SUJOG

SUSTAINABLE URBAN SERVICES IN A JIFFY BY ODISHA GOVERNMENT

A Case Study on the use of Innovative Technology for FSSM

TRANSFORMATIVE URBAN DEVELOPMENT WITH INNOVATIVE DIGITAL PUBLIC INFRASTRUCTURE

At the heart of effective and quality public services lies the **capacity of state, and local governments,** to operate and deliver essential functions. With the growth of cities, there is a **need to** adapt public services to make them more **convenient, agile, responsive, and effective.** At the current rate of urbanisation, **digital tools** are crucial for improving public services. Such tools help local governments keep up with the needs of the increasing urban population, making services more efficient and responsive for a better quality of city life.

Absorbing the demographic context and the needs arising from urbanisation, the state of Odisha created a digital solution which is **interoperable, transparent, and localised.**

Odisha, guided by its **5T principles - Transparency, Technology, Teamwork, Time and Transformation** - has pioneered the **adoption of e-governance.** With the **vision of keeping citizens at the centre of the Digital Transformation of urban services,** the state introduced - SUJOG (Sustainable Urban services in a Jiffy by Odisha Government), a cutting-edge Digital Public Infrastructure (DPI) platform operational since 2021. SUJOG aims to make city services better by distributing the load on local governments to handle tasks more easily, reducing bureaucracy problems, improving citizen access and overall experience of availing urban services, by making systems efficient, transparent and monitored.

What is Digital Public Infrastructure (DPI)?

Digital public infrastructure refers to the technology-based systems and platforms that enable government entities to deliver public services efficiently. It encompasses digital tools, applications, networks, and databases that support the functioning of essential services such as healthcare, education, transportation, facilitating improved governance, and accessibility for citizens. **DPI ensures tailored solutions for local communities, simplifies administrative challenges for governments and ensures data driven insights for timely course correction.**

## Opportunity for Localised, Adaptive Solutions in Public Service Delivery

DPI offers opportunities for creating solutions that are **adapted to local needs in public service delivery.** Its greatest strength is its **flexibility,** allowing for the development of governance strategies that are closely aligned with the specific requirements of different communities. **This approach ensures that public services are not just efficient but also deeply relevant to the people they serve.**

DPI simplifies administrative operations while addressing the diverse demands of residents, improving the relationship between the government and its people. Furthermore, DPI's ability to combine and analyze statistical data aids in the continual enhancement of these services, making them more effective and relevant to the needs of the population.

