



# COMMEMORATING FIVE YEARS OF THE INDIA SANITATION COALITION-FICCI SANITATION AWARDS

A Token of Gratitude to the Awardees and Awards Jury





# Table of CONTENTS

---

<b>Preface</b> .....	<b>1</b>
<b>Foreword</b> .....	<b>3</b>
<b>ISC-FICCI Sanitation Awards: Opinion by Dr. Mashelkar</b> .....	<b>5</b>
<b>ISC -FICCI Sanitation Awardees: Reflections and assessment of their achievements</b> .....	<b>7</b>
<b>Best Corporate Initiative in Sanitation (CSR): Small &amp; Large</b> .....	<b>8</b>
DCM Shriram (2020).....	9
HDFC Bank Limited (2020).....	11
Saraplast Pvt Ltd. (2019).....	12
LIXIL India Pvt Ltd. (2019).....	14
ITC Ltd. (2019).....	15
Tide Technocrats Pvt Ltd (2019).....	17
Genrobotic Innovations Pvt Ltd. (2019).....	18
<b>Best Non-Profit Engagement Model in Sanitation: Rural and Urban</b> .....	<b>21</b>
Environ (2020).....	22
Aga Khan Foundation (2020).....	23
SUHAM Trust (2019).....	26
WAVE Federation (Gramalaya) (2019).....	28
Shelter Associates (SA) (2018).....	29
Centre for Water and Sanitation, CEPT University (2018).....	31
<b>Best Communication in Sanitation: Traditional and Digital</b> .....	<b>34</b>
GRIT by The Wire (2019).....	35
<b>Best Innovative Financial Accessibility model for WASH:</b> .....	<b>38</b>
<b>Large financial institutions, microfinance institutions, banks, government financial institutions, etc.</b>	
Annapurna Finance (2019).....	39
IDFC First Bank (2019).....	40

Dhan (Development of Humane Action) Foundation (2018).....	42
Credit Access Grameen Limited (2017).....	43
<b>Best Engagement Model in Sanitation by a Social Enterprise / Start-up .....</b>	<b>46</b>
Padcare labs (2020).....	47
Agrata City Level Federation (2020).....	48
Eram Scientific Solutions Pvt Ltd. (ESS) (2019).....	50
<b>Best Faecal Sludge and Septage Management (FSSM) Model: Urban and Rural .....</b>	<b>56</b>
Berhampur Municipal Corporation (2020).....	57
Banka Biolo (2020) .....	59
<b>Best Skilling Initiative for Sanitation .....</b>	<b>63</b>
Jan Sahas Social Development Society (2020) .....	64
<b>Excellence on Work for Upliftment of Sanitation Workers .....</b>	<b>67</b>
JALODBUST™ (Cherries Engineering and Innovation India Pvt Ltd) (2020) .....	68
<b>Best Innovation in Sanitation .....</b>	<b>72</b>
CDD Society (2017) .....	73
<b>Lifetime Achievement in Sanitation .....</b>	<b>75</b>
Dr. Bindeshwar Pathak for Sulabh International (2017) .....	76
<b>ISC-FICCI Sanitation Awards Jury (2017-2021) .....</b>	<b>78</b>
<b>ISC-FICCI Sanitation Awardees (2017-2021).....</b>	<b>82</b>



# PREFACE

The Annual ISC-FICCI Sanitation Awards were set up five years ago to reward quality innovative work done for people in India, covering both, sanitation products and services. As these awards are curated, besides recognizing the institutions and individuals for their contribution, the award-winning profiles are documented and disseminated to encourage other players to follow suit to achieve scale and expand the knowledge base for sanitation.

Through the book that I preface here, we are not only celebrating the good work done by our awardees but are also honouring the expertise and diligence of our acclaimed jury members. This valuable document is an apt commemoration of the five years of the ISC-FICCI Sanitation awards as also evidence of the pathbreaking work in sanitation that has been achieved by our awardees.

This has been an outstanding journey, where over the last years, the awards have evolved and fine-tuned as per the changing sectoral requirements by adding more relevant categories as also by raising the jurying standards. It has been gratifying to see that the standard of entries also rose year after year, keeping pace with the rising threshold levels for awards adjudication.

The ISC-FICCI Sanitation Awards have been juried by nationally and internationally acclaimed experts and subject matter specialists. Besides, a Padma Vibhushan, Dr. R. A. Mashelkar, National Research Professor has presided over the jury right since the inception of these awards in 2017. I applaud the dedication and perseverance of the jury members who have had a tough time shortlisting and awarding the best of the best.

This document is a tribute to each of the jury members as also a celebration of the excellence in sanitation recognized and rewarded over the last five years through the ISC-FICCI Sanitation Awards.

Finally, I wish to congratulate all the jury members and awardees warmly for demonstrating extraordinary commitment to achieving significant outcomes with real benefits accruing to society at large.



**Natasha Patel**

Chief Executive, India Sanitation Coalition at FICCI





# FORWARD

The ISC-FICCI Sanitation Awards were instituted 5 years ago in 2017, to honour establishments and individuals who excel and go the extra mile in sanitation.

Until 2019 there were six categories of these awards. Three more categories were added in 2020 based on the jury's recommendations as also in alignment with what had emerged as the priority areas for action, and in alignment with the swachh Bharat mission's phase II objectives.

In 2021, we went a step further and added a special category to reward the women game-changers in sanitation, in accordance with ISC's current focus on looking at sanitation through a gender lens.

Like 2020, the 2021 awards were a remarkable success too—over sixty-odd entries, rigorous jurying for adjudicating the winners, and enriching deliberations through the jury panel providing great insights and learning.

In 2021, we realized that with the growth of the sector over the years, these awards had evolved into an aspirational and popular contest, recognizing models and interventions that could be replicated and scaled up. After all, real progress will not come through small, isolated pockets of success; it will come when we pool in our efforts and learnings and build a strong foundation.

We decided to commemorate 5-years of the ISC-FICCI Sanitation Awards by felicitating the remarkable work done by our awardees as also by our jury members, through this prized document.

This document is an aide-memoire, a celebration of excellence in sanitation as also a ready reckoner for all those who are interested in familiarizing themselves with success stories in sanitation in India.

The publication carries a fresh account of the work done by most of the awardees as assessed on the 'ASSURED' framework. This framework has been adapted from what is described in Dr. R A Mashelkar's acclaimed book, entitled "Leapfrogging to pole vaulting: Creating the magic of a radical yet sustainable transformation." A big thank you to Dr. Mashelkar for his chairing

the jury and ensuring the high standard and quality of the awards, enriched by his knowledge and experience.

Moreover, some of the members of the jury have carefully reflected on the merits of these cases and shared their points of view and suggestions as to how these awards can be curated in the future to have a greater positive impact on sanitation outcomes.

I wish to extend my heartfelt gratitude to all our jury members for their invaluable contributions, the leadership, and time and effort they have dedicated to the cause of sanitation in India. I congratulate each of our awardees for their outstanding work and wish them every success as they scale up and reach new heights. We need these great examples and contributions to achieve a strong, healthy, and clean India.



**Naina Lal Kidwai**

Chair, India Sanitation Coalition





# SPECIAL MESSAGE

Equal access to essential health, clean water, and sanitation services continue to be one of the foremost priorities for India. The Swachh Bharat Mission launched in 2014 led to renewed focus and action on these priorities. To appreciate and recognize the efforts of the enterprises and individuals working in this arena, the India Sanitation Coalition (ISC) at FICCI decided to institute the Annual ISC-FICCI Sanitation Awards in 2017.

Now, as we complete five years of these awards, it is important to look back and reflect on the accomplishments of these awardees as also the lessons learnt. Such an exercise would enable ISC to curate these awards with renewed vigor, benchmarking them to even higher standards of utility and innovativeness. I am elated to see these reflections documented as an aide-memoire as the coalition commemorates an important milestone of the ISC-FICCI Sanitation Awards.

This document is a treasure trove for all those who are interested in the sector as it showcases the exemplary initiatives of our awardees. These also bear testimony to the fact that considerable progress has been made by us as a nation in understanding the causes and correlates of poor sanitation and then addressing them in a manner that is best suited to the Indian context.

Through these awards, we targeted technologies for our nation that met the criteria in a rigorous yet holistic ASSURED framework. This framework examined as to whether the innovations were affordable, scalable, sustainable, user friendly, rapidly deployable, excellent in terms of exacting standards, as also distinctive and not just me too.

The jury applied rigorous criteria for selection, and it made sure the final winners had made an actual and measurable impact with demonstrable speed, scale, and sustainability.

Over the last five years, I was particularly happy to see awardees who introduced emerging exponential technologies such as Robotics, Artificial Intelligence, etc., and excelled in their respective fields to impact lives for significant developmental outcomes.

I am also very pleased with the members at the ISC Secretariat, who have curated these awards perspicaciously for the last five years

and played a key role in bringing these awards to the forefront of the sector as a means to identify and reward the most innovative and impactful solutions addressing the problems of sanitation in India.

As jury chair, I take pride in being associated with these awards since their inception and wish to congratulate all the winners for their outstanding contribution which has gone a long way to transform society, and in turn, the entire nation.

I also wish to gratefully recognize the efforts and rigour of my fellow jury members for contributing to the monumental success of these awards. It will be our shared effort to continue to recognize and document good practices and disseminate knowledge to encourage other players to enter into the field of sanitation.

Thank you very much!



**R A Mashelkar**

Chair, India Sanitation-FICCI Sanitation Awards, and National Research Professor

# ISC -FICCI SANITATION AWARDEES: REFLECTIONS AND ASSESSMENT OF THEIR ACHIEVEMENTS





# BEST CORPORATE INITIATIVE IN SANITATION (CSR): SMALL & LARGE



# Best Corporate Initiative in Sanitation (CSR): Small & Large

## DCM Shriram (2020)

In alignment with Swachh Bharat Mission, the organization constructed/renovated school toilet blocks for girls and boys at Kota (Rajasthan), Hardoi, and Lakhimpur Kheri (UP). Besides, in Bharuch (Gujarat), they constructed Individual Household Toilets (IHHTs) to make villages open defecation-free. With over 358 school toilet blocks constructed in Kota, Hardoi, and Lakhimpur and 361 IHHTs constructed in the Bharuch district, about 50,000 school children and over 2000 families benefited directly through the intervention. Besides, the organization partnered with specialized NGOs and organized over 700 behaviour change workshops across the project areas.

Though construction of toilets could not be undertaken in the previous year due to the pandemic, yet the programme took an integrated approach by moving from school-led total sanitation (SLTS) to Community Led Total Sanitation (CLTS) intending to achieve an ODF status in the villages, addressing the four most critical components of WASH: infrastructure support to team, knowledge & attitude, capacity building, and operations & maintenance. The Company planned various training and capacity-building programmes targeted for teachers, students and their families, Aganwadi workers and helpers, and PRI members. The programme was designed and executed to address the local realities and needs of beneficiary schools, wherein the schools had a participatory role right from the beginning of the programme itself. This helped the programme in increasing the reach to the community and making the benefits accessible to all.



In 2020-21, the programme was implemented in 120 villages, divided into 6 clusters in the Kota district. The idea was to discover the challenges and solutions from these different segments and accordingly develop a model programme. To shift the focus towards attaining ODF plus, efforts were laid on various behavioural change activities. The programme was also scaled from Kota to Hardoi and Lakhimpur Kheri Districts in UP where PRI members of 40 villages were trained on ODF+ protocols.

Additionally, Nigrani Samities were formed and activated for attaining ODF sustainability. These Samities are a community organization, formed by communities to monitor open defecation in their villages, educate families on the ill effects of open defecation, and on how toilet use benefits the families and contributes to the overall well-being of the entire village population. Further, responsibility was taken to put in place a framework, highlighting the essential elements of a menstrual hygiene management program. The company partnered with FINISH Society as an implementation partner, Project BAALA as a recyclable sanitary napkin provider, and Tata Trusts as a knowledge advisor to help adolescent girls manage menstruation effectively, safely, and comfortably. Freedom from the fear of leakage or unpleasant odour enhances a girl's ability to be at school during menstruation. Over 700+ reusable/washable sanitary napkins were distributed to adolescents, and they were trained on how to use the same.

Besides, master training sessions and refresher training were conducted for SMC members in all the schools to develop the understanding and approach about SLTS and other related issues which can lead to greater ownership. Over 117 teachers were trained on WASH via a virtual training platform.

The Company undertook a 5-day training workshop for the ward members which provided them the information on the roles of PRI members, sanitation, and its importance on village preparedness on COVID-19. Over 247 ward members participated in the programme in Hardoi, Lakhimpur Kheri, and Kota. The offline session was conducted with a presentation, IEC materials that established the importance of community sanitation and learning goals for Panchayats.

The training not only focused on sanitation but also skill development sessions for the ward members and sarpanches on leadership and behavioural change communication.

Due to the pandemic, the company recalibrated its 'Shriram Swachagraha' and acted swiftly to help the community in these unprecedented times. The company with its NGO partners made a shift in its implementation approach keeping the safety precautions in mind as directed by the government and WHO. The focus shifted from construction to behaviour change and to create awareness on personal hygiene, ODF+ and COVID-19 precautions, which had a multiplier effect and created a larger impact in bringing about the change in approach.

Along with knowledge on aspects of safe water, sanitation, and hygiene; toilets, hand-wash units, and incinerators were assessed for augmentation for enabling the usage besides increasing it. The programme strategies also helped the capacity of the local service providers, stakeholders, and end beneficiaries together for providing efficient O&M services. Existing forums like the school management committees (SMCs), child cabinets, mothers' groups were activated via the door-to-door sensitization method. The programme tried to connect all possible missing links to sensitize all

stakeholders and help them contribute to their capacity for enabling change at a community level. Total beneficiaries reached were 10,500 plus via direct intervention in partnership with FINISH Society.

## HDFC Bank Limited (2020)

Overcoming geographical constraints to better the lives of people was at the core of their programme design when the bank constructed fully equipped, school sanitation units with gender-separate toilets, followed by extensive training on WASH practices for the students, teachers, and school management committees; over 132 Schools benefitted from the program across the 5 districts in Meghalaya.

Efforts have been undertaken by the bank to keep the endeavour financially sustainable, in terms of planning the intervention in a manner that utilises the locally available resources—both human and material. The focus is on changing the two features of an existing system—the economic variables involved in addition to the enabling technology—to create sustainable models that can be modified ensuring the social and economic equilibrium for the targeted beneficiaries.

Besides, the bank has been able to increase the impact of the program by further replicating the similarly designed interventions. What had begun with educational institutions has now seeped down to the community and individual levels. For instance, in Meghalaya, the intervention on sanitation had started with equipping 136 schools with over 167 units, which later on took form into imparting WASH training to the community members and further led to the facilitation of over 600 individual sanitation units across 25 villages in the region.

These individual units have been designed in a manner that is easy to maintain and according to the geographic feasibility.

One of the focus areas of HDFC Bank Parivartan remains healthcare & hygiene. Under this intervention, they endeavour to create more toilets that are equipped, wholesome and built with customized systems. Be it in Odisha where they have the concept of Integrated Community Toilet that not only has a functional toilet but also a bathroom and washing area, or Gujarat where they distributed sanitation kits in addition to constructing toilets for school students after taking suggestions from villagers.

The bank is working with multiple NGOs and government departments across states. Paryatan Sanstha, Indo Global Society (IGSS) & SACH are some of the NGOs the Bank has been implementing its sanitation programs with. These organizations are engaged in various rural development projects in the selected locations.

The government departments have been supporting HDFC in providing the necessary data for identifying locations, disbursal of schemes/convergence of schemes with their program intervention for the sustainability of the efforts undertaken.

Efforts have been undertaken to keep the endeavour economically, socially, and environmentally



sustainable in terms of planning the intervention in a manner that utilizes locally available resources. For social sustainability, the intervention engages with the community to ensure self-responsibility for the maintenance. Environmental sustainability is achieved by designing the structures in a manner that is conducive to protecting the environment around them.

The HDFC model is practical and its replicability and sustainability at any given location is a testimonial to the practicality of the model. It can be adapted in a way to adjust according to the different terrain/geographic requirements across any given region.

