

## The water and sanitation challenge

Sanitation is critical to public health, and survival. According to the World Health Organization (WHO), however, more than 1.7 billion people globally do not have access to basic sanitation services even today. Poor sanitation is believed to be the main cause in some 432,000 of these deaths and is a major factor in several neglected tropical diseases, including intestinal worms, schistosomiasis, and trachoma. Around 80% of

India's water is severely polluted because people dump raw sewage, silt, and garbage into the country's rivers and lakes.

At eGovernment's Foundation (eGov), we believe that at the heart of the problems in sanitation are systems that fail to deliver, and hence systems must be progressively reformed.



Problems	Why are these pivotal problems?
Absence of well-defined standards for sanitation.	<ul> <li>Current standards do not cover all aspects of sanitation and service delivery - such as standards.</li> <li>The ecosystem has created many standards, which are not formally notified or enforced.</li> </ul>
Broken chain of custody from waste generation to reuse.	<ul> <li>Faceal sludge tends to drop out of the value chain, untreated.</li> <li>The unavailability of the information hampers the process of taking corrective and preventive measures.</li> </ul>
Availability of verifiable and trusted data at various levels of aggregation to all actors.	<ul> <li>Data around faceal sludge (how much, where, when, who is responsible) is too little.</li> <li>Required data is not available, or shared across relevant ecosystem actors. As a result, the performance of sanitation systems remains opaque and unobservable.</li> </ul>
Stakeholder behaviour is often misaligned with safe sanitation practices.	<ul> <li>Some citizens may favour open defecation, construct improper containment units, and ask sanitation workers to clean the tank.</li> <li>Sanitation workers do not actively use personal protective equipment.</li> </ul>

### Digital is key to solving the sanitation problems

The problems of sanitation are systemic, and cannot be solved without the cooperation, and collaboration of all stakeholders with a common shared understanding and a willingness to collaborate and contribute. Digital platforms enable interactions among many actors, leading to value being exchanged. By their very nature, these platforms are built on open-source technologies. The shared digital

infrastructure approach makes the digital building blocks available to the entire ecosystem, thus, reducing the overall expenditure needed on the technology development side for individual solutions. Platforms enable ecosystem actors to develop contextual 'local' innovations at speed and scale, thereby accelerating the rate of adoption and proliferation of innovations.

## Building resilient sanitation systems

eGov's open-source platform **Digital Infrastructure for Governance, Impact & Transformation (DIGIT)** provides reliable citizen services that require effortless collaboration between multiple stakeholders. Leveraging these capabilities, DIGIT Sanitation has been created as a digital public infrastructure (DPI) that will address the core problems of broken chain of custody from waste generation to safe disposal, the non-availability of verifiable data at multiple levels, thus leading to improved sanitation systems.

Adopting a DPI, as opposed to an application-based solution, provides a long-term, sustainable and holistic solution to sanitation service delivery. Digitising systems enables immediate efficiency gains and enables digital skilling of all users along the waste management value chain.

#### Our Vision -

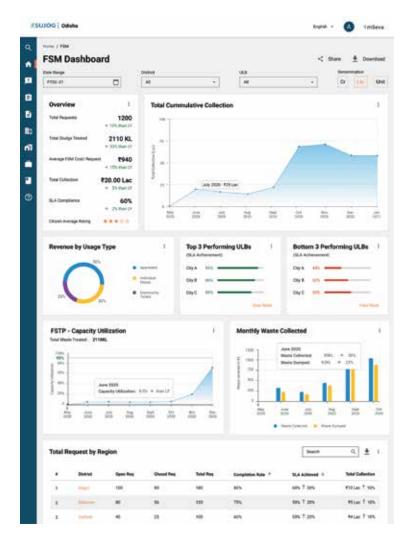
"Making zero deaths, disease, and environmental contamination resulting from poor sanitation a reality for every citizen in the global south"

DIGIT Sanitation started with Faecal Sludge Management (FSM) as our first solution area in sanitation in the Indian state of Odisha. It focuses on providing visibility into the sanitation value chain through real-time data generation. This tech infrastructure has been made freely available for individuals, communities, businesses, and government bodies to co-create innovative solutions in FSM.

Built on open protocols and designed to be interoperable, the platform ensures that new tech solutions and tools can be built to integrate easily with the existing software, and data-exchange between systems would be seamless. This is important when digitising service delivery for an evolving problem space like sanitation, which sits at the crucial intersection of climate risks and public health concerns. In the future, we will pick up Solid and Liquid Waste Management (SLWM).

In the long term, DIGIT Sanitation will enable evidence-based reforms, to ensure that sanitation services are safely managed, thereby protecting our environment and health. Our interventions will continue to evolve as we plan to leverage the platform for other use cases in sanitation.





#### About DIGIT

Driven by the shared goals of improving the quality and accountability of public services and facilitating citizen-centric governance, eGov built DIGIT as an open-source platform to facilitate transformation at scale and speed.

Over the years, DIGIT has evolved constantly with the needs and requirements of governments and has helped over 16 million citizens seamlessly access public services. DIGIT has also emerged as a platform of choice for India's National Urban Digital Mission (NUDM).





A composable platform built on the principles of reusability, scalability, and interoperability, DIGIT enables seamless interaction between citizens, governments, policymakers, administrators, and employees.

### About eGov

eGov Foundation started its journey in 2003 towards building ease of access and ease of living for every citizen and has been early on the digital infrastructure initiatives. Over the last 19 years, we have worked across India to spur new solutions and enable local capacity to solve problems.





















2 Bn Citizens benefitted from our Digital Public Infrastructures (DPIs) across the global south

100 Partners

for implementation, policy and capacity building

40 Solutions built by partners via collaboration using open API tools

**19**Years

of enabling the government for citizen-centric service delivery

5 Countries India, Indonesia, Philippines, Sri Lanka, and Jamaica - have adopted our health DPG for verifiable credentialing

# Our Supporters













#### Catalyse achievement of SDGs

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