ODISHA'S JOURNEY IN IMPLEMENTING INNOVATIVE TECHNOLOGY FOR SAFE AND INCLUSIVE SERVICE DELIVERY

Odisha's technological innovation stands out as a ground-breaking initiative, catalysing urban transformation at scale through its open digital ecosystem, innovative design philosophy, and commitment to transparent and efficient governance. SUJOG, introduced by the Government of Odisha through the Housing and Urban Development Department (H&UDD), is aimed at ensuring that urban services are delivered to citizens in a seamless, transparent, and trackable manner by implementing e-governance services across all Urban Local Bodies (ULBs) in the state. The programme aims to bring a paradigm shift in urban governance by leveraging digitalisation.
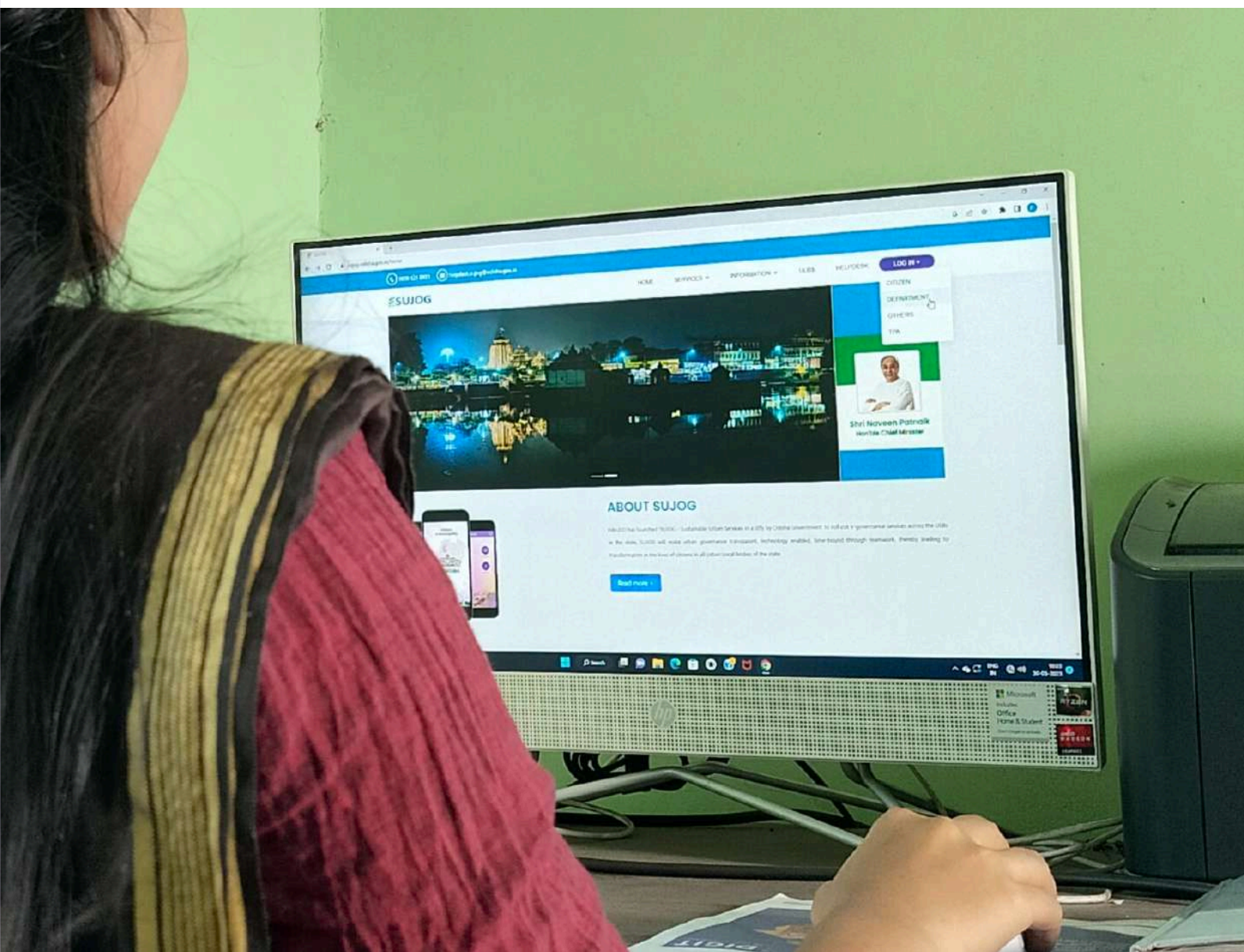
SUJOG: A SERVICE DELIVERY AND GOVERNANCE SYSTEM WITH A UNIQUE PLATFORM-BASED APPROACH

In order to address these issues, the H&UDD department of Odisha has leveraged the DPI DIGIT to launch Sustainable Urban Services in a Jiffy by the Odisha Government (SUJOG). SUJOG is powered by a free, open-source platform called Digital Infrastructure for Governance, Impact, and Transformation (DIGIT), developed by eGovernments Foundation.

What is DIGIT?