The unique aspect of the program is its judicious blend of social, financial, and regional concepts and approaches which allows utmost flexibility in adapting the model and intervention as per the needs of the community/region. Another unique point is that it does not depend on any further external support for sustenance. The program is designed so that it mostly includes readily available resources from within the community, with reliance on external agents (government agencies, implementing agencies, etc.) only for the duration of the implementation. Further, the community/individual is handheld and empowered to sustain the program on their own, thus ensuring sustainability and making it accessible to all.

## Saraplast Pvt Ltd. (2019)

Saraplast (also known as 3S, its brand name) came up with an innovative concept of Toilet Integration Centers (TiCs) to provide women with clean and safe toilets, as well as to incorporate points for the sale and disposal of female hygiene products. TiCs is created by refurbishing old buses into integrated sanitation hubs and, therefore, require relatively low levels of capital





investment. It is not only toilets on wheels but also a multipurpose resource for women. It comprises western, Indian toilets, taps with water-saving technology, panic buttons in case of emergencies, a digital feedback system, and trained female attendants. The centers are also enhanced by solar-operated lights. Other facilities provided in TiCs are Wi-Fi connectivity, diaper changing area, sanitary napkin dispenser, roof-top ventilation, and fire alarm system. The organization started with 12 TiCs in Pune and was able to serve around 1500 females per day

Considering the lack of space and to make the model more cost-effective and economical for the government, they have refurbished 3 additional units in the form of a container. To make these self-sustainable, they have set up a small health clinic, where basic medications and vaccinations are provided to local citizens at affordable fees.

Women from low-income communities, daily-wage laborers, municipality workers cleaning the city, police workforce on patrol, middle-class women, and teens on the move for work and education are all their beneficiaries. Their 12 existing centers in Pune have been used over 2,00,000 times by women and girls to date. They have expanded their reach to places like Narayanapet-Hyderabad, Jalpally-Hyderabad, Noida, and the Andaman Islands.

With the organization's Ti Health Program, they have been able to upscale and increase the impact of their program. Ti health centre was initiated primarily due to a felt need during surveys and also to maximize the social impact of this project which begins with women and can be extended to families and communities. Ti healthcare centers are installed in 2 towns - Narayanpet and Jalpally which are close to Hyderabad and Lifecare Pvt Ltd is their partner in this project. They have also partnered with Apollo Health Care Services for tele consulting during the COVID-19 pandemic. The location is offered in the town is a central place with a high footfall of commuters throughout the day.

To create awareness about their services in Narayanapet, they conducted two health care campaigns in the local area where 800+ people enrolled themselves and opted for free healthcare services like general doctor consultation, specialty consultation, blood pressure check-up, blood sugar check-up, wound dressing, injection services for IM and IV, temperature check, BMI check, etc.

To enhance the operations, they tied up with local pharmacies and laboratories. Home visits were carried out by the team for emergency treatments. To attract the crowd, they provided users with face masks and hand sanitizer and also educate the users about the hand-washing techniques.

To make it a self-sustainable model, they have different revenue models such as pay-per-use, advertisement on the buses, and kiosks for installation of cafes, healthcare clinics, laundromats, etc. In the pay-per-use model, they charge a nominal tariff of Rs.5 for every user at all locations. After placing different kinds of advertisements, they learned that females related to advertisements that were female- or feminine product-centric. Hence, they have partnered with Pee-Safe company. They have also installed kiosks for selling packed products, laundromats, etc.

They have partnered with Sevasahyog, an NGO, that has been supporting women empowerment for more than two decades and is experienced in women's welfare activities like enabling women entrepreneurs in the city, etc. They work with lower-income communities, especially women and girls. Besides, the organization has tied up with NGOs to retail the products manufactured by their women members. The products sold from their end are hand-made masks, jute bags, lanterns, Diya, and other festive products.

The project has been replicated in New Jersey and other cities in the USA by the World Economic Forum. The unique aspects of this programme are 1) Automated Payment Systems; 2) Footfall Counters; and 3) Water Meters and Electric Meters.

## **LIXIL India Pvt Ltd. (2019)**

The new generation of SATO (Smart and Affordable Toilet Solutions) units which use an innovative V-trap configuration connecting the twin pits were introduced in 9 states of the country. These units are suitable for use with direct and offset pit installations, septic tanks, sewer connections, and other water-based containment systems. Moreover, these toilets can be utilized in new construction or can be retrofitted into existing latrines to provide an easy, inexpensive upgrade using less than 500 ml of water per flush.

Market-ready, SATO Solutions help save time and effort while providing the simplest and most hygienic solution for toilets. Since 2019, the social impact of the SATO intervention has grown multi-folds. These toilets have been made available across India at various retail counters and these have been able to change lives across difficult-to-reach locations, through social and business partners.

Since 2019, SATO has partnered with UNICEF, Habitat for Humanity, Scope, and other such impact creators to deliver safe and hygienic sanitation solutions. The accessibility of the brand has been increased manifold by making it available online and at Ultratech Business Stores.



SATO has been growing from strength to strength in the last few years and has found a place of acceptance not just in households but in community and shared spaces. SATO solutions have been used in COVID quarantine shelters, it has been used in community toilets, and in emergency services in case of floods, etc. Their solutions and initiatives have grown the sanitation economy from within the rural sector with skilled partners joining them. The SATO solutions are designed to save nearly 80% per flush, making them environmentally

sustainable and with every installed SATO toilet 1000s of litres of water are saved.

Over the years, the organization has been able to reach more partners and increase its feet on the ground as skilled influencers. Understanding that SATO solutions need to be available in the heartland, SATO started bringing into its fold the last leg influencers such as masons and plumbers. The brand has worked to create a network of such skilled influencers and trained them both in technical and business skills to make sure they become sanitation spokespersons.

Over the last 2 years, SATO has trained nearly 18,000 Masons creating nearly 600 Mason Marts who today sell SATO Products making them easily accessible to people living in deep rural parts of the country.

## ITC Ltd. (2019)

With its Mission Sunehra Kal, ITC focuses both on providing "Access" and driving "Usage" through behaviour change, in its three-pronged approach to Sanitation through – Individual Household Toilets (IHHTs), Community Toilets for households without land, and WASH in Schools. The aim is to promote a hygienic environment in its catchments through the prevention of Open Defecation and reduction in water-borne diseases.

Since the three-pronged approach to sanitation adopted by ITC proved to be effective in ensuring access and usage of toilets, therefore, the programme continued to follow the approach and focused on scale and sustainability. As a result, from 23 districts in 2018 across 16 states, the sanitation programme managed to reach 28 districts during 2020-21 and all the catchments under the program have been declared Open Defecation Free (ODF) (from 64% in 2018). Cumulatively, over 38,000 IHHTs and 104 community toilets were constructed, benefiting over 85,000 households. Besides, the number of students who benefitted from WASH interventions increased from 1 lakh in 2018 to over 2.8 lakh in 2020-21.

Sustainability, replicability, and scale are the key tenets of ITC's development interventions. Collaboration with the state governments is part of the strategy to scale up the models developed by ITC's Social Investments Programme. ITC's projects bring together communities, NGOs, local

government bodies as well as technical and professional agencies, all of whom have a role in enabling scaling up and sustainability. The intervention is implemented with specialist NGOs selected on the basis of their in-depth knowledge of the project area and appropriate technical expertise. They are responsible for carrying out and coordinating all project activities at the initial stages and in guiding, supervising, and building the capacity of community groups as they take on more responsibility. Partnering technical and professional agencies ensure that the various interventions (physical/technical, IEC) involved are appropriate and effective and that all infrastructure constructed meets the quality standards set by ITC.

Local governments/Panchayati Raj Institutions play a vital role in facilitating infrastructural support, including the availability of water and sewage disposal through relevant departments. The programme adopts the PPP mode for scale, wherein MoUs are signed between ITC and government departments, where possible, for carrying out the initiative. The Programme actively promotes convergence with the government's Swachh Bharat Abhiyan for greater scale and impact. Moreover, every effort is made to coordinate/ partner with existing community groups and government workers including SHGs, Anganwadi, ASHA and municipal workers, and civil society organizations.

ITC's Sanitation programme from its initial planning stage builds in financial sustainability, which is ensured through up-front beneficiary contribution for IHHTs; monthly beneficiary contribution for the usage of community toilets; soft loan model; and leverage of government programs/schemes.

Scalability is ensured through a partnership with government bodies including MGNREGA and Swachh Bharat Mission (SBM), which enables replicability and scalability across locations. The program is sustainable socially and environmentally as it follows a community-driven-managed-owned intervention with stakeholders comprising community members, ward members, government officials, and NGO partners. Community-based organizations (CBOs) such as WATSAN Committees, School Management Committees (SMC), Child Cabinets, and Women Self-Help Groups (SHGs) are formed and strengthened for ownership and sustainability. Information, Education, and Communication (IEC) activities are undertaken to drive behaviour change by sensitizing the community on the ill effects of open defecation on health and environment.

The community-driven-managed-owned approach makes the program practical and unique as it ensures behaviour change, which is key to driving usage of toilets besides ensuring access. Community contribution reflects the ownership of the community towards the operation and maintenance of community toilets and School WASH. Likewise, contributions for the construction of household toilets show that the households see value in getting the toilets constructed.

The programme is executed in partnership with NGOs, both thematic experts and those with grassroots experience to enable mobilization. The implementation modalities include - Demand generation through awareness creation, using intensive IEC programs; Community mobilization and capacity building of CBOs; Building financial stakes of beneficiaries through mandatory contributions for construction, operation, and maintenance; and forging multi-stakeholder partnerships and leveraging SBM funds for the benefit of BPL households. The program ensured that all interventions are in project mode, long-term, committed, and not once-off so that all stakeholders take a long-term approach rather than focus on short-term results.

## Tide Technocrats Pvt Ltd

Till 2019, Tide Technocrats Pvt. Ltd (TTPL) had supported over 170 towns and cities in India, Asia, and Africa helping them achieve their environmental impact. It had successfully completed biosafe treatment of septic tank waste (solid and liquid) in three non-sewered towns in India, impacting a population of about 150,000. Initially, none of these towns had any underground sewerage networks and the human waste collected from septic tanks and pits was discharged on fields, waste dumpsites drains, lakes, and rivers. TTPL helped these towns in achieving ODF+ status.

A winner at the Chicago-Tata Trusts Delhi Innovation Challenge and a finalist at the PFAN USAID challenge for Smart Solutions for Adaptable Communities and Cities in 2017 and a finalist in the IHUWASH challenge for WASH sector solutions for Udaipur in 2018, TTPL has been at the forefront of open innovation.

In 2019, Tide Technocrats had set up 3 FSTPs in Warangal (Telangana), Narsapur (Andhra Pradesh), and Wai (Maharashtra). Since then, the organization has been delivering solutions for the management of faecal waste, which are more cost-efficient, meet environmental standards, and are designed to our client's requirements. The company has established forward and backward linkages for equipment supply, project setup, and operations. The above initiatives have enabled the company to deliver solutions as per client requirements.

The company has now scale-up and is currently operating 5 FSTPs. 6 more FSTPs are under implementation and there is an order book of 17 more FSTPs. The company is aiming to set up at least 50 FSTPs by end of 2022. The O & M of the FSTPs has been standardized. Their FSTP plants at Warangal and Narsapur are now ISO 9001:2015 Quality Management System and ISO 14001:2015 Environmental Management System certified. This has helped to build an approach of setting up well-organized and maintained, ISO Certified FSTPs.

Their upcoming FSTPs will be equipped with a training centre that will function as a Centre of Knowledge and Excellence for sustainable reuse of waste and circular economy. The organization has been engaging with external partners and stakeholders including Government departments like JUIDCO Jharkhand, Swachh Andhra Corporation (SAC) Andhra Pradesh, Urban Local Bodies, NGOs, Private sector partners for upscaling the FSTP interventions in the respective States. Recently,

they have collaborated with SR University, Telangana to initiate research & development for using biochar from FSTPs. The company is also setting up market linkages for the by-products from the FSTPs with organic product FPOs.

Tide Technocrats has been working towards making the initiatives sustainable. The capital cost for setting up the FSTP along with its O & M cost is borne by the government. Their focus has been on working towards developing revenue models to make these FSTPs self-



sustainable in the long run. They hire staff for the plant from local areas and then train them to operate the plant. Besides, they plan to achieve 100% recycling of the by-products and support the local circular economy.

The program is unique in that it focuses on serving the towns and cities having less than one Lakh population. The strategy is to build the FSTP as a Centre of Excellence where apart from treatment of faecal sludge the facilities are used for promoting the circular economy. This would enable the FSTP to become self-sustainable over the long run and provide local livelihoods.

The company has consciously disseminated information about technology and products in different forums. The team has been involved with different governmental agencies to communicate the need for technologies for faecal sludge treatment. Tide Technocrats is a part of the Sustainable Sanitation Industry Alliance, an effort to create an industry body for sanitation.

## **Genrobotic Innovations Pvt Ltd.**

To leverage technology as a tool for social good to eliminate the exploitative, menial and dangerous job of manual scavenging and improve the lives of millions of people by providing safe and clean cities, GenRobotic launched "Mission Robohole"- initiated by Bandicoot- the world's first manhole cleaning robot in 2017 in 8 municipalities in 3 states of the country.

Through this initiative the organization aimed to eradicate the scourge of manual scavenging by changing the concept of Manholes to Roboholes, thereby propelling the socio-economic transformation of one of the most marginalized sections of society. Bandicoot is the world's first Manhole Cleaning Robot, made in India, by GenRobotics. It goes deep into and looks into cleaning manholes, thus negating the risks of human scavenging and the associated societal costs, including health hazards, the burden to the public purse, social ostracization, amongst others. GenRobotics also rehabilitates displaced workers by training them to use robots and become robot operators. In the launch phase, the organization rehabilitated 87 manual scavengers to Robotic operators.

Despite the increase in the cost of supplies, the organization has maintained the cost of the product without any hikes. They have also been able to upscale and increase the impact and replicate their intervention across other geographies. For the past 2 years, Genrobotics has delivered more than 50 units of Bandicoot Robots across 14 states of India including municipalities of Maharashtra, Tamil Nadu, Andhra Pradesh, Haryana, Gujarat, Uttar Pradesh, Kerala, Telangana, Punjab, Assam, and Madhya Pradesh. Repeated orders were placed, and Robots were delivered concerning the requirements of the clients. Genrobotics are on a journey to set foot on the rest of the corners of the country for implementing Bandicoot robots.

Besides, the organization is working with external partners and stakeholders to upscale its interventions. Genrobotics have implemented Bandicoot robots with the support of various PSU Companies such as BPCL, IOCL, ONGC, HPCL, etc as a part of their Corporate Social Responsibility (CSR).

Bandicoot robots are economically efficient for Municipal corporations. The robotic scavenging is also more efficient as it can cover up to 10 manholes every day against 1 or 2 being covered by



manual scavenging. Additionally, by employing robots, sanitation workers get better wages and professional jobs. Therefore, it is also economically beneficial for the sanitation workers.

By introducing robotic scavenging, the organization aims to empower the sanitation workers through their initiative "Mission Robohole". They provide training to the sanitation workers and rehabilitate them as robotic operators. Bandicoot ensures a better quality of life for these sanitation workers' communities by empowering their lives. Besides, it reduces social discrimination and provides dignified jobs to them.

Bandicoot Robot meets 9 out of 17 SDG goals set by the United Nations including Good Health, Clean Water and Sanitation, Good Jobs and Economic Growth, Innovation and Infrastructure, Reduced Inequalities, Peace, Justice, and Strong Institution.

The model is practical as the manholes of all countries around the world are designed in such a way that only men can clean it. This leaves little option but to employ manual methods of cleaning the manholes. There's no clear solution with human-level flexibility for cleaning manholes without manual intervention other than the Bandicoot. Bandicoot is a unique globally patented robotic manhole cleaning Technology for sanitation workers which aims to eliminate human intervention for cleaning manholes and their rehabilitation. Bandicoot is a Human comparable innovation, which can work with human-level flexibility inside the manhole. This technology is the best example of Robotics in sanitation. Bandicoot robots are available through the start-up runway initiative in GeM, an initiative of the Government of India so that every municipal corporation & other entity can avail themselves easily without much purchase procedure.

## Jury's Reflection



Over the years, India has made remarkable progress in the field of sanitation. The sanitation coverage in rural India went up from 39% in October 2014 to 100% on October 2, 2019. It is quite an achievement that nearly 60 crore people changed their behaviours and stopped open defecation in a matter of 5 years.

