



# AFTER THE FLUSH

## Demonstrating a sustainable approach to fecal sludge management

India's recent gains in sanitation are impressive. In the six years since its launch in 2014, the Government of India's Swachh Bharat Abhiyan ('Clean India') campaign has built more than 110 million household toilets.<sup>1</sup> The achievement is remarkable, but the goal of safe sanitation for all requires that we go beyond toilet building to also address the huge problem of excreta management. The problem is escalating with rapidly expanding cities, where nearly half the toilets are on-site systems (pits or septic tanks) that are not connected to the sewer grid and are in unattended municipal outgrowth areas. These toilets need to be emptied from time to time to stay useful. Millions of households with such on-site systems rely on informal and unregulated private tanker operators to clean out their septic tanks. City sewerage systems largely ignore the installation of a feasible mechanism to accommodate the fecal sludge. These operators, therefore, collect the fecal waste into their tankers and, due to lack of both choice and knowledge, dump it illegally in open land, water bodies, drains, and landfills.

Indiscriminate dumping of fecal waste has catastrophic consequences for human and environmental health. Untreated fecal sludge and septage is in fact the biggest polluter of water sources in India, causing disease, contamination of agricultural produce, and environmental degradation.<sup>2</sup> Fecal

sludge management (FSM) – which involves everything from emptying pits of fecal matter to transporting the sludge to treatment plants and its safe disposal – is an imperative that India must address urgently and comprehensively.

### TOILETS + FSM = SAFE SANITATION

A leading health organization, Population Services International (PSI India; henceforth referred to as 'PSI' in this document) is working on sanitation in India. It is especially focused on combating unsafe, large-scale dumping of fecal sludge into open land and water bodies. PSI recognized the sheer scale of the problem while working in Patna city in the state of Bihar on a program supported by Bill & Melinda Gates Foundation. PSI worked with Patna Municipal Corporation and pit emptying service providers, developing a model for replication in other bigger urban local bodies (ULBs). The model was further refined and replicated in the cities of Lucknow and Kanpur in Uttar Pradesh and in Pithampur in Madhya Pradesh during 2019–2022. The project, called **After the Flush (ATF)**, is supported by Maverick Collective.

This brief summarizes the key insights, achievements, and lessons from ATF's ongoing implementation in three Indian cities.

1 Press Information Bureau. Government of India. 2020. Available at: <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1639468>

2 Ministry of Urban Development. Government of India. 2017. National Policy on Faecal Sludge and Septage Management (FSSM). Available at: [http://amrut.gov.in/upload/newsrelease/5a5dc55188eb0FSSM\\_Policy\\_Report\\_23Feb.pdf](http://amrut.gov.in/upload/newsrelease/5a5dc55188eb0FSSM_Policy_Report_23Feb.pdf)

## The After the Flush approach

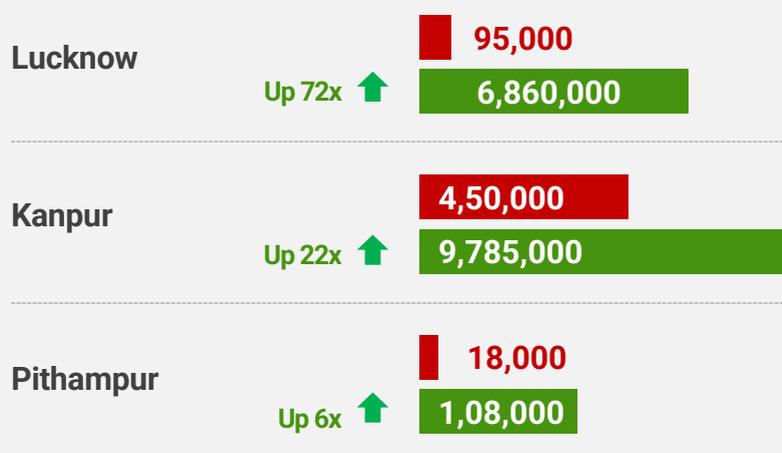
Cities in India, as also in other low-income countries, face multiple obstacles in expanding their sewer systems: exorbitant cost, long and tedious execution time, and lack of space. Even if these obstacles are overcome, there remain significant areas in the city where connection to a sewer line is impractical because most households in dense settlements and slums have on-site containment systems. To cater to a city's requirements for safe sanitation, the ULB needs to be equipped with a significant number of suction tankers, drivers, helpers, and a complex mechanism for their monitoring. This requires big capital investment and huge operational costs. ULBs with limited resources, thus, find it difficult to cater to the city's large and growing population.

