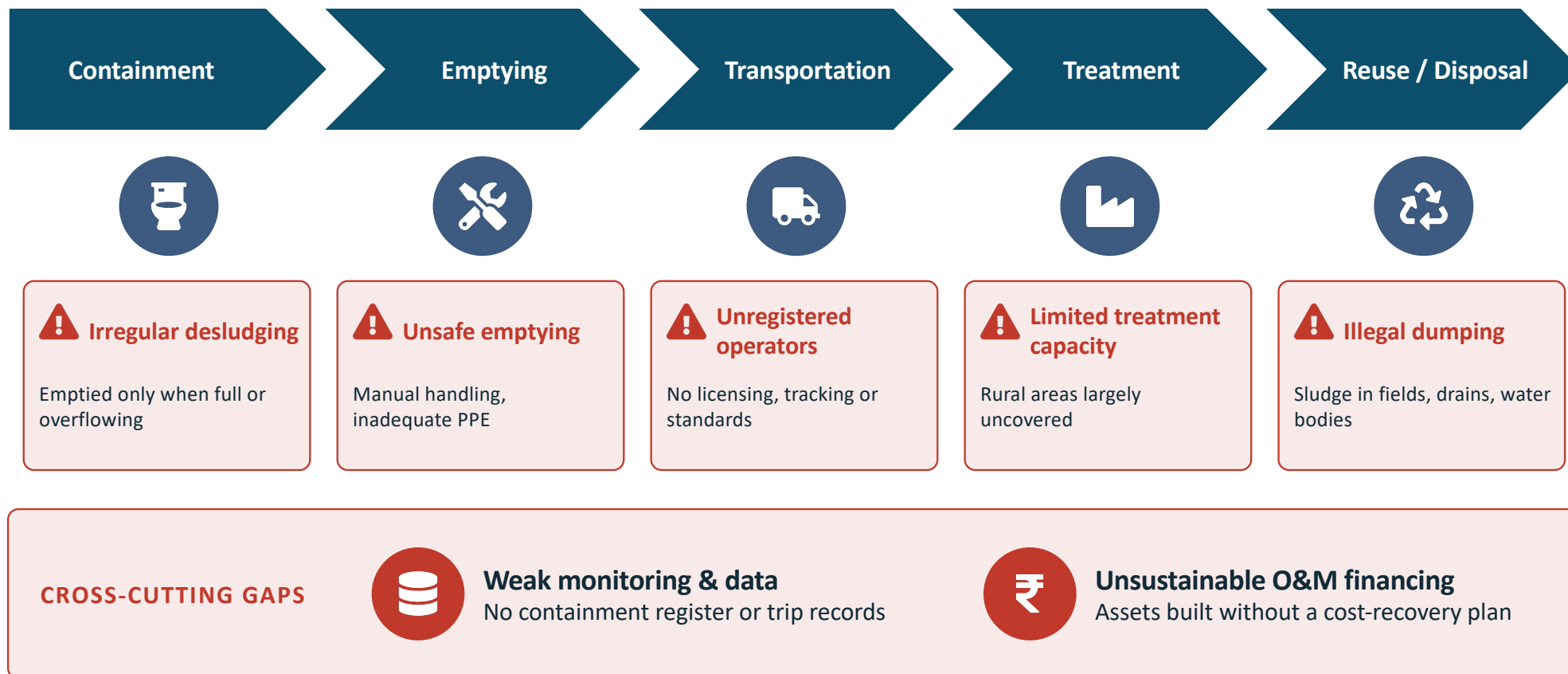
Shared assets optimise infrastructure, cut costs, improve service



