Session 4: Enabling policy and regulatory framework: Innovations in Governance

April 25 - 27, 2023
Enabling Policy Shifts – The Digital Public Infrastructure Way
Expectations of a Sanitation Worker

- No Discrimination
- Hygienic Living Conditions
- Affordable living
- Ontime salary
- Safe workplace
- Access to education, healthcare

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Complex Systems at play

What do we measure?
- What is easy to measure?
- Survey? Self Report?
- Information systems?

M. E. L

Policies - Schemes

No Discrimination
Hygienic Living Conditions
Affordable living
Ontime salary
Safe workplace
Access to education, healthcare
Value Chain – Information flow

CONTAINMENT ➔ EMPTYING ➔ TRANSPORT ➔ TREATMENT ➔ REUSE/DISPOSAL

Toilet ➔ Desludging truck ➔ FSTP ➔ Capacity Utilization ➔ Quality Standards ➔ Environmental ➔ Marketplace

Request ➔ Service Request ➔ Close Requests ➔ Pay ➔ Collect Payment, Acknowledge ➔ Worker Safety ➔ Feedback ➔ Worker Safety ➔ Maintenance ➔ Treatment/Maintenance

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Odisha Initiatives on a Digital Public Infrastructure

2021

Sujog Modules
Ecosystem mobilizes resources and creates platforms and solutions for Multiple Domains

2022

Sanitation FSM

Public Goods Core Software & Non Software Infrastructure

Societal Missions cross-pollinate with other actors and leverage DPI

Private-Public innovation

Public goods (Software & non-software)

DIGIT Academy
Open Specs/API
Non s/w Public Goods
Docs/Workbench
DPI & Program Consulting

Digital Public Infra

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Systems Approach to data visibility

Governance of the entire value chain (Dashboards and Reports)

### Governing Body
- Define Pricing
- Provide Free/subsidized services
- View and manage collection requests
- Collect Payment
- Urban Rural Convergence
- Track incoming waste from unregistered vendors
- Monitor Treatment Quality
- Track incoming waste volumes
- Raise Maintenance Requests
- Treatment Plant Master
- Transactional record of all incoming waste
- Asset Master
- Treatment Quality Records

### Vendors
- Urban Rural Convergence
- Make Payments (Online & Offline)

### Individuals/Institutions/Organizations
- Raise request for one or many trips
- Make Payments (Online & Offline)

### Plant Operators
- Defined Pricing
- Provide Free/subsidized services
- View and manage collection requests
- Collect Payment
- Urban Rural Convergence
- Track incoming waste volumes
- Raise Maintenance Requests

### Data Registries
- Vendor Master
- Vehicle Master
- Driver/Worker Master
- Transactional record of services provided
- Treatment Plant Master
- Transactional record of all incoming waste
- Asset Master
- Treatment Quality Records

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Insights for decision making – Informed policy

- # of requests
- SLA of the requests
- Location – Slums / Urban Rural
- Type of Properties
- Trends – Month/Day/Time etc.
- Sludge Volume
- # of Trips
- Assigned Sanitation worker - Machine/PPE/Skills/Schemes
- Vehicle usage pattern
- Distribution of vehicles by size
- Treatment Quality
- Capacity Utilization
- Non-empaneled vehicles
- Plant Maintenance
- Costs / Revenue

SIMPLE - CONFIGURABLE – SECURE – OPEN SOURCE – INTEROPERABLE - SCALABLE
- An Engaged Sanitation Worker

No Discrimination:
- Scheme Benefits/
- # Services/
- Gender Inclusivity

Ontime salary:
- Incentives, Skills for additional work, loans to be a micro-entrepreneur

Hygienic Living Conditions
- Ontime efficient services, proactive services before monsoon, disease prevalence

Safe workplace:
- Machines/ PPEs/
- SoPs/ Contracts
Digital Public Infrastructure for Waste Management

Traditional Approach

- Citizens
- Administrators
- Employees
- Vendors
- Front Line

- Service Request
- Scheduled Pickups
- Treatment Quality
- Dashboards

- Fecal Sludge Mgmt
- Solid Waste Mgmt
- Medical Waste Mgmt

Platform Approach

- Policy Makers
- Administrators
- Employees
- Vendors
- Front Line

- Unified Interface

- Fecal Sludge Mgmt
- Solid Waste Mgmt
- Medical Waste Mgmt

Products

- Service Request
- Transportation
- Treatment Quality
- Dashboards

Platform

- COMMON SERVICES
  - Workflow | Search | Encrypt | Report | Analytics | Pay, ...

- SHARED REGISTRIES
  - Users | Location | Program | Vendors | Treatment Plants

- DATA EXCHANGE
  - APIs | Events | Data Formats

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Thank you!

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