Households are then left with little choice than to go with informal operators who empty the excreta from their pit toilets. Ironically, in most cities, ULBs do not acknowledge the services informal operators provide, and lack the capacity to engage with them and support them as partners who complement the ULBs' own efforts and goal of enhancing safe FSM services in the city. This multifaceted challenge demands an inventive approach that can meet the urgent need for FSM but without additional burden on any of the stakeholders – government, private operators, and customers.

PSI's ATF project is demonstrating such a three-pronged approach. First, PSI is working with the government to advocate for the legitimacy of pit cleaning service providers and the need for ULBs' engagement and support to them as an extended sanitation arm. Second, PSI has been strengthening pit cleaning service providers by organizing them into an association (Septic Tanker Operator Welfare Association, STOWA) to put forward a unified voice; building their capacity to better and more safely run their sanitation business; and securing their sanitation workers by linking with social security schemes. PSI's sustained advocacy with the government has succeeded in getting the hitherto illegally operating private operators registered with the government and the ULBs have given them access of all the feasible disposal locations across the city. Third, PSI is also working with the community to make them aware of the consequences of unsafe fecal sludge disposal and how they can receive better services through ULBs. ATF has established a toll-free FSM hotline/call center, which not only provides customers an easy way to reach registered providers but also enables municipal authorities to track the desludging vehicles fitted with GPS by the ATF project.

### OUR IMPACT

#### SAFE FECAL SLUDGE DISPOSAL (LITERS)



■ 2019 (ATF's inception) ■ March 2022

Safe fecal disposal  
has increased by

**30 times!**

The After the Flush project is demonstrating an effective approach to expand the ambit of safe FSM. The project is facilitating the development of a sustainable FSM market by creating an enabling environment for the informal sector.

# ATF: A WIN-WIN SOLUTION FOR ALL STAKEHOLDERS



## Government

- By using the large number of existing pit cleaning service providers, ULBs are able to provide FSM services in the city without any capital and operational cost.
- The government now has data on authorized providers and is tracking them from a central location through GPS. This further minimizes chances of unsafe disposal.
- Disposal locations are now equipped with fecal sludge recording systems, using which ULBs regularly capture data on safe disposal and use it for decision making on retrofitting, maintenance, etc.
- Licensing of private operators is ensuring safe, secure services to customers.
- Underutilized capacity of existing sewage treatment plants (STPs) is being used better.
- The goal of expanding sanitation coverage is being achieved despite COVID-19 restrictions.



## Private operators

- Getting registered with the government is giving hitherto illegal private tanker operators legitimacy and protection from harassment, building their confidence, and lessening the burden of stigma.
- Formation of their association is providing the earlier unorganized and fragmented private operators collective strength and voice to advocate with the government and self-regulate.
- Linking of poor sanitation workers with the Government of India's pension and accident insurance schemes is enabling them to avail crucial social security benefits.
- Trainings and mentoring are building private operators' capacities to undertake FSM safely and to also run their business better, such as through improved bookkeeping and handling of clients.



## Customers

- Messaging through radio jingles, hoardings and wall art, and community meetings is creating awareness about the need for safe disposal and the customers' role in it.
- Establishment of an FSM call center is enabling customers to easily access licensed private operators for pit emptying needs.
- The call center is also providing customers a platform to register complaints and provide feedback, thereby accelerating quality improvement in sanitation services.

**ATF's strategy of legitimizing and connecting private operators to each other, the government, and customers is helping to maintain and grow a successful FSM system and market in the three project cities.**



Each of the total 71 private tanker operators in the 3 cities registered with the government

92 desludging vehicles fitted with GPS trackers

FM radio jingles on FSM reach approximately 10 lakh Lucknow residents; Lucknow also sees 150 community meetings, 350 wall paintings, and 95 hoardings on FSM

108 desludging vehicles of private operators branded



21 municipal STPs/disposal locations opened to private operators to dispose their collected waste safely

361 sanitation workers enrolled in social security schemes



Toll-free FSM hotline established to provide customers in project cities access to safe pit emptying services

38 capacity building sessions organized for private operators and their sanitation workers



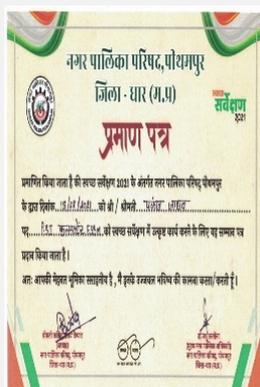
Private operators organized by forming an association