Convergence = one sanitation service chain across administrative boundaries

The FSM Value Chain & Existing Gaps

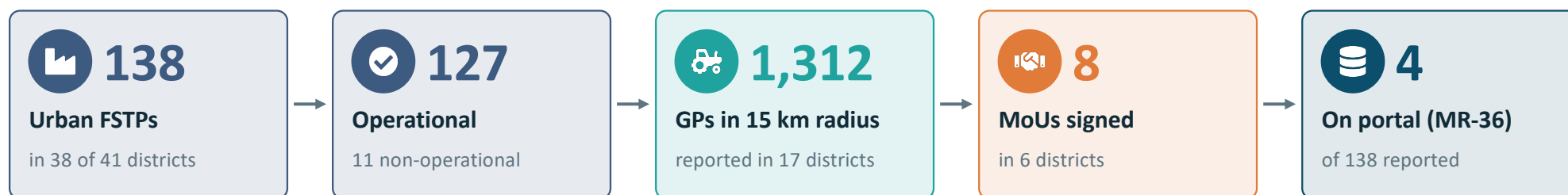
Rural · Peri-Urban · Urban



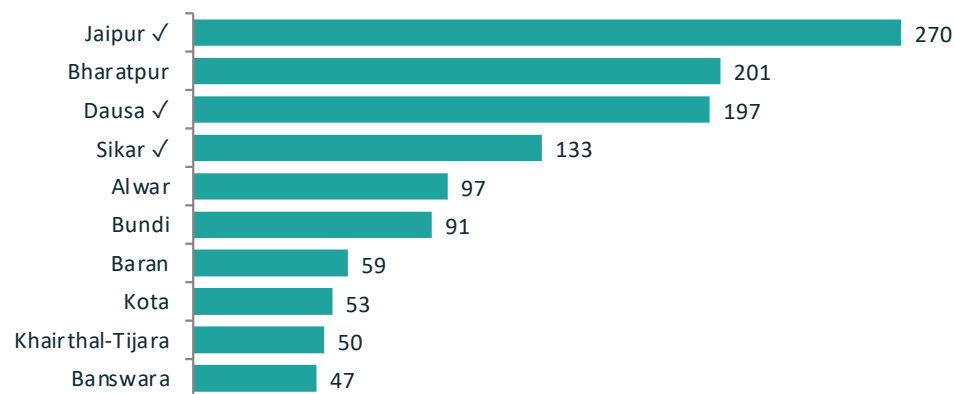
Current Status of FSM Convergence

Urban FSTPs and rural GP linkage across 41 districts · Status as on 30.09.2026

Rural · Peri-Urban · Urban



Top 10 districts: GPs within 15 km radius



✓ MoU signed · Top 10 account for 91% of GPs in radius

KEY GAPS

- 11 FSTPs non-operational**
Bhilwara 5, Karauli 2, Kota 2, Hanumangarh, Jhalawar
- MoUs in only 6 of 41 districts**
Rajsamand 2, Sirohi 2, Dausa, Jaipur, Jaisalmer, Sikar
- Only 4 of 138 FSTPs on portal (MR-36)**
Ajmer, Dausa, Jaipur, Sikar
- 24 districts report no GPs in radius**
GP–FSTP mapping to be verified
- No urban FSTP in 3 districts**
Balotra, Barmer, Beawar

