



Business of Change: Thinking beyond Shitpots

Sanitation: Thinking Beyond Shitpots

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Disclaimer: Case studies have been prepared with materials provided by the respective Companies as well as from independent internet research undertaken during 2016-2017



Business of Change: Thinking beyond Shitpots

Preface

The India Sanitation Coalition (ISC) is pleased to publish the 2nd compendium of the series “Business of Change” titled “Thinking beyond Shit Pots”. This compendium brings you 45 case studies that have been implemented by our partners, companies and other stakeholders. These case studies deal with issues beyond building toilets and includes faecal sludge management, waste management, behaviour change and innovations. There are excellent examples of the holistic approach of Build-Use- Maintain-Treat (BUMT) promoted by ISC.

The 2019 goals of Swachh Bharat Mission envision several aspects of sanitation including the concept of Open Defecation Free (ODF) and beyond. The examples mentioned in this compendium not only focus on Open Defecation Free (ODF) but also a step ahead covering Solid Liquid Waste Management (SLWM) and Hygiene. By highlighting these ODF plus examples we hope to disseminate right practice and create a platform for further discussion and replication.

As we move beyond ODF, we sincerely hope that this compendium will inspire many others to further intensify their efforts for a Swachh Bharat.



Naina Lal Kidwai
Chair, India Sanitation Coalition



Foreword

परमेश्वरन अय्यर
Parameswaran Iyer



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FOREWORD

I am happy that India Sanitation Coalition (ISC) is bringing out its second edition of “**Business of Change: Thinking Beyond Shitpots**”, which highlights some of the best practices covering the various aspects of Build-Use-Maintain-Treat. This compendium is a recognition of sanitation initiatives along the sanitation value chain and partnerships between different stakeholders.

I hope that this compendium shall help all organisations who are already working in sanitation sector and inspire others to contribute as well.

My best wishes to the ISC team.



Parameswaran Iyer
Secretary to Government of India



Messages from Learning and Knowledge Management



Mr. Nirat Bhatnagar
Partner
DALBERG Advisors

Sanitation in India is fast progressing from being just about the construction of toilets to being about the end-to-end management of the sanitation value chain with a special emphasis on waste treatment and financing. The space is also becoming more exciting and diverse with a range of private and public sector partners playing hugely important roles.

At such a time, it is very exciting to see the India Sanitation Coalition's compendium, "Thinking Beyond Shitpots", which captures nearly 50 case studies from all across country on how change can be made and progress driven. I congratulate the ISC on this important accomplishment and encourage organizations involved in sanitation in India to use this compendium to inspire your programs and strategies to address India's sanitation challenge.



Dr. Girija Bharat
Director
Mu Gamma Consultants Pvt. Ltd.

The Compendium titled: "Business of Change" is an excellent knowledge product of the India Sanitation Coalition advocating cross learning and information sharing in the WASH sector. This document has showcased the exemplary efforts by multiple organizations and provides an array of successful models for adoption in a rapidly evolving sector.

The holistic approach of Build-Use-Maintain-Treat (BUMT) promoted by ISC and its knowledge platform will go a long way towards transforming the sanitation landscape of India.



Task Force Members



Deepak Kumar Mitra

South Asia Regional Leader- SATO
LIXIL Link to Good Living

The most important part of sanitation revolution is providing right hardware and associated software to beneficiaries so that they will adopt the changes. It is observed that the focus of all programs are weighed towards one or other. We need to have policy mix on both to actually create the necessary changes in future. For this all stakeholders including Govt / Private / Development sector have to come to the same platform like ISC and fight for the great cause to make ODF India



Paramita Datta Dey

Senior Program Officer
NIUA

I would like to thank the India Sanitation Coalition for giving me the opportunity to be part of the task force on Learning and Knowledge Management. This document on good and promising practices is an outcome of collaborative efforts of the ISC members. The deadlines for this project having been challenging yet critical. The members have put in a lot of hard work, above and beyond the call of duty. This has helped to ensure the present shape of the document. During the several brainstorming sessions, the task force has tried to make sure that going forward, broad recommendations from this compendium can be applied in a wider knowledge base of the WASH ecosystem.



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A promising practice has a narrower definition. It is one that has achieved a high degree of success within a single setting, and the possibility of replication in the same setting is guaranteed. It has generated some quantitative data showing positive outcomes over a period of time. A promising practice has the potential to become a good practice over a period of time but does not yet have the research or replication to support wider adoption or upscaling.