ISC-FICCI awards have acted as an enabler in this outstanding feat. Over 5 years these awards have recognized and catalyzed less than twenty corporates whose works were adjudged to be the best in the category, based on Dr. Mashelkar's ASSURED framework. This framework has 7 attributes – i. Affordable, ii. Scalable, iii.

Sustainable, iv. Universal, v. Rapid, vi. Excellence, and vii. Distinctive.

I am delighted to have chaired this category and found the works of these awardees exemplary. For instance, Tide Technocrats Pvt Ltd have performed brilliantly well since the award on scalability—starting from three Faecal Sludge Treatment Plants (FSTPs) in Warangal (Telangana), Narsapur (Andhra Pradesh), and Wai (Maharashtra), they have now scaled up to five FSTPs, with six more FSTPs under implementation, and an order book of seventeen more FSTPs. The company is aiming to set up at least fifty FSTPs by end of 2022.

Similarly, Genrobotic Innovations Pvt Ltd. launched its initiative in 2017 in eight municipalities in three states and has now scaled up to fourteen states of India by delivering more than fifty units of Bandicoot Robots in the past two years. Saraplast Pvt Ltd. scores highly on innovativeness and affordability with their innovative concept of Toilet Integration Centers (TiCs). These TiCs are built by refurbishing old buses into integrated sanitation hubs for women comprising of western, Indian toilets, taps with water-saving technology, panic buttons in case of emergencies, a digital feedback system, and trained female attendants. These centres are solar-powered and require relatively low levels of capital investment.

Despite these encouraging works in sanitation, much unfinished business remains. I am positive that ISC-FICCI Sanitation Awards will continue to bring more such corporates to the fore for achieving great outcomes, with real benefits accruing to society at large.

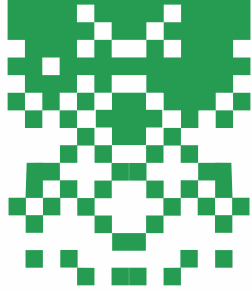
-- **Aloka Majumdar**

Head of CSR, HSBC bank





# BEST NON-PROFIT ENGAGEMENT MODEL IN SANITATION: RURAL AND URBAN



## Best Non-Profit Engagement Model in Sanitation: Rural and Urban

### Environ (2020)

The intervention introduced decentralized beneficial solid waste management in Jakhlabandha Gram Panchayat, Nagaon, Assam to prevent haphazard dumping of solid waste by utilizing the waste as a resource to initiate a clean, green, and sanitized rural environment. It ensured biodegradable, solid waste management at the household level through its innovative 'Waste Assimilator'. By using the "Waste Assimilator", beneficiary rural households are now able to produce both 'organic manure' and 'pest repellent' from the daily-generated biodegradable solid waste in the form of 'Microbial-wash' from the 3rd day of use, 'Vermi-wash' from the 25th day of use and finally 'Vermicompost' after 120 days.

Further, it ensured non-biodegradable waste management through incentivization by providing condiments such as ginger and garlic in exchange for household plastic and introduced a specially designed litter bin for source segregation of the plastic waste. Source management of the household-generated plastic waste was undertaken through their initiative - 'Plastic Handicraft', through which housewives are now producing different decorative and utility products out of the daily generated single-use plastics like 'chair back', 'cushion', 'mattress', 'tabletop', 'table mat', 'garland', 'decorative bag', 'water-bottle bag', 'flower vase', 'hat' etc.

These activities are now being replicated in the BSF campuses of Dhubri, Assam, and Cooch Behar, West Bengal. The innovative component "Waste Assimilator" for biodegradable solid waste



management and “Plastic Craft” was also supported by the Assam State Rural Livelihood Mission Society (ASRLMS) and Gauhati Refinery for the benefit of the rural populace in the State.

Generally, most of the solid waste management activities fail as they adopt a community approach where there are no individual responsibilities and benefits, so by bringing in the concept of “Waste Assimilator”, “Money Earning Litterbin” and “Plastic Craft”, the organization has introduced decentralized solid waste management with individual responsibilities and benefits.

ENVIRON has brought about the much-needed convergence between waste management and organic farming through its patented invention - “Waste Assimilator” (Patent C.B.R. No. 13952). Moreover, its “Money Earning Litterbin” is useful for source segregation of 'single-use plastic' which can be utilized 'as a resource' at the source itself through the concept of “Plastic Craft”. This conclusively shows that more than 70% of the solid waste management problems can be solved at the source itself by employing the decentralized waste management approach.

## Aga Khan Foundation (2020)

The initiative undertaken by Aga Khan Foundation dwells on the experiences gathered from the integrated approach of intervention in the states relying on behavioural change communications and working in alliance with the local government. They commenced operations in 6 states of the country. Till 2020 they reached out to 2500 villages (over 158,000 households) in 22 districts through their DI (Direct Intervention) model, intending to improve the sanitation status at the household and school levels besides setting up the operation and management (O&M) systems, hygiene promotion and awareness, waste management as well as training and capacity building of the target communities to ensure the sustainability of the project objectives.

Their TA (Technical Assistance) model focuses on catalyzing existing initiatives to accelerate the achievement of ODF status under SBM by reviewing and analysing the district annual implementation plans, social and behavioural change communication plans, capacity building plans, and establishing robust monitoring and review systems. Till 2020, the initiative reached over 725,000 households through TA, and 3000 schools with inclusive access to WASH and improved hygiene behaviours across intervention geographies. The programme also succeeded in ensuring 'last mile usage' with a 93% toilet rate among families.

Through a combination of measures for aligning with flagship Government priorities, ensuring seamless fund flow, introducing technology-enabled tracking, and empowering local institutions, the initiative has positively impacted the sustenance of universal WASH access and heightened awareness of COVID-19-appropriate behaviors.

Additionally, AKF's experience demonstrates that while ensuring improved household level access to 150,000 families across 1200 villages an additional amount of Rs. 800 per household has allowed the programme to empower local institutions, build local capacities, and centre-stage cross-cutting issues of gender and inclusion. From a system strengthening perspective, a cost of Rs. 30 per household has allowed AKF to support effective policy implementation of the Swachh Bharat



Mission and to ensure access to 750,000 families. All of these efforts have enabled AKF to deliver the programmes cost-effectively and efficiently.

AKF has also been able to launch a rapid COVID-19 emergency response initiative across 6 states in India, reaching out to over 21,00,000 beneficiaries. The initiative has been able to build community-level resilience by raising awareness amongst beneficiaries on COVID-19-appropriate behaviours and has also ensured the availability of soap and water on premises for over 73% of households. This has been made possible due to AKF's existing strength on the ground, as well as its strong rapport with the community and government in its priority intervention geographies.

Building on its implementation experience, and the successful WASH programmes it has implemented on the ground, AKF has also been selected as a sector partner by the Union Ministry of Jal Shakti under Jal Jeevan Mission and will be lending technical assistance for the programme in Uttar Pradesh, Bihar, and Telangana under the said mission.

AKF has been working closely with diverse partners and stakeholders to scale up its programmes. These include Aga Khan Development Network Partners (AKDN)- the district governments in 18 districts, as well as corporate partners such as Coca-Cola, Reckitt, Unilever, and HDFC. Additionally, it has partnered with institutional donors such as the EU, FCDO, UNICEF, and WHO to upscale its interventions. These various entities are supporting AKF in lending technical assistance for implementation of the Flagships, Clean India Mission, as well as Jal Jeevan Mission. Their support has also enabled AKF to expand its footprint and initiate a rapid emergency response initiative in the pandemic.

The program has prioritized systems strengthening by partnering with the block/district/state governments and empowering the local institutions and communities to plan, implement, and

monitor the sustainability of ODF status besides initiating COVID-19 response on the ground. AKF has also promoted cost-effective hand-washing infrastructure and services by encouraging households to contribute their resources, as well as leverage government resources. The responsibilities for O&M of these community handwashing infrastructures lie with individual families or PRI institutions and efforts were made through BCC campaigns to ensure proper usage. The real-time monitoring data suggest that 73% of households now have access to soap and water on-premises.

To ensure the sustainability of the initiative, AKF has also introduced real-time tracking tool M-form to monitor not only the reach of the initiative but also the quality of the handwashing infrastructure. The application allowed the field teams to geo-reference the handwashing infrastructure; upload photographs as well as collect demographic details, some basic information on hygiene behaviour, and details of quality parameters.

As part of its technical assistance programme, the focus has been on supporting the government to strengthen its COVID-19 response initiative and mobilize communities for vaccination.

AKF's engagement in schools has helped strengthen back-to-school preparedness and streamline the operation and maintenance (O&M) of school WASH facilities. Towards this, AKF is working with the School Management Committees (SMCs) to prioritize investments for regular upkeep and maintenance of the WASH facilities. SMCs are also empowered for the development of O&M plans and channelizing financial resources through different funding opportunities such as the Central Finance Commission, MGNREGA, and General School Development funds. Dedicated hygiene curriculum, promotion of children's parliament, hygiene corners, peer monitoring, and basic toilet usage training have further helped to ensure sustained functionality of the school WASH infrastructure.



Introduction of inclusive, height-appropriate, and gender-friendly WASH facilities such as foot-operated, no-touch, cost-effective, and innovative handwashing stations, drinking water stations, and toilet blocks for schools, Angandwadis, and healthcare institutions have been undertaken. In total, some 12+ models have been piloted across the 6 states.

Since community-focused BCC approaches were promoted by AKF and this was also a policy priority for the governments to achieve ODF status at scale, hence they prioritized to sign non-financial MoUs with State and district governments to continue their support towards improving sanitation access. Moreover, strong national government commitment linked with public financing has helped agencies like AKF to continue their support for the sanitation programme.

AKF has also introduced the concept of soap banks-which are community-led repositories of soaps. Over 1200 villages now have community-led soap banks in villages, providing ready access to soaps for handwashing, a key preventive behaviour in the fight against COVID-19. They are transforming hygiene behaviours of school children through a child-friendly hygiene curriculum; reinforcing hygiene practices through culturally relevant behaviour change tools such as hygiene-themed local songs, plays, puppetry, wall paintings, nudges, etc.

For environmental safeguarding and taking collective measures to minimize bacteriological contamination of the local water sources (hand pumps), a detailed aquifer vulnerability study was carried out and water safety measures were introduced based on the results.

For systems strengthening, AKF has extended support to districts by developing and demonstrating district-level strategic implementation plans and models for ODF sustainability and developing water safety and solid and liquid waste management plans for districts and gram panchayats.

## **SUHAM Trust (2019)**

To achieve the ODF status of the block by changing the behaviour and practices of the community in construction and usage of toilets in areas where the issue of open defecation was higher, SUHAM Trust launched the project in Tamil Nadu. The project enabled to bring out the behavioural change among potential users and non-users. The entire community in the block was sensitized about the implications of Behaviour Change Communication (BCC) as the major strategy. The project developed replicable models of sensitizing the community towards changing behaviour and adopting safe sanitation practices and ultimately it resulted in achieving the ODF status of the block. BCC strategies were used to increase the knowledge and improve the attitude which resulted in positive behavioural changes for sanitation. This in turn strengthened the linkages with the stakeholders like PRIs, SHG members, educational institutions, anganwadis, PHCs/HSCs, youth groups, and service providers for providing literacy on sanitation, and individual and community toilets were brought to use.

SUHAM Trust works at the grassroots level in bringing behaviour and practice change in the community through promoting peer educators among the Self Help Group (SHG) households. The organization is known for its behavioural change tool and works with policy-making bodies.



SUHAM facilitates workshops and seminars with bankers, DRDA, and district administration in bringing relevant and community-oriented policies for a WATSAN favourable environment. Especially with the banker, SUHAM works on affordable lending and exclusive products to encourage the community towards safe water and sanitation.

The organization expanded its intervention to reach 1.5 million SHG households for behavioural change through capacity building. They developed multilingual communication materials and training modules for sensitizing the community, field workers, and government/bank officials. The model which was piloted in the Sanarpatti block of Dindigul district, Tamilnadu was replicated in 14 states of the country.

The organisation works closely with banks, district administration, district rural development agencies, and health departments in the project districts and states. Besides, SUHAM is a technical-cum-training institute for many SHG federations that are promoted by DHAN Foundation. A financially viable proposal is being chalked out between SHG federations and SUHAM. It also caters to the training needs of DHAN Foundation. The programme's sustainability is ensured through the promotion of new sanitation and safe water products and capacity building of the staff. At present, 35 professionals and paraprofessionals along with 150 field workers are engaged in water and sanitation interventions.

SUHAM supports SHG federations in attaining sustainability under sanitation and safe water. Cost-effective models are showcased to poor households to ensure affordability.

The trust is known for its product development and promotion; behavioural change communication strategies; capacity building of staff and governance for implementation and monitoring; bringing together the stakeholders and beneficiaries/communities by ensuring a favourable environment; and technical support for cost-effective models.

## WAVE Federation (Gramalaya) (2019)

The growth of urban slums has been one of the defining characteristics of the past decades in the developing world. With inadequate sanitation being one of the key concerns, community toilets have become a prominent solution. However, the operationalization of community toilets, their maintenance, and economic sustainability continue to remain a concern.

The SHE teams, consisting of women SHG members from the local slums, formed under WAVE Federation, with the support of a local voluntary organization, Gramalaya, have addressed this need comprehensively and sustainably. Individual SHE teams are responsible for overseeing and managing the financial sustainability of a network of public conveniences across the city. Members have been trained to maintain financial records, manage resources and ensure proper operations of the facilities. The teams simultaneously work to increase awareness on sanitation and hygiene within their communities. The SHE teams operate as part of the Women's Action in Village Empowerment (WAVE) Federation and are responsible for the operation and maintenance of around 200 public conveniences in the city. With at least two members in each SHE team and around 200 SHE teams currently operating in the city, nearly 400 women directly benefit from this initiative.

During the year 2019-2020, with the financial support (budget - Rs.2.25 Cr) from the HT Parekh Foundation, Mumbai, the federation retrofitted 95 Community Toilets (CTs) through Gramalaya across 65 Wards of Tiruchirappalli City Corporation. As a result, the community toilets which were constructed 20 -25 years back, have now been upgraded with the latest technology. This has ensured consistent usage and proper O&M of the renovated community toilets by the SHE team and WAVE Federation at Tiruchirappalli.

Based on the successful renovation of these 95 community toilets during the year 2019-20, Gramalaya approached HT Parekh Foundation again for the renovation of 100 additional community toilet complexes and a budget of Rs.2.35 Cr. has been sanctioned for the purpose.







The federation has been able to sustain the programme economically as a robust community-based organisation. Sanitation Hygiene Education (SHE team) has been efficiently managing the O & M of 150 CTs (out of total 370 CTs) through 150 SHE teams at Tiruchirappalli City Corporation (TCC) for the past two decades. The income generated from CTs is just about sufficient for their proper upkeep and maintenance. Besides, the surplus income generated from high-

income-yielding CTs is utilized for the O&M of CTs where less income is generated. All these SHE teams are closely monitored by the WAVE Federation. The income generated from these CTs neither goes to Gramalaya nor to Tiruchirappalli City Corporation but is utilized for the CTs themselves.

Additionally, 1500 Women SHGs, toilet cleaners, and plumbers are economically benefitted every day across 65 Wards of TCC through O&M of these community toilets. The social impact is that now users get clean and hygienic CTs that are also women-friendly fitted with incinerators.

Environmental sustainability has been ensured by the eradication of open defecation in the vicinity of the slums across 65 Wards of TCC.

The ripple effect has been that maintenance of CTs across 65 wards of TCC has become a people's movement and different stakeholders such as local leaders, elected representatives, local body officials, women SHGs, youth, volunteers, etc., are now involved to patronize and sustain the initiative.

Gramalaya provided handholding and financial support to the SHE teams and WAVE federation with the help of Arghyam and IIHS, Bangalore. For the past 21 years, "SHE managed toilets are considered as one of the most successful and sustainable models in urban sanitation for O&M of community toilets by a trained community-based organisation.

## Shelter Associates (SA) (2018)

One Home One Toilet (OHOT) model is unique because of its data-driven approach, use of technology such as Geographic Information Systems (GIS), Google Earth coupled with android-based smartphone technology, and integral behaviour change component. To ensure sustainability, the cost-sharing model is implemented in partnership with local governments and slum communities to deliver household sanitation ensuring its alignment with the Swachh Bharat

Mission. SA's model has allowed cities to address gaps in a targeted manner by strategizing phased interventions. The model aims to target issues in health, safety, and environment besides providing a data-driven mechanism supporting effective policy implementation and government fund utilization.