Proposed Rural-Urban Convergence Model

Rural · Peri-Urban · Urban



MODEL A

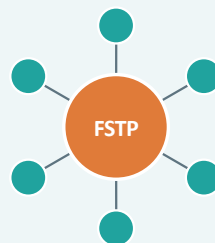
ULB facility serving surrounding GPs



Nearby GPs use spare capacity at an existing urban FSTP/STP

MODEL B

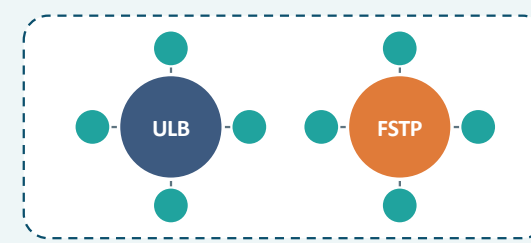
Cluster-level common FSTP



A shared FSTP serves GPs with no ULB facility within reach

MODEL C

District-level integrated FSM system



One district network of facilities, operators and data

Preferred model depends on



Distance



Population



Sludge generation



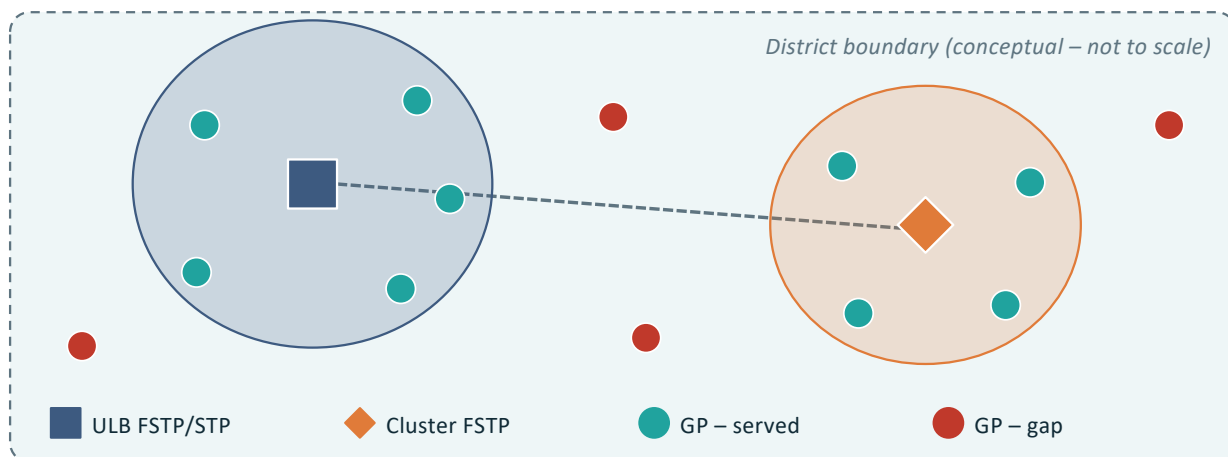
Existing capacity



Financial viability

District-Level Planning Approach

Rural · Peri-Urban · Urban



Planning outputs

- ✓ GP–ULB distance matrix (GIS)
- ✓ Service cluster map
- ✓ Treatment capacity gap estimate
- ✓ District FSM Action Plan

Institutional Convergence & Roles

Rural · Peri-Urban · Urban

State → District Administration → Zila Parishad → ULB → GP → Service Provider

Responsibility	State	District Admin.	Zila Parishad	ULB	GP	Service Provider
Policy & standards	●	○				
District planning & coordination	○	●	○	○		
Service delivery			○	○	○	●
Treatment infrastructure	○		○	●		○
Operator registration & monitoring		○	●	●	○	
Community mobilisation			○	○	●	
Data & reporting		●	○	○	○	○

● Lead ○ Support (indicative – to be finalised by the State)



Formal GP–ULB service agreement / MoU wherever required — access, tipping fee, volumes, reporting

Sustainable Service Delivery Model

Rural · Peri-Urban · Urban



Digital layer: helpline / app → trip manifest → GPS log → receipt at FSTP/STP



Scheduled desludging

Planned emptying cycle per containment, not only on demand



Registered operators

Public or private operators licensed by ULB / Zila Parishad



GPS tracking

Every trip tracked from pickup to FSTP/STP



Digital records

Household, trip and volume data in one system



Complaint redressal

Helpline / app with time-bound resolution



Safe disposal / reuse

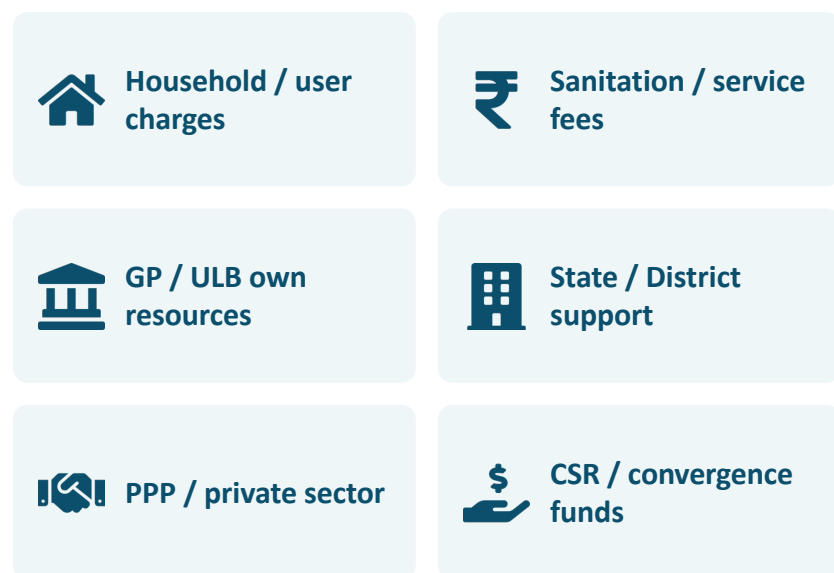
Discharge only at designated facilities; treated output reused