# THE LEARNING SO FAR

- Formation of private tanker operators' associations in the project cities has not only built the operators' collective strength but is also enabling self-regulation to stop illegal dumping and improve their business. For example, association members in Lucknow pooled about INR 30,000 to repair the road their tankers take to reach the STP. However, continued mentoring of the association's office bearers and members is important to ensure the associations become sustainable, successful, and effective. Tanker operators have little experience in running an organization and thus require training on conducting productive meetings, writing formal letters to government, record keeping, etc. PSI has been providing training and mentoring to association members, but the support may need to be expanded and made more intensive.
- Septic tank cleaning is considered a menial job in India. Sanitation workers face discrimination, social stigma, financial insecurity, and health hazards. A social and behavior change (SBC) campaign is needed to position FSM as a critical sector and its workers as sanitation champions who provide their services with integrity and competence. PSI India has taken initiatives to this end, such as communication activities in the community to improve awareness about FSM, branding of desludging vehicles, and the establishment of an FSM hotline.
- Technology, such as the use of GPS tracking by the ATF project, can play an important role in monitoring of unsafe disposal by quickly identifying defaulters.
- The project's experience in Pithampur has shown that small cities like it may require a different approach. Pithampur has a small population and, therefore, a lower demand for pit cleaning services, making the city less attractive for private operators. Smaller cities like Pithampur thus cannot build a model around private operators and must instead tackle the need for FSM by building their ULB's capacity for collection and transportation of fecal sludge, such as by increasing the number of owned and operated desludging vehicles.
- It was with an eye on sustainability that PSI India set up the FSM call center in the premises of the municipal corporations in Lucknow, Kanpur, and Pithampur. Housing of the call center in government premises indicates the government's support for the initiative, which will in turn help build customers' trust in the service. Importantly, being in government premises will aid the call center's subsequent integration with the government's other helplines.

## ATF project cities are receiving recognition for their sanitation initiatives.



# Key stakeholders feel the impact!



*PSI has helped me and other tanker operators in Lucknow form our association. This and the effort to get us registered with Nagar Nigam (municipality) and branding of our vehicles has given us a new identity! We are no longer disposing the waste incorrectly. We are now proud partners of the Swachh Bharat Abhiyan."*

**Mohammad Ameen,**  
Vice President - Septic  
Tanker Operator Welfare  
Association, Lucknow



*Sustained efforts by PSI India, including the many meetings they held with private tanker operators and municipal officials, have borne fruit. The enthusiasm of these operators is visible. They are now able to do their work legally, confidently, and safely with the cooperation of government officials. PSI India initiative under the ATF project is commendable and should definitely be expanded."*

**Neeraj Gaur,**  
General Manager,  
Jalkal Vibhag,  
Municipal Corporation, Kanpur



*"In December 2021, PSI India supported us in signing an MoU (memorandum of understanding) with the private tanker association. Some 40 operators have got registered with us now and have been given access to government STPs. This is helping to keep Lucknow city clean, a major goal for which we have been working under the Swachh Bharat Abhiyan. All their sanitation workers have also been given safety training and PPE kits. This has not only greatly changed their way of working but is also making them feel safe themselves."*

**Ramkailash Gupta,**  
Executive Engineer,  
Jalkal Vibhag,  
Municipal Corporation, Lucknow

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*“I called up the sanitation helpline to get my septic tank cleaned. A tanker was at my house within 30 minutes. The staff wore safety gear and did their job well. They even sanitized the area after the cleaning.”*

**Anu Agnihotri**, customer and resident of Goba Garden, Kanpur



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*“Our livelihoods were in peril during COVID lockdown. PSI India equipped us with PPE, sanitizers, and masks, and got passes made for us. Their support allowed us to continue our work of keeping the city clean and keeping our households running.”*

**Sudhir**, tanker driver, Naubasta, Kanpur



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*“We work day and night to keep the city clean but no one think of us. It was PSI India who made so much effort to get all sanitation workers in the municipality linked with government insurance schemes. If we meet with an accident, now at least our families will be taken care of.”*

**Chandni Rakesh Khare**, sanitation worker, Pithampur





Sustainable Development Goal (SDG) #6 aims for sanitation that goes beyond just access to toilets to also include safe management of excreta. In India, the current penetration of sewerage systems is low and more than 45% urban households have on-site toilets. Until such time that the government's vision of 100% sewerage universalization is achieved, complementary approaches like PSI's ATF project are showing how the fecal sludge output can be managed now in a safe and simple manner.

Population Services International India (PSI India) has been at the forefront of supporting governments in ensuring accessible, affordable healthcare to the most vulnerable in society. It was established in India in 1980 as a not-for-profit organization dedicated to improving the quality of life and well-being of people in India.