The OHOT sanitation model has been gaining prominence and from over 12000 in 2018, the numbers have now reached 23000+ home toilets in 7 cities of Maharashtra. With the growing number of toilets, SA has been able to achieve economies of scale through better bargaining power. On an average, SA has been able to facilitate close to 4000 toilets per year. The financial buy-in from donors and infrastructure investment from ULBs make the project cost-effective, besides ensuring provision for adequate construction materials fulfilling beneficiary needs.

Shelter Associates has been scaling its model across cities in Maharashtra. The impact of the OHOT program has been multifold since winning the award. The Pune Municipal Corporation that adopted the 'One Home One Toilet' Sanitation model with SA's support, ranked 1st across India under Swachh Bharat Mission for the delivery of over 46500 home toilets in the informal settlements of Pune. Additionally, using the contractor model of household toilet facilitation, Municipal Corporations of Panvel and Pimpri-Chinchwad have scaled their operations to facilitate 1000+ and 6000+ household toilets, respectively in the informal settlements of their regions. This was a faster approach compared to the regular toilet facilitation model implemented through SBM wherein money got transferred to beneficiary accounts in three tranches.

SA has launched an easily replicable toolkit detailing the OHOT model so that like-minded NGOs and organizations can successfully replicate the model. The toolkit is also validated and uploaded on the Government of India's Swachh Bharat urban website.

The organization is working with different stakeholders including the Urban Local Bodies of the intervention cities, corporates, and individuals who fund the initiative, and the communities who are equal stakeholders in the entire process. A separate Memorandum of Understanding (MOU) is signed with the City Municipal Corporation that defines the roles and responsibilities of both parties. The inclusive approach also allows SA to update the toilet completion data on the SBM platform.

SA's sanitation model is economically viable, for it is a cost-sharing model where SA provides toilet construction materials through CSR support while the beneficiaries invest in its construction. The social impact is evident from the improvement in health and well-being upon having a toilet at home, improved living conditions and livelihood for the masons living there, and up-gradation of lifestyle



through house upgradations incentivized due to toilet facilitation. At the same time, the OHOT model enables better faecal sludge management due to drainage and septic tank toilets since it brings an end to open defecation.

The organization has been implementing the OHOT program through strong use of data, community engagement, inclusive stakeholder participation, and cost-sharing approach which has been successfully replicated and scaled in 7 cities of Maharashtra with varied slum sizes, characters and densities and can also be taken across the country and even globally.

New technologies and processes have been introduced over time. Enhanced android-based technology for ease in data collection and analysis; use of Plus Codes, a digital addressing solution for better accessibility; continuous capacity building of stakeholders; extensive community mobilization, etc. have all contributed towards project excellence. SA's model and approach can be used for multiple sectors even during pandemics.

## Centre for Water and Sanitation, CEPT University (2018)

Work towards addressing the entire sanitation service chain in two towns of Maharashtra (Wai and Sinnar) since 2013 has led on to these towns becoming ODF. Since 2013 itself, the focus was on sustaining the ODF status and making them ODF+ through citywide faecal sludge management. These interventions were designed to cover operating expenses from the local taxes on sanitation. Introduction of scheduled emptying and FSTP led on to both cities becoming ODF+. Knowledge and Learning products were used to develop a State-level ODF+ and ODF++ frameworks, which were adopted in the national FSSM policy.

The program is being implemented cost-effectively and efficiently as the two cities of Wai and Sinnar in Maharashtra have, for the first time in India, implemented citywide inclusive scheduled desludging services. This service is now available at a much lower price as compared to what property owners were paying earlier for demand-based desludging services. Based on these experiences, various planning and monitoring tools and documentation have been developed. Therefore, this model can be replicated in other cities more cost-effectively as Government of Maharashtra scales up these experiences across more cities.

The organization has been able to scale up these interventions both at the State and national levels through policies and guidelines. The learnings from these two project cities have been adopted in the NFSSM policy, FSSM primer, and Swachh Survekshan that the Ministry of Housing and Urban Affairs (MoHUA), GoI has rolled out. The idea of scheduled desludging has been adopted by the Union Ministry of Housing and Urban Affairs (MoHUA) under its SBM program through the ODF++ protocol and Swachh Survekshan. The new 2020 CPHEEO Advisory on Onsite and Offsite Sewage Management Practices has recommended that scheduled desludging of septic tanks should be practiced, and they have also documented the case of these two cities to showcase how this can be effectively achieved.



Lessons from these two project cities were also used to develop the ODF, ODF+, and ODF++ frameworks by the Government of Maharashtra. This was later adapted by the Government of India for defining ODF/ODF+/++ protocols under the Swachh Bharat Mission. Various guidelines have also been developed based on the lessons from these cities like the Handbook for Making Cities ODF, ODF Sustainability Guidelines, Guidelines for Septage Management in Maharashtra, and Guidebook for Urban Local Bodies to Implement a Septage Management Plan. Based on this experience, the Government of Maharashtra is now planning to implement a State-wide scheduled desludging strategy.

The programme of scheduled desludging services has now been replicated in two more cities of Maharashtra – Kolhapur, and Satara. This support is through a grant from the HT Parekh foundation. Under this program, cities will use the tools for development of plans and monitoring which were developed and used in Wai and Sinnar for providing citywide inclusive FSSM services. Besides, the organization is exploring an innovative financing approach through a Development Impact Bond (DIB) for citywide FSSM services in 15 cities of Maharashtra.

Center For Water and Sanitation (CWAS) at the CEPT Research and Development Foundation (CRDF) is working with various government partners, funders, and sector partners for scaling up its interventions in India. They are supporting the Government of Maharashtra through an MoU in the implementation of Swachh Maharashtra Mission, through which the learnings from these cities are being scaled up across Maharashtra. This activity is being funded by the Bill and Melinda Gates Foundation (BMGF).

CWAS is a key partner in the NFSSM alliance. This enables them to scale up these lessons in other states as also at the national level. Other corporate funders such as HSBC and HT Parekh Foundation are now supporting CWAS to scale up these learnings in other cities of Maharashtra.

They have been able to sustain the programme economically and socially. The operation and maintenance costs are being met through the local government's resources. Through this program, a public-private partnership (PPP) model was successfully used in both cities to provide scheduled desludging services. This service is provided to all households and non-residential properties in the city, including the slums. Development and implementation of this approach has helped demonstrate sanitation and FSSM as a public service delivered through a PPP model.

Environmental benefits of this program can be summarised as follows: Monitoring of water quality in Wai since the implementation of scheduled desludging services shows improvements both around groundwater and river water.

More than 350 lakh litres of septage has been scientifically treated at both these FSTPs. This has also led to reduction in soil and groundwater pollution. Besides, solar panels have been installed at these FSTPs. As a result, both the FSTPs have become energy positive.

At the FSTPs in both cities, landscaped gardens have been developed by reusing the treated wastewater. In addition, in Sinnar, 8000 sqm of the urban forest and landscaped area have been developed. This helps reduce the use of fresh water and improve the overall environment around this plant.

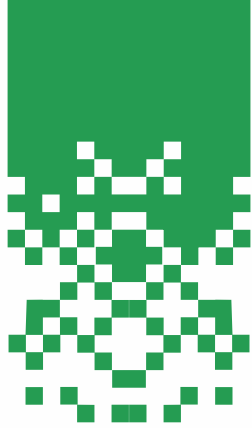
Establishing sustainable mechanisms was at the core of CWAS's approach. While CWAS worked very closely with the government from assessment to designing solutions, facilitation, implementation, and monitoring of the interventions, it simultaneously built the capacities of the local government officials at all stages.

The programme is one of a kind, citywide inclusive scheduled desludging programme, which covers all the properties (slum and non-slum areas as well as both residential and non-residential properties). Besides, runs on a Performance Linked Annuity Model (PLAM) approach for implementing scheduled services, where Capex for conveyance as well as regular O&M costs are mobilized from the private sector. The city governments have signed an exclusive contract with the service providers where payments are done through sanitation tax on an annuity basis and based on performance through an escrow mechanism. This has helped to introduce a 'pay-for-performance' mechanism where the private service provider is paid only on performance.

Another unique aspect is the use of online monitoring systems such as SaniTab, SaniTrack, and SanQ, for real-time monitoring of the FSSM services. These are now being used in the other two cities as well which have taken up scheduled desludging. Based on this experience, multi-city models for these tools are currently being developed.



## BEST COMMUNICATION IN SANITATION



## Best Communication in Sanitation

### GRIT by The Wire (2019)

Grit is an initiative of The Wire dedicated to covering manual scavenging and sanitation and their inter-linkages with caste, gender, policy, and apathy. The Grit initiative aimed to build a conversation around an issue that deserves a large amount of public attention. It has brought in several reports on topics ranging from the daily lives of manual scavengers and the discrimination and dangers faced by them; implementation of the Swachh Bharat Abhiyan; technologies developed that have the potential to eradicate manual scavenging; government's survey for enumerating the manual scavengers, and much more.



Launched in May 2017, close to 90 reports, opinion pieces, and videos had been published under the project till 2019. Their content has been in multiple formats, with text stories that are interspersed with videos, photos, and even poetry.

Grit is a long-term project for The Wire, given that sanitation and manual scavenging have been largely underreported by the Indian media. After winning the ISC award, they have continued their efforts to bring these issues to the limelight. While reporting is never cheap – especially ground reports – they have continued their efforts in engaging with the sector experts, and bringing in-depth views on the said subject to the public, including possible solutions and best practices in the field that local governments can employ.

The Wire continues to be funded largely by their reader's donations. When Grit won the award in



2019, there was a huge requirement for reporting and dissemination about the sanitation sector – and that continues to be the case today.

The Wire has been able to maintain its focus on issues around sanitation, particularly during the COVID-19 pandemic, highlighting the importance of sanitation workers, public hygiene, etc.

The Wire's articles and videos have always been freely available on the internet. They are now being

published in four languages – English, Hindi, Marathi, and Urdu – and their work on sanitation is often translated to non-English websites as this helps in better engagement with the readers from different parts of the country.



## Jury's Reflection



The ASSURED framework has at one go given us a way to judge the work of any organisation in any field. When looking at work in the social sector, it is important to study each of the characteristics the ASSURED framework offers us: affordability, very important in a cost-conscious, still largely poor nation; scalability, understandable given our numbers; sustainability, which our culture naturally believes in; universality, which again is important given the diversity of conditions; excellence, which we should try to achieve in all national projects; rapidity, needed to control the rot; and distinctiveness, which allows the innovation to stand out. It was particularly useful in a category as subjective as the best communication in sanitation, which cannot be examined only from the prism of numbers. Ideally, winners in every category should fulfill all conditions equally but we all know we are in an imperfect world, especially when it comes to social sector communication. But now whenever I am asked to judge any other award, I keep Dr. Mashelkar's framework at the back of my mind. It gives me an easy shorthand to approach the contenders and allows me then to dwell in detail on each required quality. I feel this framework needs to be more widely disseminated as it can help us standardize and raise the bar in social sector achievement. This is an area of tremendous growth, especially with the increasing involvement of committed young people, and the least we can do is to give them a fair and uniform way of measuring their work.

**--Kaveree Bamzai**

Independent journalist at India Today,  
The Indian Express, and The Times of India



## BEST INNOVATIVE FINANCIAL ACCESSIBILITY MODEL FOR WASH: LARGE FINANCIAL INSTITUTIONS, MICROFINANCE INSTITUTIONS, BANKS, GOVERNMENT FINANCIAL INSTITUTIONS, ETC.



## Best Innovative Financial Accessibility model for WASH: Large financial institutions, microfinance institutions, banks, government financial institutions, etc.

### Annapurna Finance (2019)

With the aim of providing financial assistance to individuals for access to safe water and sanitation facilities at the household level, the SWASTH (Safe Water and Sanitation To Households) scheme was launched by Annapurna finance in 13 states of the country. These loan products focus on the utilization of funds and awareness regarding safe water and sanitation that lead to convenience, saving of time, increased privacy, heightened safety, reduced expenditure on healthcare, and improvement in overall quality of life. It also looks into financing entrepreneurs for cleaning toilet pits and sewages, dealing in sanitary products, water ATMs, and biogas plants.

By 2019, Annapurna was able to increase the outreach of its financial products to 50,429 households. Loans are offered for the construction of double or single pit toilets, water connection, hand bore well, and water purifier.

Annapurna has been able to make its products cheaper to make them economically sustainable and of use to the common public. The interest rate for water & sanitation loans was 22% in 2019 which has been lower to 21.25% in 2021. Besides, these loans are extended only to the existing customers (who have availed group loans) which eliminate the cost incurred in appraising the repayment capacity of the potential loanees.

The organization has been able to upscale and increase the impact of its program based on inter alia the beneficiaries' feedback. Based on its customers' feedback, Annapurna has planned to launch several products such as specially-abled toilet loans. These loans are provided to people with disabilities.

The organization is working with external partners like Water.org to upscale and replicate its programs across other geographies. It has been able to increase the outreach of the water & sanitation loans to 5 new states- West Bengal, Haryana, Punjab, Himachal Pradesh, and Karnataka. More than 1 lakh households have been reached out through various programs.

Annapurna has been able to run the SWASTH scheme sustainably and economically as the loan recovery rates are good. Having said that, the program was impacted by Covid-19 and the subsequent lockdown, resulting in delayed repayments, however, with the easing of lockdown, recovery rates have increased again.

Environmental and social sustainability is ensured by maintaining a close connection with the



customers as also by suggesting and supporting them in the construction of resource-efficient toilets which utilize less amount of water.

SWASTH has been more than just a product for Annapurna as the organization has made it a mission to reach out to every customer and help them in having access to safe water and sanitation. Annapurna aims at providing end-to-end solutions to its clients in terms of water and sanitation.

SWASTH is unique because the organization has now moved towards digital and paperless processing of the water & sanitation loans. In collaboration with Water.Org, Annapurna now also focuses on awareness and sensitization programs essential for safeguarding its customers from Covid -19. Cashless recovery is being pushed forward and loanees are trained to pay through online or UPI applications. Posters are also digitally shared thereby moving towards a contact-less approach for customer sensitization.

## **IDFC First Bank (2019)**

IDFC First bank's Suvidha Shakti initiative not only caters to the sanitation requirements of the rural households but also addresses their other priority needs. They developed a customized product to be offered for sanitation at an individual level. By January 2019, they had disbursed 105,000 loans across 20 states of the country, through this model.



The bank has continued its efforts to market the product efficiently by employing its unique marketing strategy which comprises WASH adoption through various case studies, community engagement to spread awareness, and by using peer group mode. Besides, their exclusive method of leveraging the technology makes them work more efficiently. Digitization has helped their field officers to get end-to-end solutions at their fingertips. Additionally, digitization of origination, underwriting, and servicing has allowed them to

address their customers' needs more efficiently.

The bank has been able to upscale and increase the impact of its program and as of June 31st, 2021, its WASH program had reached out to over 2 Lac households, positively impacting approx. 8 lac people. They are continuously increasing their network and now, the product is offered through 600+, branch networks across Madhya Pradesh, Gujarat, Karnataka, Odisha, Chhattisgarh, Maharashtra, Rajasthan, Tamilnadu, Kerala.

The program has received positive feedback from customers and impact, post building the sanitation assets especially in terms of time savings, convenience, and increasing the productivity of family members towards work and study has been seen.

IDFC First bank is working in close coordination with Animedh Charitable Trust (ACT), a non-profit organization with a dedicated team of 20 Project Coordinators, which helps the branch team in lead generation through WASH Awareness among the target customers.

The bank has been able to ensure environmental sustainability by adopting end-to-end paperless transactions right from loan origination to the maturity of the loan.

Social sustainability has been ensured through their core product – the W.A.S.H program, developed to fix the issues of the Watsan community. Moreover, they are approaching rural households with integrated product solutions wherein in addition to the credit for income livelihood, a customized product for wash and sanitation is offered to build infra for access to safe and drinkable water along with sanitation.

The unique aspects of this program are that the product meets various requirements of the customers right from a water filter purchase to installing handpump, digging borewell, as also installing rainwater harvesting system. On the sanitation front, this includes toilet creation, renovation/repair of a defunct/old toilet, and construction of an accessible family toilet.