Financial Sustainability Model

Rural · Peri-Urban · Urban



Revenue sources



Fund utilisation

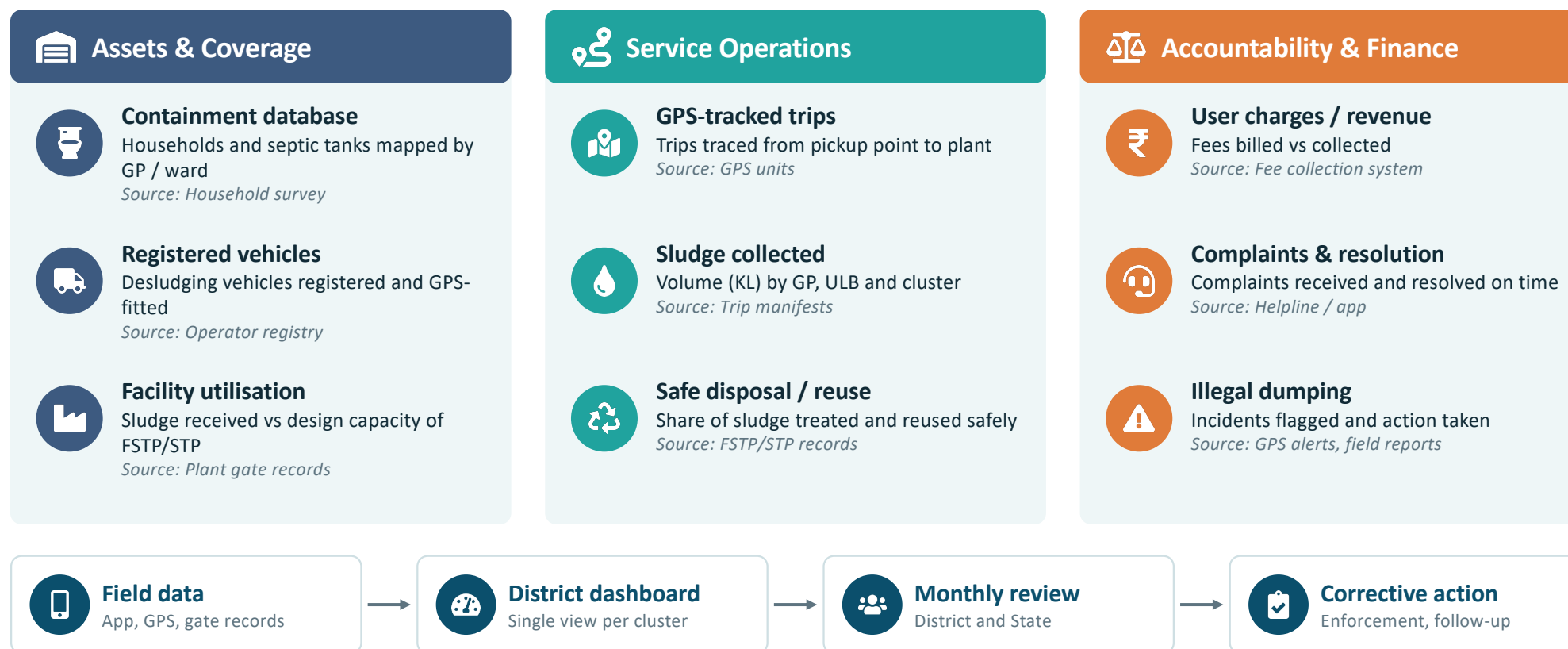


Illustrative financial flow – revenue mix and tariffs to be decided per district / cluster