DIGIT is a reliable open-source platform with freely available specifications. The source code of DIGIT is openly accessible, and the data is kept in shared registries, with the government owning the data stores. This setup mitigates risks associated with vendor lock-ins and enables seamless digital transformation of citizen service delivery initiatives. DIGIT, developed by eGovernments Foundation, is an outcome of Platform Thinking, which is a versatile and free platform fostering collaboration among developers, businesses, governments, and citizens for urban governance

OBJECTIVES OF SUJOG

a. Provide enhanced quality of urban services to citizens through **online/single window service delivery** channel and ensure accessible, convenient, transparent and timely delivery of services.

b. **Minimize the number of in-person visits** required by the citizens to the ULBs. By increasing convenience for citizens, it leads to better uptake of government services.

c. Achieve **internal efficiency & effectiveness** of the ULB by:

- **Automating and optimizing their back-office processes,** and **reducing administrative burden** which helps them focus on their core functions and responsibilities by freeing them from routine operations and delivering cost-effective services.

- **Integrating the departments/functions** within ULBs for better information flow and transparency.

- **Integrating with the existing software** in place at H&UDD/ULB/Other urban parastatals.

- Facilitate secure, instantaneous and **online payment options** for the taxes and statutory fees associated with services.

SUJOG supports efficient governance across **6 areas** of public service delivery.

1. BUILDING PERMISSION APPROVAL

2. PUBLIC GRIEVANCE REDRESSAL

3. TRADE LICENSE

4. PROPERTY TAX

5. WATER AND SEWERAGE, INCLUDING FAECAL SLUDGE AND SEPTAGE MANAGEMENT (FSSM)

6. MARRIAGE REGISTRATION

In this case study, we will do an in-depth analysis of the implementation and impact of SUJOG for faecal sludge and septage management services. SUJOG FSSM's modules and offerings helped strengthen and monitor FSSM services across the sanitation value chain.

THE CRUCIAL NEED FOR TRANSPARENCY AND MONITORING ACROSS THE SANITATION VALUE CHAIN

Odisha, experiencing a remarkable **27% urban growth,** has pioneered effective Faecal Sludge and Septage Management (FSSM) with **119** operational Faecal Sludge Treatment Plants (FSTPs) as of 2021. The success of FSSM depends on meticulous coordination and infrastructure calibration across its entire value chain. This approach tackles challenges such as tracking waste loads and optimizing transport, ensuring safe and efficient sanitation outcomes in the face of complex socio-economic factors.

The sanitation sector faces various roadblocks on its journey to sustainable sanitation for all.

- One of the major obstacles is the **lack of transparency in data and communication** across the sanitation value chain. Citizens have **no visibility or closure on where the waste** goes once it has been collected from their septic tanks.

- Additionally, the **lack of a grievance redressal mechanism for citizens** to file complaints means there is a **severe lack of accountability in the sanitation ecosystem.** As a result, there is no visibility of gaps in the value chain and potential areas for improvement. Additionally, a significant disconnect exists between citizens and the (eventual fate/consequence) of their waste once flushed down the toilet.

Therefore, it is crucial for the sanitation ecosystem of a city to have monitoring systems in place **to ensure transparency and accountability among stakeholders.**

The Odisha government's SUJOG FSSM initiative aims to enhance sanitation service delivery through an interoperable, transparent, and localized approach.

PILOTING OF SUJOG FSSM IN ODISHA

The pilot phase, conducted in three locations during the COVID-19 pandemic, incorporated online training sessions. Insights gained from the pilot were integrated into the subsequent version, deployed in 36 ULBs with the support of Self-Help Groups (SHGs), indicating their readiness to embrace SUJOG FSSM. Continuous training sessions were organised to enhance stakeholder comfort with the platform, and unique issues identified during the pilot were noted for resolution in the upcoming version

The pilot phase provided valuable insights.

1. Infrastructure delays led to initial adoption gaps.

2. In-person training boosted service adoption in all three ULBs.

3. Collaboration was crucial for successful implementation, with ongoing support sustaining application usage.

4. Platform adjustments, like multi-trip capability and flexible payment options, enhanced SUJOG FSSM application effectiveness.