Additionally, it is a 'simple product with simple features' - loans are given without guarantee/mortgage; Maximum loan amount is sanctioned up to INR 50,000/-; Loan assessment is quite simple, and extension of loan is done with effective end-use monitoring mechanism with the help of technology.

## Dhan (Development of Humane Action) Foundation (2018)

Intending to create access to credit for safe water and sanitation for sustaining the livelihood enhancement of the poor towards a better standard of living, the foundation launched its SCALE UP (Sustainable Credit Access for Livelihood Enhancement of poor through Upgraded sanitation and safe water towards addressing Poverty) initiative, across 13 states of the country.

DHAN Foundation works with commercial banks under the SHG-Bank Linkage program where the cost of lending is comparatively cheaper and highly accessible. DHAN provides strategic directions to around 250+ SHG Federations where 3000-5000 poor households have memberships. It also works with banks for accessible and affordable lending to the poor.

During the last five years (2016-2021), approximately INR 700 crore lending at the rate of 15-18% was facilitated for safe water and sanitation infrastructure development in 4.2 lakh poor households. The institutional and financial sustainability of the operations is being ensured.

The foundation has now expanded its program SCALE UP to 80 districts from 14 states. The focus has now shifted from new toilet construction to toilet renovation, improvement, infrastructure for drinking water, and roof water harvesting, etc.

The organisation closely works with the banks, district administrations, and district rural development agencies in project districts. State-level partnerships have also emerged in the states



like Tamil Nadu, Karnataka, Maharashtra, and Madhya Pradesh. The donor cum strategic partner water.org provides financial and technical support for expansion, capacity building of teams, and technological advancement.

Sustainability is the core focus of all the interventions of DHAN foundation. The program sustainability is being ensured through the promotion of new sanitation and safe water products by focussing on community demands. The financial sustainability and viability is being ensured through its microfinance operations at SHGs and federation level that helps in meeting expenses related to its workforce. At present, around 300 field staff, 20 professionals, and 10 Civil Engineers are being deputed exclusively for the WATSAN programme.

The implementation and monitoring of the program have been kept practical by promoting voluntary community governance at the village, slum, panchayat, and block level. The community governance is supported by the field workers and these workers are guided by the professionals and Civil Engineers. The safe water and sanitation portfolio provides strength and value addition to the SHG Federations. Besides, DHAN ensures capacity building at all levels.

The program is unique because it has eight products under its umbrella and the organisation generates demand for them by working closely with the community. Behavioural Change Communication (BCC) strategies are being applied to influence/ convince the community using knowledge and attitude building processes. Once the demand is generated, financial and technical support is ensured through the SHG federations.

## **Grameen Koota Financial Services Pvt Ltd (Now Credit Access Grameen Limited) (2017)**

Grameen Koota was recognized for increasing financial accessibility in rural Karnataka and Maharashtra through their three-pronged approach - Creating awareness among potential customers; Mason training; and Providing access to affordable credit for toilet construction.

Currently known as Credit Access Grameen Limited (CAGL), the organization has been continuously working towards the empowerment of rural women by strengthening their last-mile connectivity and using technology for the seamless distribution of their financial products. CAGL's high, tech-high touch delivery model helps to serve the customer and rural households quite efficiently. They have digitized all customer touchpoints by equipping their field force with handheld tabs which enable automated and paperless customer on-boarding process through faster KYC verification and instant credit bureau checks. Besides, they have enabled automated loan applications, same day as well as on-field loan disbursements to eliminate the need for visiting the branch. This has significantly reduced the TAT with increased responsiveness to customer needs. The efficiency achieved without burdening customers is passed on through reduced pricing and effective service. The rate of interest charged by CAGL is one of the lowest in this segment.

CreditAccess Grameen not only offers loan but also work towards creating proper awareness on the

importance, maintenance, and benefits of having these facilities. Their programs have now been extended to Madhya Pradesh and Tamil Nadu in addition to Karnataka and Maharashtra where they were already implementing the programs.

This was achieved with the help of their executing partner NGO - Navya Disha. Various interventions like street plays, wall paintings, group interaction, village level, panchayat level, and block-level awareness activities were executed with the support of local government institutions such as village authorities, gram panchayat, block, and district panchayats. These activities were replicated in new states by involving expert volunteers who drive towards a mindset change.

CAGL has been able to sustain itself economically by availing funds from various lenders for providing loans to its customers. The benefits derived from this are passed on to the customers by offering them loans at affordable rates. Additionally, the government's support in the form of subsidies for such activities also encourages the customers to avail financial assistance from CAGL to build sanitation facilities.

Social sustainability of the organization has been ensured through its continuous support to low-income households. CAGL has been able to make a significant difference by helping the entire household through various loans to meet their life cycle needs as also ensuring a healthy and clean environment to positively reinforce their health and reduce the health expenses.

From 3.7 lakh customers in 2017, CAGL has reached approx. 3 million customers and has the vision to reach 1 crore households by the year 2025. This aptly is indicative of the practicality of the initiative. While new customers start the journey by availing financial assistance for income generation activities, aspiration for a quality lifestyle will result in the sanitation and water facilities being vital needs for the customers. Through coordinated CSR activities, CAGL intends to continue the focus on improving sanitation and ensuring access to clean water as one of its core activities.

CAGL's initiative is unique because it provides sanitation loans up to Rs. 15000 which can be repaid in 104 weeks and water loan up to Rs. 5000 which can be repaid in 52 weeks. These products are offered at affordable interest rates and available throughout the year with the disposal of loans on need. A flexible repayment option is provided to customers. Customers can repay in weekly, biweekly, and four weekly tenures.

Moreover, the high tech-high touch model adopted by CAGL has enabled CAGL to maintain on-demand loan availability and uninterrupted service to customers. Digitized loan applications, cashless disbursement through bank transfer, same day disbursement, and cashless collections have resulted in ensuring proper guidance and awareness to our customers. The Community Led total sanitation approach and campaigns to sensitize the communities have inspired them to leverage credit financing.



## Jury's Reflection



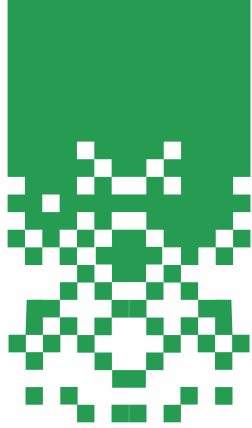
It has been a pleasure to be associated with the ISC-FICCI Sanitation awards as a juror since inception. The journey over the past 5 years has been fascinating and I have learned a lot from all the applicants and from interactions with the other jury members including our jury chair, Professor Mashelkar who introduced us to the rigor and discipline of the ASSURED framework. As the Chair for the category of “Best Innovative Financial Accessibility for WASH”, we at Water.org are particularly pleased to see the ongoing commitment to water & sanitation (WSS) lending from a variety of financial institutions including small and large microfinance institutions, government and non-government self-help group organizations and private and public sector banks. Their commitment to scaling and sustaining affordable access to WSS finance nicely complements the Government's initiatives of enabling access to safe water and sanitation for all.

– **Vedika Bhandarkar**

Chief Operating Officer, Water.org



# BEST ENGAGEMENT MODEL IN SANITATION BY A SOCIAL ENTERPRISE / START-UP



# Best Engagement Model in Sanitation by a Social Enterprise / Start-up

## Padcare labs (2020)

To address the challenge of menstrual hygiene management (MHM) and its effect on women's health and the environment due to improper disposal of sanitary napkins, the SANECO (Smokeless Sanitary Napkin Disposal System ) initiative was piloted in 5 locations in Pune city. The SANECO includes UVECO which are secured collection bins for the washroom, SANECO 30 which is a novel central processing unit, and SANICYCLE which is a collection and central disposal service. The SANECO machine provides safe, accessible & eco-friendly sanitary waste disposal and recycling system that uses treated waste as fuel.

By 2020, it had successfully disposed and recycled over 750 sanitary napkins and, in the process, saved 2MT of carbon release. The initiative prevents contamination of washrooms hence reducing chances of urinary tract infections. It helps improve the dignity of waste pickers along with maintaining the privacy of users while at disposal.

Padcare is working on menstrual hygiene, and the feedback that they have received in terms of health, and hygiene has helped them in optimizing their products. They realized that besides increasing the product efficacy they need to focus on service efficiency. Based on the service provided in public washrooms, they optimized their product as well as developed a service-based model for better on-ground implementation of their products.

The organization is able to provide cost-effective and efficient service as well as the service of menstrual hygiene management. They have been able to reduce the cost of their service by more than 30% and that of the product, by INR 50,000.00 while continuing to maintain the quality of the product.

They have been able to increase the social and economic impact of their programme, by deploying two comprehensive pilots along with Tata trust, and Sukhibhava, a local NGO. They deployed more than 40 collection points at ITI (Industrial Training Institute for women) having more than 600 females. Further, their efficiency was improved by forging new associations with stakeholders as well as by getting beneficiary feedback.



The organization has not been able to expand in other geographies due to the pandemic situation that halted its expansion plans. However, they have plans to expand to other geographies within 6 months.

Padcare is working with NGOs, foundations as well as government bodies like the Maharashtra Start-up Innovations Society, and Tata Trust. Under Maharashtra Start-up Innovations Society, they are associated with different kinds of associations and donors who help them on the implementation aspects, regulatory aspects, and association with the investors. Tata Trust helps them in implementing their initiative on the ground for women from rural areas.

The impact that Padcare is getting aligned socially, and environmentally is that they are now able to serve more than 5000+ females through their MHM system. Through their sanitary napkin disposal and recycling mechanism, they are able to save 5 metric tons of carbon monthly and to date, they have conserved more than 60 metric tons of waste in the past 6 months.

The intervention has no direct economic benefits, but its indirect benefits are reduced health-related expenses, reduced infections like UTIs, etc.

Initially, the organization explored various models but recently through beneficiary feedback (they are serving 5000 females) they found a replicable and scalable model, in terms of better service delivery and partnership associations. The early evidence on the model that they received recently is the service model.

During early phases, the organization was focussing on the disposal of sanitary napkins but now Padcare is working on a non-stop solution for MHM through awareness, accessibility, and sustainable disposal. Padcare is an innovative company, and they will be coming up with a few more products aligned with feminine hygiene problems, shortly.

## **Agrata City Level Federation (2020)**

As sanitation service providers for the Berhampur Municipal Corporation, the Agrata City Level Federation (CLF) of Self-Help Groups (SHGs) has more than 7,000 members from low-income households. It is the only CLF of SHGs formed so far in the State under the National Urban Livelihood Mission (NULM) and has been involved in multiple income-generating activities, particularly in the provision of sanitation services in partnership with the Urban Local Body (ULB). By 2020, the CLF was engaged in construction and maintenance of 4 mini hybrid toilets; O&M of 38 community toilets; provision of bottled drinking water through installation of RO water filter; a door-to-door collection of segregated solid waste from households; plastic waste management;

spreading awareness on sanitation programmes and their benefits and was also involved in the O&M of the Septage Treatment Plant (SeTP) in Berhampur.

Since the beginning of the intervention, Agrata CLF under the Mission Shakti program has been striving to make the operations not only cost-effective but also cost-efficient. To achieve this target, the Federation has been constantly trying to optimize its operations to reduce both resource



wastage and idle time of the SHG members. To make the interventions economically better sustainable, the CLF is involved in the creation of additional sanitation infrastructures such as the community and public toilets as hyper marketplaces where along with sanitation services, users will also be able to buy sanitation-related products such as soaps, handwash, sanitary napkins, etc. Moreover, the services provided by the SHGs under Agrata for both FSSM and Solid Waste Management (SWM) have been cost-effective, efficient, and participatory as compared to the contractor-driven model of waste management.

The Federation has been able to enhance the impact of its interventions through feedback received from the users of sanitation services. Earlier, there were a few challenges related to streamlining solid waste collection. However, with inputs from the households and citizens, the members engaged as Swachh Saathis prepared regular route charts for the solid waste collection vehicles. Through this, they have been able to reduce the time for covering specific areas and ensuring that none of the households/lanes are missed.

Swachha Sathis also accompany solid waste collection vehicles in their trips and create awareness amongst the households to provide segregated household waste. This has not only increased the amount of solid waste collected by almost 20% but it has also been effective in motivating people for giving segregated waste.

Following Agrata's example, two other CLFs, established in Berhampur have also started taking up sanitation-related service provisions such as the operation and maintenance of Community Toilets. The leaders have also been motivating the ALFs/ CLFs in the city and providing them with necessary managerial training for sanitation-related services. Similar models of engagement have also been adopted in ULBs across Odisha where ALFs and CLFs of women SHGs are partnering with the civic bodies to provide quality sanitation services.

The Federation has been able to sustain the interventions by creating a circular sanitation economy. It generates substantial revenue for the ULB through the collection of user fees and also income generated from the sale of organic compost (prepared from treated solid waste), recyclable plastic, and soil conditioners from treated bio-solids. The SHGs managing the Micro Composting Centres (MCCs) and Material Recovery Facilities (MRFs) also receive incentives from the sale of treated and recyclable solid waste. Nearly 7,000 SHG members under the Federation have now access to better livelihood opportunities across the sanitation value chain along with a regular source of income. This has helped in enhancing the social and economic status of women associated with the CLF by providing them economic empowerment and changing prevalent social norms to ensure more inclusive growth. By engaging in the delivery of sanitation services, Agrata has been able to contribute towards better practices in waste collection and ensure safe reuse and disposal.

The model is practical and is already being implemented across ULBs in the State. The Mission Shakti SHGs are being increasingly involved in sanitation-related entrepreneurial interventions with support from the ULBs and State and are proving to be more effective change-makers in the field of sanitation.

Agrata is the first city level federation of SHGs in Odisha engaged in multiple activities across the FSSM and SWM value chain. It has forged a unique, effective, and participatory partnership with the Berhampur Municipal Corporation setting a benchmark for other SHGs and federations to emulate. Besides, the federation has made efforts to build the capacity of its members through training and exposure visits and engaged more and more women from vulnerable backgrounds.

## **Eram Scientific Solutions Pvt Ltd. (ESS) (2019)**

Eram Scientific's eToilet® is an indigenous & innovative product that is India's first automatic, unmanned, electronic public toilet. Through this unique product, they have attempted to address the inherent challenges of hygienic public sanitation on the whole. eToilet® is a patented solution and is 100% environment friendly and is developed on a holistic convergence of the latest technologies in electrical, mechanical, web, and mobile, which is cost-effective and suitable for the geographic and demographic patterns of any location. It also adopts the concept of "Internet of Things" (IoT) for monitoring and proper upkeep. As a result, eToilet® is positioned as the perfect solution which addresses all the existing challenges of sustainable public sanitation, effectively. Above all, it offers a comprehensive maintenance support mechanism to ensure sustainable operation of eToilet®, beyond the commissioning stage.

A Pan India Service Network is there to cater to the operations and maintenance of units based on AMC. It works on a sustainable revenue model, some including an outright purchase by the local bodies, a sponsored model involving CSR funding by corporates, and an entrepreneurship model where the operator can have a parallel revenue stream by getting advertisements on the exterior and walls that accommodate scrolling and back-lit displays.

The organization facilitates community action and engagement through the MES model (Micro

Enterprises for Sanitation). The concept developed here is to transform every public sanitation infrastructure into enterprising units with clear business models. This business structure engages SHGs, JLGs or Nano-Small Entrepreneurs to take charge of the entire eco-system, driving the idea of the community contributing to sustaining and maintaining sanitation space at the same time bringing new ideas and business to his or her community.

The community-owned and managed sanitation facilities named 'MES Model' was successfully piloted in the Nedumangad Municipality, Kerala, and ESS was market ready to scale up the MES programme bringing entrepreneurship model in sanitation. They are implementing the same in 6 other locations in Odisha with CSR funding from HT Parekh Foundation.

Riding on the success of the first launch, Eram Scientific Solutions launched India's first-ever "urban sanitation infrastructure" on 19th February 2021 - connecting livelihood, healthcare and sanitation" in partnership with Angul Municipality, Government of Odisha, funded by Eram Scientific Solutions and District Mineral Foundation, Angul, supported by RTI and UNICEF; to promote the best practices in sanitation facilities, providing livelihood, and encouraging the marginalised community to get involved in mainstream society. The toilet and food kiosk was installed in the bustling marketplace of Angul Municipality, Odisha.