Digital Monitoring & Accountability

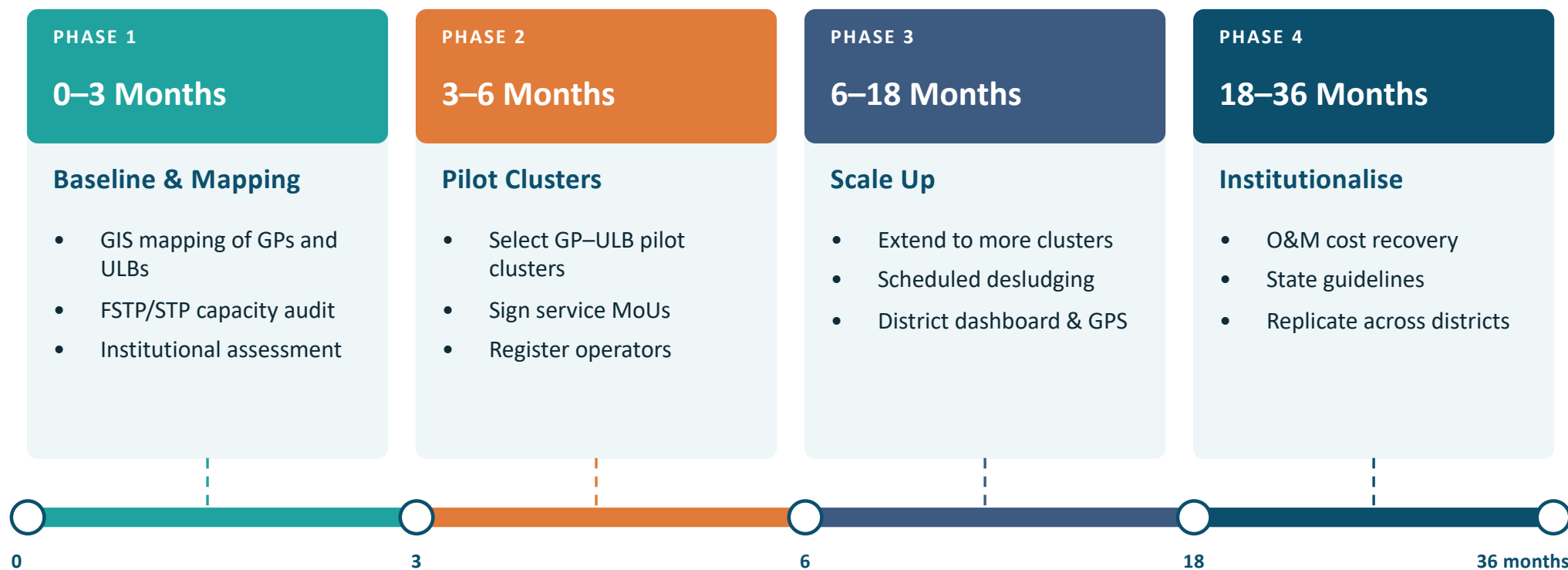
District FSM Dashboard: what will be tracked, and from where

Rural · Peri-Urban · Urban



Implementation Roadmap

Rural · Peri-Urban · Urban



Review gate at the end of each phase: continue, adjust or scale

Key Recommendations / Way Forward

Rural · Peri-Urban · Urban

1



Adopt district-level integrated FSM planning

2



Map rural, peri-urban and urban FSM demand

3



Optimise existing FSTP/STP capacity

4



Develop GP–ULB service agreements

5



Establish regulated, registered desludging services

6



Introduce digital / GPS-based tracking

7



Develop a sustainable user-charge and O&M model

8



Set up regular convergence and performance reviews

One Sanitation Chain – One Integrated Approach – Rural + Urban = Sustainable FSM

From Convergence to Sustainable FSM

DECISIONS REQUIRED

PLAN

- Identify priority districts and clusters

PILOT

- Select pilot GP–ULB convergence model
- Define institutional and financial arrangements

SCALE

- Establish monitoring framework for scale-up

“ *Safe sanitation is sustainable only when the entire sanitation value chain works together—across rural and urban boundaries.*