PARTNERSHIPS TO IMPLEMENT SUJOG FSSM

In partnership with **Odisha Urban Academy (OUA),** SUJOG FSSM was implemented with a **collaborated sense of ownership** between the state and ULBs. Single Points of Contact (SPOCs) and TSUs such as EY partnered to facilitate in-person training sessions, including a "Train the Trainer" program for master trainers. The training methodology involved **Reverse Knowledge Transfer (RKT)** sessions conducted by individual users across ULBs, fostering a participative approach that enhanced trainee engagement. State support was sought for a prolonged engagement with master trainers, while weekly sessions between state teams and ULB SPOCs were conducted to monitor adoption and address any identified gaps. **Continuous improvement** was planned based on ground-level feedback, and there was an exploration of involving Swachh Sathis in recording desludging requests on behalf of citizens.

IMPACT OF SUJOG FSSM ON STRENGTHENING THE SANITATION ECOSYSTEM

Across the ecosystem, SUJOG FSSM's impact has been felt and welcomed. It was rolled out live across **36 ULBs in Phase 1,** with over **100 employees** receiving training in partnership with Odisha Urban Academy. The platform recorded **91% of the total requests.** Its milestone impacts optimised FSSM infrastructure for stakeholders at each stage of the service delivery process.

36ULBS
IN PHASE 1

91%
TOTAL REQUESTS
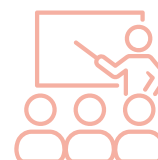
① UP-SKILLING AND TRAINING

The digital infrastructure fosters financial sustainability and supports sanitation businesses through **efficient operations and reduced manual efforts.** The platform also provides skilling programs for sanitation professionals, offering training on practices, standards, and tools, ensuring effortless compliance with industry norms.

② TRANSPARENT MONITORING OF SERVICES

SUJOG FSSM enables the collection of data, allowing for gaps and areas of improvement to be identified across the sanitation value chain. Furthermore, the performance of these solutions can be monitored to ensure their effectiveness over time. Since citizens can use the SUJOG portal to air their grievances, there is a **constant feedback loop** from users on the performance of sanitation services. As a result, the sanitation ecosystem continuously evolves to become efficient and deliver high-quality service to all.

③ ACCOUNTABILITY TO SAFEGUARD PUBLIC HEALTH AND THE ENVIRONMENT

SUJOG's minimal design makes it simple for both citizens and sanitation professionals to use. It effectively **empowers citizens** to track their waste across the entire sanitation value chain, creating awareness of what happens to human waste after it is flushed, and potentially instilling a desire for accountability for the safe management of their waste. Digital monitoring enables citizens to track if their waste undergoes proper treatment and safe disposal or reuse. This system instils **accountability in service providers,** helping prevent the hazardous practice of dumping faecal sludge and septage into open water bodies, which poses risks to both the environment and public health.

④ ACCESS TO QUALITY DATA

Digitisation generates data, process flows, and standards, becoming valuable subjects for **research and analysis** and supports in **course correction** during implementation. Research findings contribute to knowledge dissemination, driving the creation of new technologies, recommendations, and a continuous learning loop.

Given the **adaptability and potential to scale,** SUJOG FSSM empowers the government to scale FSSM for enhanced safe sanitation coverage and local community needs.

CONCLUSION

The **scalability** of leveraging digital public infrastructure such as SUJOG stems from its **adaptability** across states and countries. Different areas of service delivery can build upon existing elements, contributing to the source code for collective improvement. Customizable and user-friendly, it addresses municipal service challenges, and promotes a shared sense of responsibility and accountability. This ensures impactful management of safe and inclusive services with timely implementation, course-correction, optimized processes, and transparency across administrative levels.

With data-driven policies, rapid digital solutions, and transparent monitoring, SUJOG FSSM module exemplifies the transformative impact of Digital Public Infrastructure (DPI) in the sanitation value chain. SUJOG FSSM stands out as a stellar case study where DPI has had a tangible impact on the sanitation value chain's many stakeholders. By facilitating data-driven decision-making, ensuring transparency, and offering scalable digital solutions, SUJOG FSSM showcases how DPI can transform development initiatives, providing insights for strategic decision-making and accountability.

These learnings can help several countries and states adopt digital solutions to address challenges of rapidly urbanising areas, giving more citizens access to seamless quality public services.