Saptarang Self Help Group, from the Transgender Community which has been involved by the Angul Municipality for its beautification drive, has been engaged to operate the model. Eram Scientific Solutions has set itself to the task of implementing the "MES Model with the Health component", in Angul and handhold the SHG group to operate this model successfully. At the initial phase, ESS has facilitated the project capacity building workshop for the SHG to provide the necessary skill training and orientation. The Model is a blend of eToilet (sanitation infrastructure) and eSHOP (Food Kiosk) at a little distance. Additionally, the health kit is an added component to the MES Model in Angul which gives instant health test output for most of the basic health parameters of an individual.

This project envisages a win-win for all stakeholders - from the Entrepreneur, enabling organizations with CSR funds, the Urban Local bodies as well as Eram Scientific Solutions.

They plan to install another 100 such models this year (2021) in Kerala, Mumbai, Chennai, and Odisha as per the response received from the government and CSR Companies.

ESS has been working with Angul Municipality, various corporations/ municipalities/ panchayats in Kerala, HDFC to implement MES. They are supported by Toilet Board Coalition, RTI, UNICEF, KADCO, HUL, Metal Industries in implementing sanitation solutions. ESS works with the topmost universities of the world and licensee of path-breaking sanitation solutions developed by Caltech University, University of South Florida,



and Bristol University, etc. ESS products are approved & recognized by the various government bodies of India/ government of Kerala and other public/ private organizations.

Kerala government-owned enterprises (PSUs) like Keltron, Metal Industries Ltd., KSIE, and Gender Park, etc. hold the selling rights of Eram Products. The SHG Groups, Women-led Groups are identified by the clients/government offices who are subsequently shortlisted to operate the MES. The Fund for the entire project is from Sanitation/Livelihood Funds with government or CSR Companies.

The organization has received good traction and response, especially from the MES at Angul in Odisha. The Sales output from the Kiosk generates a daily sales revenue of approx. INR 2000-3000/- per day. The MES is operated by the Transgender Group, 'Saptarang' who are successfully running the model. The toilet usage and its cleanliness are taken care of by the group that helps in its maintenance and upkeep, and in advising the community/ shopkeepers on the modality of its use. Biodigester tanks underground provide the safe disposal of the waste at the site itself. The toilet ensures a regular supply of water with an underground 3000 litre capacity water tank, taking care of the intermittent supply of water in the region. Other waste management solutions can also be very easily integrated with the MES.

Being a community-engaged, community-led model, the selected SHG members who operate the entire model becomes a single point source who takes ownership of the sanitation space; is trained and provided skill development to run the MES as an enterprise, generating a decent income for her family. Besides, she is trained to be the 'Sanitation Champion' bringing the much-needed sanitation/hygiene best practices causing behavioral impacts in the community. This is evident from the pilot installation in Angul, Nedumangad, and very recently in Cuttack and Puri.

ESS introduced its flagship product "eToilet®" way back in 2008 with the revolutionary concept of





technology-integrated-sanitation to address the challenges associated with public sanitation (community and public toilets or CPTs) in the society. Since then, they have continued to invest in R&D to build newer products like off-grid self-sustained CPTs in collaboration with the prestigious Bill & Melinda Gates Foundation initiatives. They developed five different business models around sanitation - eToilets+ food shop; eToilets+Food & Health Kiosk; eToilets + Small Agri Clinic; eToilets + Telemedicine; eToilet + Artisan's products in Tourism locations, etc. They have piloted these models in various locations.

Additionally, ESS developed the model as Micro Enterprise for Sanitation (MES). MES integrates livelihood to sanitation space, bringing impact in the community where public toilet is installed. The MES infrastructure and entire management of each project from finding locations, doing a feasibility study, liaising with LSGDs, to entrepreneur selection, training, infrastructure, implementation, and logistics support for MES is provided by Eram Scientific Solutions. They have liaised/partnered with various major industries as solution providers in the food, and health sectors to support logistics and services.

The MES catalysis for women's aspirations & empowerment is that women are empowered with economic independence enabling their socio-economic development. Further, women are made the educator and role models to drive safe & unbiased sanitation messages faster in the society. Women-centric sanitation space encourages other women in the community to be more resilient and independent. Products related to hygiene are made more readily available, giving more choices and options for sanitation and personal hygiene management. The model takes ease of access and a safety-first approach.



## Jury's Reflection



Providing safe sanitation in the developing world is still a major hurdle to achieving the United Nations' Sustainable Development Goal (SDG) 6 (clean water and sanitation), with 4.2 billion people or half of the world's population lacking safely managed sanitation services.

This is because the solid waste management systems in developing countries are over-burdened and lack finances for optimal operation. This threatens both the health and environment. It is in this context that we discuss the non-capital-intensive circular economy solutions. These solutions not only design innovations to reduce waste, but also go beyond and highlight the under-explored potential of waste as an economically viable resource.

The circular economy for sanitation (CES) emphasises on the entire sanitation chain: manufacturing material for toilets, collection of waste, treatment of faecal sludge, and transforming this waste and sludge into products that can be used by other industries like fertiliser, fuel and clean water. This can help address other SDGs including SDG 7 (Affordable and Clean Energy), SDG 8 (Decent Work and Economic Growth), SDG 12 (Responsible Consumption and Production), and SDG 15 (Life on Land).

Ultimately, CES can enable a self-sustaining sanitation business model that accelerates demand for improved sanitation as well as its by-products, leading to wider economic and environmental gains.

Over the last few years, the Government as well as other stakeholders have been working towards enhancing access to water, sanitation, and hygiene facilities. Due to the programmes like the Swachh Bharat Mission (SBM), the number of people without access to toilets has reduced significantly. Awareness generation has also been responsible for sustained usage of these facilities. India Sanitation Coalition has also played a key role in supporting safe and sustainable sanitation. I am proud to be associated with the Coalition, which is consistently striving towards creating impact through multi-stakeholder collaboration.

I ardently believe that the private sector, especially start-ups have a key role to play in addressing the sanitation related challenges in the country and achieving the targets set up by the Indian Government. It is heartening to see social enterprises and start-ups such as Padcare Labs, Agrata City Level Federation, and Eram Scientific Solutions Pvt. Ltd. implementing innovative business models across the sanitation value chain. Their focus on livelihood development, proper waste management, and introducing circularity in the sanitation ecosystem has a multiplier effect on health and well-being of people as well as reducing the environmental footprint.

– Parul Soni

Global Managing Partner, Thinkthrough Consulting

## Jury's Reflection



India's rapidly growing economy, the fast pace of urbanization, and population growth have put tremendous pressure on the water and sanitation infrastructure. Though India has achieved significant progress under Swachh Bharat Mission, nonetheless, the demand for clean water and sanitation services is expected to increase in the future and significant investments and interventions including engagement of social enterprises are necessary to meet these needs and sustain the progress. However, most current models require high investment, where the potential revenue generation is low. Looking at the current challenges, India needs numerous social entrepreneurs with innovative solutions to society's most pressing social issues in the areas such as sanitation, water, and environmental problems. In the past couple of years, we have seen some positive efforts from ISC-FICCI to promote social enterprises by recognizing innovative, cost-effective, and self-sustained models through the prestigious Annual ISC-FICCI Sanitation Awards. It is heartening to see that in the last few years, ASSURED Framework adopted by ISC-FICCI to identify award-winning entries has helped social enterprises such as Eram Scientific Solutions, Agrata City Level Federation, and Pad Care labs to showcase some innovative solutions under the Social Enterprise category. These enterprises have successfully demonstrated affordable, scalable and sustainable, business models to address some of the pressing sanitation challenges in India while maintaining sustainability through viable revenue models. As we know the number of investment-worthy Social Enterprises (SE) is on the rise, but limited access to growth capital remains a key constraint and needs an immediate solution. Though the SE space in the country continues to grow, the ecosystem to support it will need to grow as well. We need effective, innovative, and sustainable solutions to address pressing sanitation and environmental challenges in the country.

**– Mr. Asad Umar, Ph. D.**

Senior Programme Officer- WASH & Health  
Aga Khan Foundation



# BEST FAECAL SLUDGE AND SEPTAGE MANAGEMENT (FSSM) MODEL: URBAN AND RURAL



# Best Faecal Sludge and Septage Management (FSSM) Model: Urban and Rural

## Berhampur Municipal Corporation (2020)

Berhampur city not having an underground sewer system necessitated the implementation of a non-conventional FSSM (faecal sludge and septage management) method to manage the black water generated in the city. The Berhampur Municipal Corporation (BeMC) through its initiative ensured infrastructure for safe emptying, transportation, and treatment of solid and faecal waste as well as addressing gaps in systems and processes associated with FSSM in the city.

Periodically, it develops City Sanitation Plans (CSPs), identifying the key areas of intervention across sanitation sub-sectors. It further engages community-based organizations in operation and maintenance (O&M) of the community and public toilets (CPTs), collection, transport, treatment, and reuse of faecal waste along with mechanised cleaning of septic tanks and safe disposal of faecal sludge in the treatment facility. The communication campaign 'Malasur' supported by BBC Media Action was also launched to start the conversation around FSSM. Additionally, the SHGs were engaged as 'Swachh Sathis' for awareness generation on FSSM.

Berhampur attained ODF status towards the end of the year 2018, as such, effective implementation of FSSM helped to achieve ODF++ status in late 2019. Engagement of women in the FSSM value chain for O&M and demand generation for mechanized cleaning led to their social and economic empowerment besides enhancing community ownership.





BeMC has been able to implement the FSSM model cost-effectively and efficiently with additional interventions being undertaken to make the infrastructure and services accessible and affordable for all households in the city. While procurement and use of small cesspool vehicles have helped in increasing access to congested lanes and urban-poor settlements, subsidised desludging services provided by the ULB for the urban poor households have helped in making services affordable for the vulnerable groups.

Successful interventions under the model are being extended to the periphery and other areas of the city. Community and Public Toilets across the ULB have been facelifted to improve both the toilet infrastructure and services for the users. An additional Septage Treatment Plant (SeTP) of 60 KLD capacity is now coming up in the city to cater to the growing population. Both the FSSM infrastructure and facilities are now being utilized for urban-rural convergence where *Gram Panchayats* in a 20-km radius are now directed and encouraged to use the facilities. Women SHGs continue to actively participate in the operation and maintenance of CPTs and the SeTP, along with demand generation for mechanized desludging and spreading awareness on key FSSM behaviours.

The Berhampur FSSM model has now been scaled up across other ULBs in the state. Nearly 50 ULBs are now in various stages of implementation of a similar model. The ULB has also been partnering with various organizations, both government and non-government like E-Gov for digital monitoring of the FSSM services.

The FSSM services are provided basis user fees making it economically sustainable. Moreover, the ULB has facilitated the procurement of additional cesspool vehicles for sanitation workers to make them self-sustainable, and to increase mechanized desludging in the city.

The intervention is environmentally sustainable as Berhampur has adopted the FSSM Regulations 2018. As per the Regulations, it is mandatory for all cesspool emptier vehicles to dispose faecal

waste only at the treatment plant and not dispose indiscriminately into water bodies and open fields. Both the treated wastewater and sludge at the plant are being reused for landscaping and as compost for gardening, respectively, leading to resource recovery.

Social sustainability has been ensured through partnerships with local women SHGs across the FSSM value chain. It has resulted in increased participation of communities like women's collectives and community ownership of sanitation facilities. Nearly 7000 women SHG members from the urban-poor communities have directly benefitted from this partnership through enhanced individual and household level incomes.

Berhampur has adopted a community-led, cost-effective, simple-technology sustainable model for FSSM engaging women across the value chain, which could be easily replicated by other cities with similar profiles, making the intervention pragmatic. The cities can adopt the policy and institutional framework, service contracts adopted by BeMC in engaging women SHGs, etc. The communication campaigns led by women for promoting desired FSSM behaviour among citizens is another area that could be implemented.

The ULB-community partnership in the implementation of FSSM in Berhampur is a unique women-led model, where the ULB partnered with women collectives in each stage of the FSSM value chain. Women collectives were trained to build and operate community toilets, and operate and manage the septage treatment plant, and also in spreading awareness on desired FSSM behaviours among people. While the ULB benefitted from the skilled workforce of SHGs, the SHGs gained through enhanced income levels from varied livelihood opportunities.

They have shared the learnings through inter-city workshops, knowledge platforms, and exposure visits for others to witness this community-driven FSSM model across the value chain.

## Banka Biolo (2020)

Pluto, a small-scale Faecal Sludge Treatment Plant (FSTP), based on Geotube technology, was developed to address the challenges of safe disposal of fecal sludge and health risks due to poor handling of the sludge. The FSTP has GPS-enabled desludging trucks that can be monitored by the local authority. The sludge/septage is screened and then taken into a holding tank where the homogenization of sludge is processed. The homogenized sludge is closed with a polymer and post-polymerization it is pumped into a geo tube where the solid-liquid segregation occurs.



The geo filtrate water is subjected to treatment with a carbon-activated sand filter. The retained solids in the geo tube are sundried for 6-8 weeks, then the pathogen-free biosolid is pulverized for packing, which is used for soil conditioning and agricultural use.

With around 500 trucks of sludge treated in Warangal and Rajam combined, estimating each truck is for a household with 5 people, approximately 2500 people had benefited from this intervention by 2020. The technology focuses on maximum reuse of the treated sludge with 75 percent of the water being reused and 4-5 percent solid waste being converted to bio manure which is used by the local farmers.

The organization has redesigned the system to suit smaller and semi-urban areas and has implemented 6 models in the last year. They successfully replicated this model in 2 states namely Andhra Pradesh and Telangana.

They have been operating the plants and have treated nearly 3 million liters of fecal sludge successfully and have sold 40 tonnes of organic soil conditioner to the local farmers. This clearly shows the practicality of the model.



## Jury's Reflection



### **FSSM in Berhampur**

FSSM implementation in Berhampur is as close to an idea for a small town as is practically possible. They tick all the checkboxes in any sanitation practitioner's wish list – awareness campaigns, demand generation initiatives, citizen-friendly services, differential pricing of services so the poor can afford them, a simple cost-effective treatment technology, reuse of treated water and solids – and have systematically worked towards public health and environmental outcomes. That would have been good enough, but Berhampur went further!

In evolving these initiatives with the participation and leadership of women through self-help groups Berhampur has started an exciting new experiment. In doing so they have acknowledged that sanitation is a social good, best managed by the community. Several aspects of FSSM operations, such as simple operations, low-tech interventions, and low operating costs, enable such an approach. It is no surprise that these initiatives have led to improved livelihoods.

The key to all of this of course is building a self-sustaining financial model, with either user fee or municipal revenues as sources of funds. For that to happen sanitation has to be a felt need that citizens value and are willing to pay for. Communities owning sanitation service delivery and building shared responsibility for their amenities and environment is perhaps the most reliable way to achieve that end. Only time will tell if we succeed in Berhampur, till then we can help by applauding their efforts.

### **Banka Bioloo**

Working in the sanitation sector, particularly FSSM has been an exciting time in recent years with many innovations being developed. Banka Bioloo's FSTP technology adds to this growing body of knowledge being developed for the sector. The technology involves using the right material to create a device that separates solids from faecal sludge using very little energy. The technology is simple to operate as well and does not require skilled workers. So, the technology ticks all the boxes that proponents of nature-friendly technologies look for. The only question remains about the discarding and disposal of the geo bags after use since these are made of plastic. The Banka Bioloo team is aware of and working hard to ensure that end-of-life issues are addressed.

The real innovation in this FSTP perhaps lies elsewhere – in its business model rather than in the technology per se. Unlike a typical infrastructure project which has a high capital investment followed by relatively lower operating costs, Banka Bioloo's FSTP costs much less to set up and is not expensive to run as well. And therein lies its potential to help small towns, rural areas, and short-term sanitation needs.

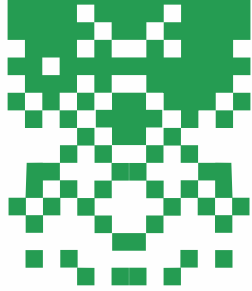
For a country as diverse as ours we need a variety of use cases, price points, and technical approaches to truly address safe sanitation. Banka Bioloo has shown one good way and should be congratulated for thinking up a simple and practical solution at a low cost.

-- **Sasanka Velidandla**

Expert Urban Sanitation, WASHi



# BEST SKILLING INITIATIVE FOR SANITATION



## Best Skilling Initiative for Sanitation

### Jan Sahas Social Development Society (2020)

Jan Sahas' intervention on eradication of manual scavenging and promotion of safe working conditions for sanitation workers was implemented in 6 states of the country. The organization has been working for the liberation and rehabilitation of manual scavengers along with the promotion of safe working conditions for the sanitation workers, policy advocacy, and upskilling initiatives. Their work has demonstrated a shift in mindset among communities resulting in both government officials and people reconsidering ways to create safer and discrimination-free working conditions for the sanitation workers.



By 2020, the intervention had led to the deliverance of 46,268 manual scavengers out of which 82 percent were women. One lakh twenty-eight thousand sanitation workers had received support for safety, entitlements, and rehabilitation from the program with more than 0.1 million people being linked to various government social schemes. In addition to facilitating compensation of a total amount of over 21 crores under rehabilitation schemes under the aegis of the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013, 4178 sanitation workers had been informed and trained on safety procedures and rights at the workplace and 4630 sanitation workers had benefited from legal entitlements. Alternate livelihood opportunities such as tailoring, driving & grocery store had also been provided to 1885 workers.

Since 2020, the organization has focused on the livelihood and safety security of the manual scavenging community. In the last two years, when the entire world was grappling with the COVID-

19 pandemic, the role of sanitation workers became extremely crucial in India. The community members are front-line staff and the backbone for supporting the medical as well as the regular functioning of the urban cities. Jan Sahas conducted several safety-related activities with the community members. As part of the COVID Relief activity from April 2020 to July 2021 more than 1,50,000 sanitation workers and their family workers received the dry ration kits, safety kit, and personal protective gears, along with training on the usage. With our collaboration with District Administration and Gram Panchayats in Madhya Pradesh, we have spread awareness on the safety of sanitation workers. As part of the awareness activity, we are one of the key partners in Swachh Survekshan's online campaign for Safai Mitra Suraksha Challenge 2021.

As a positive change organization, we focus on a bottom-up campaign, in five states of India. Through this initiative, we have improved the economic, social, and political status of more than 50 thousand manual scavenging families. The key interventions include organizing and capacity building of community members, ensuring education for their children, and working for their holistic development. Over the last year, the team identified the most marginalized families of sanitation workers community for relief support such as ration support, medical support, and social security linkages. Community-level workshops and awareness activities were conducted, and government guidelines and norms created under the Manual Scavenging Act 2013 for safety and security were shared with the community members.

On-ground challenges in the years 2020 and 2021 increased due to the COVID-19 pandemic, and several community-level meetings and village-level training were shifted to online platforms. This limited the reach of their initiative, but after relaxations in lockdown, the teams identified those families which needed support and they were connected through the Jan Sahas helpline network. The community members were connected with the help of the "Swachhata App" created by the Ministry of Housing and Urban Affairs (MoHUA).

Jan Sahas' work is collaborative, and it is closely associated with the government bodies and institutions for the implementation. A total of 5,678 meetings were conducted with the government department, district administration, local bodies, and people's representatives from the village at various levels to inform them about the status of sanitation workers. Their awareness activities are conducted regularly, through online platforms as well as the offline mode to connect more regions and members. They have a special toll-free helpline number to support the community members. They also promote the Government's Helpline "14420".



## Jury's Reflection



I read in a blog that “with the current pace of Swachh Bharat Mission and ideas for decentralized septage management in cities, we will need 5.2 million sanitation workers shortly. Creating 'Green' jobs is one effort in Skill India efforts, to ensure safe sanitation practices in municipalities. Will this effort bear fruit for all sanitation workers; who make up the bulk of municipal workers? Are we ready to take on the collective responsibility of ensuring that they will all get 'green' jobs?

Broadly, in an attempt to explore what could the response be like to some of these questions, as an awards juror, I recommended the institution of a new category of awards to the India Sanitation Coalition (ISC) at FICCI, and the category came into effect in 2020.

For the last two years, we have worked with the rigor to pick and reward institutions who have done commendable work in this space, and the nominations for the category have already started to evolve, showing huge potential to emerge as a principal category for the ISC-FICCI Sanitation Awards.

Jan Sahas Social Development Society is working towards the eradication of manual scavenging and the promotion of safe working conditions for sanitation workers. I am pleased to have chaired the category 'Best Skilling Initiative for Sanitation' where they were adjudged to be the winners in 2020. Through their work they have changed the mindset of communities, resulting in both government officials and people reconsidering ways to create safer and discrimination-free working conditions for the sanitation workers.

In just one year, they have impacted more than 1 lakh sanitation workers by providing support for safety, entitlements, rehabilitation, and alternate livelihood opportunities such as tailoring, driving & grocery store, etc. Besides, they have been the key partners in Swachh Survekshan's online campaign for Safai Mitra Suraksha Challenge 2021.

ISC-FICCI Sanitation Awards validates the works of such institutions and proves that they are ahead of the curves. As ISC-FICCI Sanitation Awards now completed five years, I stand witness to their maturation over the years. These awards have good potential for future growth much in alignment with the sector of sanitation in India. I wish them success and luck in sustaining their good work.

**-- Ishan Raina**

Member, Advisory council, India Sanitation Coalition;  
Fellow, Harvard University Advanced Leadership Initiative



# EXCELLENCE ON WORK FOR UPLIFTMENT OF SANITATION WORKERS



## Excellence on Work for Upliftment of Sanitation Workers

### **JALODBUST™ (Cherries Engineering and Innovation India Pvt Ltd) (2020)**

Vacuum trucks & pumps' inability to dislodge the sludge and drawing only the overlying liquid makes manual scavenging inevitable for emptying pits, tanks, and manholes. Hence, to change the sanitation workers' unwillingness to undertake sanitation work and eliminate the stigma around faecal sludge handling, JALODBUST was designed to make eradication of manual scavenging a possibility by solving the problem of removal of settled and densified sanitary sludge by reaching any narrow space and remote location, thus relieving the burden of sanitary sludge handling to remove sludge not removable by vacuum trucks and pumps.

The JALODBUST-Pride is a portable Lithium Battery operated smart system that can be used in narrow spaces to execute sanitation tasks. JALODBUST- SaniPreneur is a mobile system capable of reaching narrow spaces and has an included transportation system. The intervention aimed at ensuring income generation for sanitation workers of up to INR 30,000/- per month as well as reducing occupational health risks for manual scavengers through mechanized scavenging.

Since 2020, the organization has improved the product in its outlook, delivery, and versatility, making its user interface easier and intuitive. Initially, plans were to keep the interface manual but based on workers' feedback it was decided to automate it.

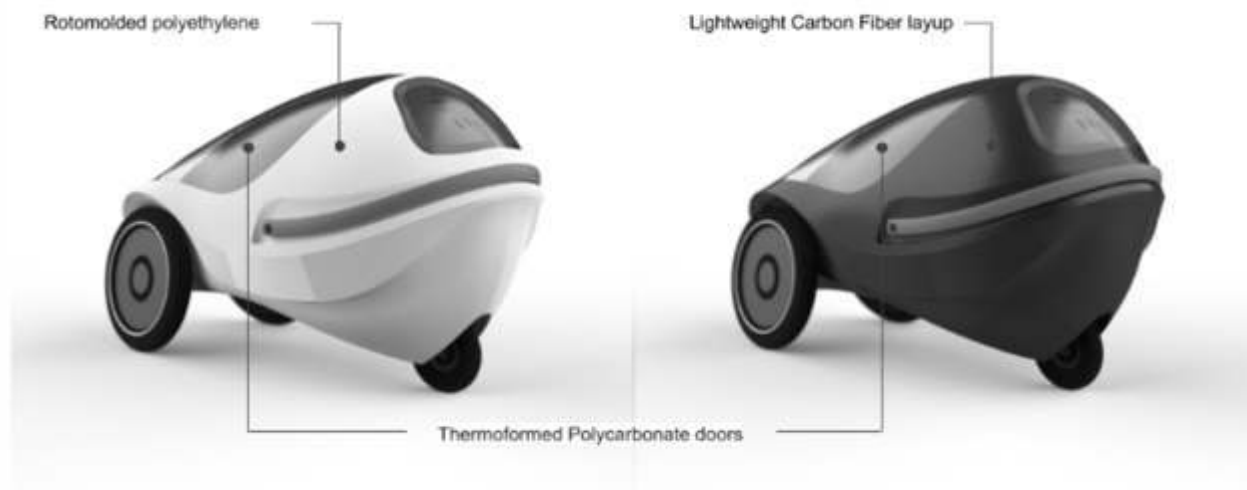
A programmable control unit was introduced making it future-ready for data generation, AI, and cloud computing. An additional feature of de-clogging blocked toilets and domestic sewer line has been added to the JALODBUST Pride (Portable model) to make it multi-functional and versatile, besides its basic function of agitation, pulverizing, and pumping of dense faecal/ sanitary sludge. The organization has developed JALODBUST SaniPreneur, which is a tractor driven faecal sludge handling system with a sludge transportation tank. This is the only faecal/ sanitary sludge transportation tank with powered unloading thus capable of handling sludge with higher solids content and even emptying dry latrine pits without the need for human contact.

As a result, now sanitation workers can handle more sanitation tasks with a single machine, making JALODBUST an affordable, simple yet modern, and viable income-generating equipment that will provide safety, dignity, and financial independence to the worker.

Catapult Designs USA helped with in-kind design support, making portable JALODBUST Pride sleek and beautiful.

The organization has not been able to manufacture JALODBUST equipment due to delays in raising business funding mostly due to Covid related concerns and diversions of their prospective funding sources. Presently Product design for manufacture is ready after completion of field-testing and



**Material/Color Variations**


worker feedback with the help of PoC machines. JALODBUST SaniPreneur, the tractor driven faecal sludge handling system with a sludge transportation tank has great use in creating independent sanitation entrepreneurs.

The organization is planning to develop production and implementation relations with other groups and NGOs working for the livelihood of the manual scavengers and sanitation workers.

Enhanced interactions and studies in the toilet eco-system have shifted the focus towards simple and compact innovations for completing the circular economy principle of using faecal sludge as fertilizer. They found that it was difficult for workers to hire tankers for the transportation of dense faecal sludge extracted from leach pits/ septic as once the sludge enters the vacuum tanker it does not flow out, needing human intervention. Accordingly, they extended the design of JALODBUST Pride to SaniPreneur by adding a sludge transportation tank with powered unloading. Besides, it ensures that the tank is emptied only at the treatment plant by locking the unloading of faecal sludge except at the designated treatment destination and many other features.

JALODBUST and such similar hardware-based social innovations, though a turning point in social justice, depend entirely on the government for financial support to cross the innovation to product chasm due to lack of interest by Venture Capitalists and banks. The organization hopes to bring JALODBUST into the market soon having won BIRAC BIG-17 (2020) challenge for funding support. JALODBUST also won CiTe (civic tech) challenge for paid piloting with NDMC–IITK in March 2021. In Sept 2021, they were awarded Idea to PoC grant for the development of WT-GST (Wet trash grabber, segregator, and transporter) for cleaning open drains and banks of water bodies through the support of SIIC-IITK.

Additionally, the organization received financial support from ASME, NY, USA as a winner of the ASME iSHOW 2020 Award that helped them to remain afloat until now. JALODBUST was also

selected for global fundraising support by EarthTech.io Australia among the top 30 out of 1200+ applicants, as part of their mandate to touch 1 billion lives by 2030.

They have received government support in the form of collateral-free loans and grants. However, they are still bootstrapped/ grant-supported and as such have not been able to raise funds for the manufacture, promotion, and marketing of their intervention. Accordingly, they have not generated sales revenue to become viable as a company. The social and environmental viability of JALODBUST is yet to be verified on the ground, which can happen only after its implementation in sizeable numbers.

JALODBUST was designed based on the existing task structure of manual scavengers and sanitation workers to remove drudgery, risk, exposure, and social ignominy from this task. Existing Vacuum Tanker technology, patented in 1966, designed for septic tanks is inadequate for leach-pit toilets. Septage from septic tanks is seen to be containing 3-5 grams of solids per litre whereas leach pit toilets with water seal seats can have up to 150 gms of solids per litre of septage. Besides the problem of choking, narrow lanes, higher unit price, difficulty in recycling the faecal sludge made it useless for leach-pit toilets.



JALODBUST is a unique and compact technology that can remove, transport, and unload dense faecal sludge without the direct intervention of sanitation workers, thereby protecting them from exposure to splash, smell, and sight of the faecal sludge. Protected against choking and self-emptying on task completion, the model indicates quantity removed and beeps on completion of the task.

The organization is developing more innovative machines to continue its focus on eradicating Manual Scavenging through technology.

## Jury's Reflection



Septic tanks are often placed under toilets or are sealed, or cemented over, making it difficult to access them for cleaning/ emptying which dis-incentivizes their frequent cleaning. JALOBUST is a promising and innovative technology aimed at reducing the burden of manual handling of faecal sludge, emptying pits, and removal of settled and densified sludge even in narrow spaces. It is an honour to reflect on the progress made by JALOBUST since it was awarded the "Excellence on Work for Upliftment of Sanitation Workers" in 2020.

It is estimated that India produces 1.2 lakh tonnes of faecal sludge a day. In urban India, nearly half (45%) of the waste is disposed into septic tanks and pit latrines, calling for a scalable approach - a decentralised approach to the sanitation chain and addressing the enormous health hazards. Our sanitation workers are central to the solution. Estimated to be over 5 million (50% women), the workers have, for long, faced social stigma and discrimination, low wages, financial insecurity, and occupational health hazards.

Keeping the waste disposal situation and the needs of the sanitation workers at the core, JALOBUST offers a promising socio-technological and public health solution for emptying the densified and settled sludge in narrow spaces, de-clogging blocked toilets and domestic sewer lines. The technology promises our SaniPreneurs not only an assured monthly income but more importantly changing a social construct around sanitation workers. It offers the potential of providing sanitation workers with dignity and an opportunity to run small social enterprises maintaining hygienic conditions. It also offers the local community-based organization, local bodies, and non-profit organizations to advance safe disposal and reuse of sludge. In the slums and high-density settlements where septic tanks may not be meeting the standards prescribed in the Indian Standard Codes and the Central Public Health and Environmental Engineering Organization (CPHEEO) manual, the device offers desludging from most difficult pits/septic tanks.

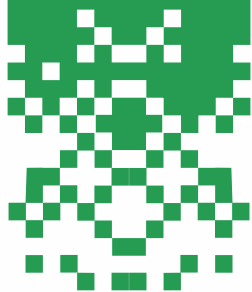
The onward journey of JALOBUST from pilot stage to market testing and scale has the potential to affordable sanitation solutions and entrepreneurship opportunities for sanitation workers in India.

**– Ms. Meena Narula**

Policy and Partnerships Advisor, StratComm Consulting  
 Ex-CEO, Water for People



# BEST INNOVATION IN SANITATION



## Best Innovation in Sanitation

### CDD Society (2017)

CDD's Devanahalli FSM model helped in changing the minds of officials regarding FSM as a viable alternative or complement to conventional sewerage. CDD built India's first-of-its-kind town-scale FSTP; which by 2017 was successfully handling 100% of the sludge collected in the town it served - Devanahalli. The plant's success motivated the town's officials to pass resolutions to ensure it faced no operational or financial hurdles, making this a model FSM town for India.

Since then, further refinements have been made to the Devanahalli design to make the treatment process more effective and economical. Out of 400+ FSTPs now tendered out in the country, at least half of them are based on the Devanahalli model. These systems meet the Pollution Control Board standards of various states and FSTP costs have come down by around 25-30% from 2016 due to process optimizations and better cost focus.

The beneficiaries of the faecal sludge treatment plant in Devanahalli are residents of the town as well as the environment around them. They appreciate that their town now has a facility to treat its faecal waste.

Devanahalli was set up to motivate government officials from other towns to replicate the model. It has been successful on that front, enabling upscaling and increase of its impact. As aforementioned, more than 70% of the FSTPs under operation are based on the Devanahalli model. Additionally, the



Devanahalli model of Unplanted Drying Beds is now mentioned in Swachh Bharat Gramin Guidelines as a model to be adopted by Panchayats across the country.

The Devanahalli model is being replicated in other places – directly by CDD or indirectly through their other partners. Dhenkanal, Angul, Sircilla, Phulera-Sambhar, Choudwar, Siddipet are the FSTPs that were directly helped by CDD helped for designing and construction. Further, there are 50+ FSTPs in Tamil Nadu and 15+ FSTPs in Telangana, where CDD supported the state through type designs, that are at various stages of completion/construction.

Donors like the Bill and Melinda Gates Foundation (BMGF) help the organization in multiplying the impact by innovating on technologies and taking up capacity building and dissemination. CDD works with NGOs like WaterAid and Practical Action to help them implement projects on the ground. They work with private sector organizations like Priyadhar Group and Global Technologies to improve their design and construction capabilities. Additionally, they work directly with the Governments in states like Karnataka to create in-house capacities within the state.

The organization has been able to sustain the innovation economically, socially, and environmentally. This has been achieved through continuous monitoring of operation and maintenance activities which gave them insights into the quantity and quality of faecal sludge being received as well as the treatment efficiency of the plant. This helped to identify areas of improvement (for instance: scope to improve upon the drying time of faecal sludge). Based on these insights, CDD then undertook applied research to bring about the required enhancements like implementing a greenhouse solar drying roof, etc. Newer FSTPs are being set up with these enhancements.

Newer FSTPs coming up on the Devanahalli model are testimony to the fact that the Devanahalli model is practical and successful. The model was set up to serve as a demonstration unit for future FSTPs and it has fulfilled its purpose on this front.

The model is unique because being a nature-based treatment system, its O&M is easy and inexpensive. Further, the design can be built with concrete/solid blocks/bricks depending on the context, making it fit for implementation across geographies and not dependent on sourcing components from faraway places. A decent contractor can easily construct these systems.

Besides, it is aesthetically pleasing - green and odorless; helping set a new standard for the image of a typical waste management facility. Moreover, the model demonstrates that setting up waste processing facilities within city limits aided by community buy-in and without impacting land prices in the vicinity of an FSTP is possible. The Devanahalli model helped in building the popular narrative “beyond building toilets” and prompted people to think about sanitation more holistically.



# LIFETIME ACHIEVEMENT IN SANITATION



## Lifetime Achievement in Sanitation

### Dr. Bindeshwar Pathak for Sulabh International (2017)

Bindeshwar Pathak revolutionized the sanitation space with his indefatigable work. He founded Sulabh International, an India-based social service organization to promote human rights, environmental sanitation, non-conventional sources of energy, waste management, and social reforms through education. To find a solution to India's sanitation woes, he invented an affordable two-pit flush toilet technology that could replace dry latrines. Sulabh has been instrumental in installing this in over 1.5 million households in India alone. Dr. Bindeshwar Pathak is also the Brand Ambassador for Swachh Rail Mission of Indian Railways.

Till 2017, Sulabh alone maintained over 8500 public toilets and had built 1.5 million household toilets. The government of India had built another 54 million household toilets based on Dr. Pathak's design. The design has been recognized by the UNDP as a Global Best Practice. Moreover, Dr. Pathak has rehabilitated millions of manual scavengers and restored their dignity by providing alternative employment through vocational training, skill development, and personality development.

Over the years, he has designed, built, and demonstrated Sulabh Shauchalaya for different income groups. The minimum cost for the model is Rs 3000/-. He also incorporated local materials, such as stone, bamboo, wood, coal tar drums, etc in his design which led to resource efficiency as well as cost-cutting. One of the models is designed without a roof for those who are comfortable with open space.

There has been increasing awareness about the importance of sanitation for health, comfort, and security for women and the aged. The impact of Dr. Pathak's intervention has steadily increased since its inception in 1968. He started with one Sulabh Shauchalaya at Arrah town but to date, his organization has built over 1.5 million household toilets in over 7000 villages and 1698 municipalities in 520 districts, spread over 24 states and 6 UTs.

Besides, 9000 public toilet complexes have been constructed and are being operated and





maintained satisfactorily. The expansion of their program depends on the satisfaction of the beneficiary, be it household Sulabh Shauchalaya or Sulabh Public Conveniences for the commuting public.

Sustainability is an important parameter for the continuation of a project/program. Dr. Pathak has been able to perform consistently for over five decades due to his faith in maintaining quality and delivering the best.

A practical approach is essential for working on the ground. Dr. Pathak has been successfully working in the field of on-site sanitation for more than 50 years which is adequate proof of the practicality of their model. They constantly keep track of the feedback of the users of their facilities. Their two-pit toilet technology has been adopted by India, Bangladesh, and Vietnam and is poised for global application.

Dr. Pathak's efforts to bring the subject of sanitation into the mainstream of education have resulted in the introduction of 'Sociology of Sanitation' in the curricula of 19 Universities in 10 states of India. His latest work is his experiments with Social Engineering. The erstwhile manual scavengers have been moved up the social value chain – from an untouchable to a position of strength on the social ladder. This has been achieved not by conflict but by building trust and consent amongst different layers of social strata. Many of the women who carried a head load of excreta from a bucket latrine have been trained in alternative vocations for a life of dignity and comfort. They can even recite slokas from our ancient scriptures. The pinnacle comes with a 'Padma Shree' award to one of them.



**ISC-FICCI  
Sanitation Awards  
Jury (2017-2021)**



## Main Jury

S.No.	Name	Organization
1.	Dr R A Mashelkar (chair)	Ex-DG CSIR, GoI, National Research Professor
2.	Aloka Majumdar	Head of Corporate Sustainability, HSBC India
3.	Anup Vikal	CFO, Head of Legal & CSR, Nayara Energy LTD
4.	Ashwini Saxena	CEO, JSW Foundation
5.	Ishan Raina	Independent Director, RBL Bank, Rainshine Entertainment
6.	Kaveree Bamzai	Independent journalist at India Today, The Indian Express, and The Times of India.
7.	Madhu Krishna	Deputy Director, Gates Foundation
8.	Manish Kumar	Managing Director and CEO, National Skill Development Corporation
9.	Sasanka Velidandla	Expert Urban Sanitation, WASHi
10.	Tinni Sawhney	CEO, Aga Khan Foundation
11.	Vedika Bhandarkar	COO, Water.org
12.	V K Madhavan	CEO, WaterAid India
13.	Prof V Srinivas Chary	Director, Administrative Staff College of India, Hyderabad - Expert Urban Sanitation
14.	Neeraj Jain	Country Director India, PATH
15.	Priyanka Dutt	Country Director, BBC Media Action
16.	Bhaskar Chatterjee	Secretary General and Executive Head, Indian Steel Association
17.	Neelima Khetan	Visiting Fellow, Brookings India; Ex- Group CSR Head, Vedanta Resources Plc & Ex-Vice President, CSR, Hindustan Zinc Limited
18.	Deepak Arora	Vice President, Public affairs, Nayara Energy Limited
19.	S. Ramkrishna	Ex-President– Group Public Affairs, Mahindra & Mahindra Ltd
20.	Vijay Chadda	Chief Executive Officer, Air Pollution Action Group
21.	Xavier Chauvot de Beauchene	Senior Water and Sanitation Specialist, International Bank for Reconstruction and Development, World Bank
22.	Ashish Jhina	Co-founder & COO, Jumbotail
23.	Manoj Aggarwal	Independent Public Policy and Impact Investment Professional, Ex-Head Business Development and Public Affairs, Cairn India Limited (CIL)
24.	Nitish Kapoor	EVP Category Development, RB Health
25.	Prof V M Chariar	Faculty Member, IIT Delhi; Independent Director, Manganese Ore (India) Limited; Founder, JoylsYou; Chair, Ekam Eco Solutions Pvt. Ltd.

## Executive Jury

S.No.	Name	Organization
1.	Aloka Majumdar	Head of Corporate Sustainability, HSBC India
2.	Joy Mukherjee	Addl. GM CSR, DCM Shriram Ltd
3.	Mukul Rastogi	Vice President, ITC
4.	VK Madhavan	CEO, WaterAid India
5.	Tinni Sawhney	CEO, Aga Khan Foundation
6.	Meena Narula	Policy and Partnerships Advisor, StratComm Consulting, Ex-CEO, Water for People
7.	Kaveree Bamzai	Independent journalist at India Today, The Indian Express, and The Times of India.
8.	Santosh Tiwari	Senior Advisor, APCO Worldwide
9.	CA Amit Arora	Chartered Accountant - FinTech Specialist, News Anchor Doordarshan, Delhi
10.	Vedika Bhandarkar	COO, Water.org
11.	Saibal Paul	Associate Director, Sa-Dhan
12.	Jayesh Modi	HSBC
13.	Parul Soni	President & Founder, Thinkthrough Consulting (TTC)
14.	Asad Umar	Senior Programme Officer -Health and WASH, Aga Khan Foundation
15.	Venkata Raman	Reliance foundation
16.	Prof V Srinivas Chary	Director, Administrative Staff College of India, Hyderabad - Expert Urban Sanitation
17.	Ruchika Shiva	Country Coordinator for India, IRC WASH
18.	Sasanka Velidandla	Expert Urban Sanitation, WASHi
19.	Ishan Raina	Independent Director, RBL Bank, Rainshine Entertainment
20.	Manish Kumar	Managing Director and Chief Executive Officer, National Skill Development Corporation
21.	VK Madhavan	CEO, WaterAid India
22.	Tinni Sawhney	CEO, Aga Khan Foundation
23.	Meena Narula	Policy and Partnerships Advisor, StratComm Consulting, Ex-CEO, Water for People
24.	Nirat Bhatnagar	Partner, Dalberg Advisors
25.	Meera Mehta	Professor Emeritus at CEPT University; Executive Director, Center for Water and Sanitation, CRDF, CEPT University
26.	Sumit Chakraborty	Associate Director, KPMG India

S.No.	Name	Organization
27.	Upneet Singh	Water and Sanitation Program-India, The World Bank
28.	Arvind Wable	Founder, Pyxs Partners
29.	Kunal Walia	Associate Partner, Dalberg Advisors
30.	Ajit Agarwal	Product Manager/Solutions Specialist, Advisory Services, Women's World Banking
31.	Mr. G. Shridhar	Additional General Manager, NTPC Ltd.
32.	Nitya Jacob	Independent Adviser and Consultant, Water and Sanitation; Coordinator, SuSanA India Chapter
33.	Arkaja Singh	Fellow & Programme Coordinator, SCI FI II, Centre for Policy Research
34.	Girija Bharat	Director, Mu Gamma Consultants Pvt. Ltd.
35.	Aditi Singh	Associate Partner, Dalberg Advisors
36.	Vipul Kumar	Director, Xynteo India
37.	Vinod Mishra	UNOPS, Head Wash Program, India
38.	Dr. Lalit Kumar	Independent Consultant; Ex-Hony Senior Vice President, Sulabh International Social Service Organisation

**ISC-FICCI  
Sanitation Awardees  
(2017-2021)**



## Awardees 2021

S.No.	Category	Winner(s)	Special Mention
1.	Best Corporate Initiative in Sanitation (CSR): Small and Large	1. NSE Foundation	
2.	Best Non-Profit Engagement Model in Sanitation: Urban & Rural	1. Social Work and Research Centre (Barefoot College) 2. GREHA	
3.	Best Communication in Sanitation: Traditional & Digital	1. Malasur - BBC Media Action 2. Commissioner, Department of Rural Drinking Water and Sanitation, Government of Karnataka	1. National Bank for Agriculture and Rural Development (NABARD)
4.	Best innovative Financial Accessibility Model for WASH: Large financial institutions, microfinance institutions, banks, and government financial institutions	1. Annapurna Finance Pvt. Ltd. 2. Pahal Financial Services Pvt. Ltd	
5.	Best Faecal Sludge and Septage Management Model (FSSM): Urban and Rural	1. Dhenkanal Municipality, Dhenkanal, Odisha	
6.	Best Skilling Initiative for Sanitation	1. Sanitation Capacity Building Platform, National Institute of Urban Affairs	
7.	Excellence on Work for Upliftment of Sanitation Workers	1. Indian Institute for Human Settlements	
8.	Special Recognition Awards for the Government	1. Shri G. Mathi Vathanan, Chairperson, Water Corporation of Odisha (WATCO), Government of Odisha	
9.	Women Changemakers in Sanitation	1. Susri Seetal Bastia, Secretary, Bahucharamata Transgender SHG manging SeTP, Cuttack Municipal Corporation, Odisha	

## Awardees 2020

S.No.	Category	Winner(s)	Special Mention
1.	Best Corporate Initiative in Sanitation (CSR): Small and Large	1. HDFC Bank 2. DCM Shriram	
2.	Best Non-Profit Engagement Model in Sanitation: Urban & Rural	1. Aga Khan Foundation India	Environ Northeast
3.	Best Communication in Sanitation: Traditional & Digital	1. Population Foundation of India	
4.	Best innovative Financial Accessibility Model for WASH: Large financial institutions, microfinance institutions, banks, and government financial institutions	1. Mahila Arthik Vikal Mahamandal (MAVIM)	
5.	Best Engagement Model in Sanitation by a Social Enterprise/Start-up	1. Agrata City Level Federation 2. Padcare labs	
6.	Best Faecal Sludge and Septage Management Model (FSSM): Urban and Rural	Berhampur Municipal Corporation	Banka Biolo
7.	Best Skilling Initiative for Sanitation	Jan Sahas	
8.	Excellence on Work for Upliftment of Sanitation Workers	JALODBUST™ (Cherries Engineering and Innovation India Pvt Ltd)	
9.	Special Recognition Awards for the Government	Assam	

## Awardees 2019

S.No.	Category	Winner(s)	Special Mention
1.	Best Corporate Initiative in Sanitation (CSR): Small and Large	1. GenRobotic Innovations Pvt Ltd (Small) 2. Tide Technocrats Pvt Ltd (Medium) 3. ITC Ltd (Large)	1. LIXIL India Pvt Ltd 2. Saraplast Pvt Ltd
2.	Best Non-Profit Engagement Model in Sanitation	1. WAVE Federation (Urban) 2. SUHAM Trust (Rural)	
3.	Best Communication in Sanitation: Traditional & Digital	GRIT by The Wire	WIN News
4.	Best Financial Accessibility Model in Sanitation	IDFC First Bank	Annapurna Finance
5.	Best Engagement Model in Sanitation by a Social Enterprise	1. Eram Scientific Solutions Pvt Ltd	Lootel (Dot Box Conception Pvt Ltd)
6.	Special Recognition Awards for the Government: Urban & Rural	1. Government of Odisha's efforts in implementing FSSM program in the State (Urban) 2. Jharkhand State Livelihood Promotion Society (Rural)	



## Awardees 2018

S.No.	Category	Winner(s)	Special Mention
1.	Best Corporate Initiative in Sanitation	1. Larsen and Toubro Ltd 2. NTPC Ltd	
2.	Best Non-Profit Model in Sanitation	1. Gram Vikas (Rural) 2. Centre for Water and Sanitation, CEPT University (Urban)	Shelter Associates
3.	Special Recognition in Media	1. Vikram Chandra (Individual) 2. Dainik Jagran (Institutional)	
4.	Best Financial Accessibility Model in Sanitation	Dhan Foundation, Madurai	
5.	Special Individual Recognition	1. Mr. D. Kannan	
6.	Special Recognition to the Government	1. Dr. Nipin Vinayak, IAS Maharashtra Cadre (2001) (Individual) 2. Ministry of Housing and Urban Affairs, Govt of India	

## Awardees 2017

S.No.	Category	Winner(s)	Special Mention
1.	Best Corporate Initiative in Sanitation (CSR): Small and Large	1. ACC Sampurna Swachhata 2. Tata Consultancy Services Ltd	
2.	Best Non-Profit Engagement Model in Sanitation	Aga Khan Foundation	
3.	Best Innovation in Sanitation	1. CDD Society 2. Svadha	
4.	Best Financial Accessibility Model in Sanitation	Grameen Koota Financial Services Pvt Ltd	
5.	Media in Sanitation	1. Down To Earth (DTE) 2. New Delhi Television Ltd (NDTV)	
6.	Lifetime Achievement in Sanitation	Bindeshwar Pathak	







For Further information:

**India Sanitation Coalition Secretariat**

FICCI Federation House, 1 Tansen Marg, New Delhi – 110001

Email: [indiasanitationcoalition@ficci.com](mailto:indiasanitationcoalition@ficci.com)

[f /indiasanitationcoalition/](#)

[t /indiasanitationcoalition/](#)

[in /company/isc-india-sanitation-coalition/](#)

[@ /indiasanitationcoalition/](#)

Website: [www.indiasanitationcoalition.org](http://www.indiasanitationcoalition.org)