What is a case study?

Drawing on the above, a case study is a piece of research on a specific process, person or thing in a defined time frame and context. It proves the rule by bringing out either trends or exceptions. For example, while writing up case studies on how ODF can be sustained, researchers need to include leadership, collective action, positive discrimination and engagement of village-level motivators. These need to be woven into a story of how a village, panchayat or district became and remained ODF. To make it more powerful, the narrative can be told in the first person, or through a beneficiary.

Another way to look at case studies is to consider them as a method of social science research to build and test theories from a new point of view. This type of case study has a larger horizon and examines how results are sustained. For example, how has a state succeeded in sanitation while another has failed thus leading to a comparative analysis with evidences. Thus, the subject of study has worked in different settings. They are excellent tools for disseminating 'good' and 'promising' practices. However to be complete, case studies must also bring out problems so their readers know what to avoid while making a success of the activity.

Under SBM case studies have presented innovations in implementation that are context-specific and have useful lessons and can be replicated. Negative examples are discouraged.

Defining their use helps decide how to get case studies. An underlying process is the CPSL framework: Collect, Produce, Share and Learn. The Best Practices Taskforce of the India Sanitation Coalition used this framework for collecting case studies from its members. It used different ways to collect: a call for submission promoted through the website, social media, broad web search, reaching out to individual partners, etc. Members produced the case studies. They were refined by the ISC team and divided into best practices and good practices for readability and consistency. They were shared in a compendium released last year, as well as this one, and on the ISC website. However, the Learning aspect requires further work.

The obvious way to get case studies sourcing them from people in the field that helps hone their skills in a new area. However, this can compromise quality since case studies are only as good as the person researching them. Case studies lack advice on how to be replicated if field staff are entrusted with the job. Case studies could build in practical lessons and recommendations that could be drawn if others want to replicate this approach. A compromise is getting experts to review and shape inputs from field staff.

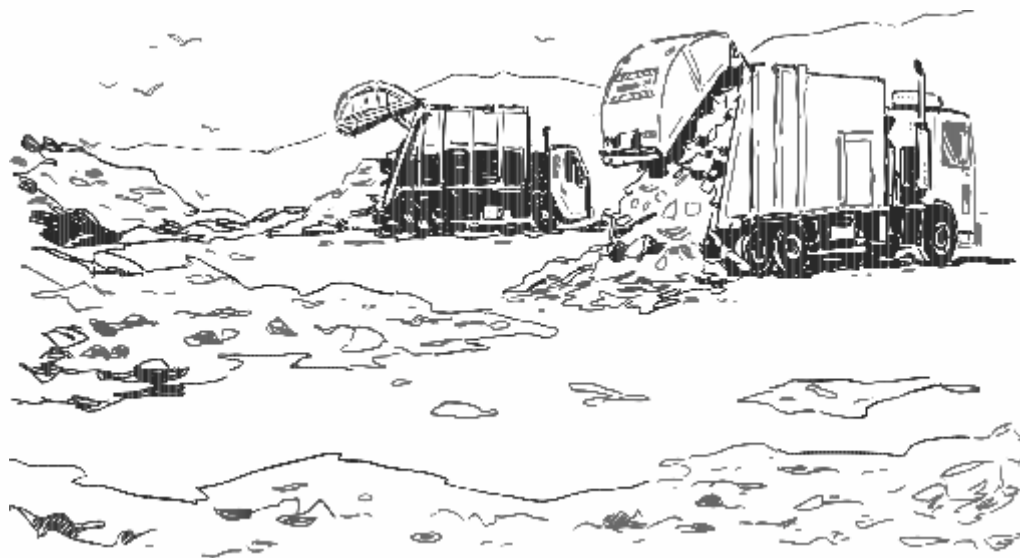
Over the decades, researchers in the WASH sector have accumulated a wealth of case studies. ISC has a roster of over 150, some of which have been included in this compendium. Most though lack suggestions on replication. As mentioned above, case studies are context-specific and need careful handling when making recommendations for use in other situations. If they are organized in priority areas or topics, it can help understand the gaps in knowledge and learning leading to 'mapping and gapping'. This can possibly point the way towards applying the example in another context.



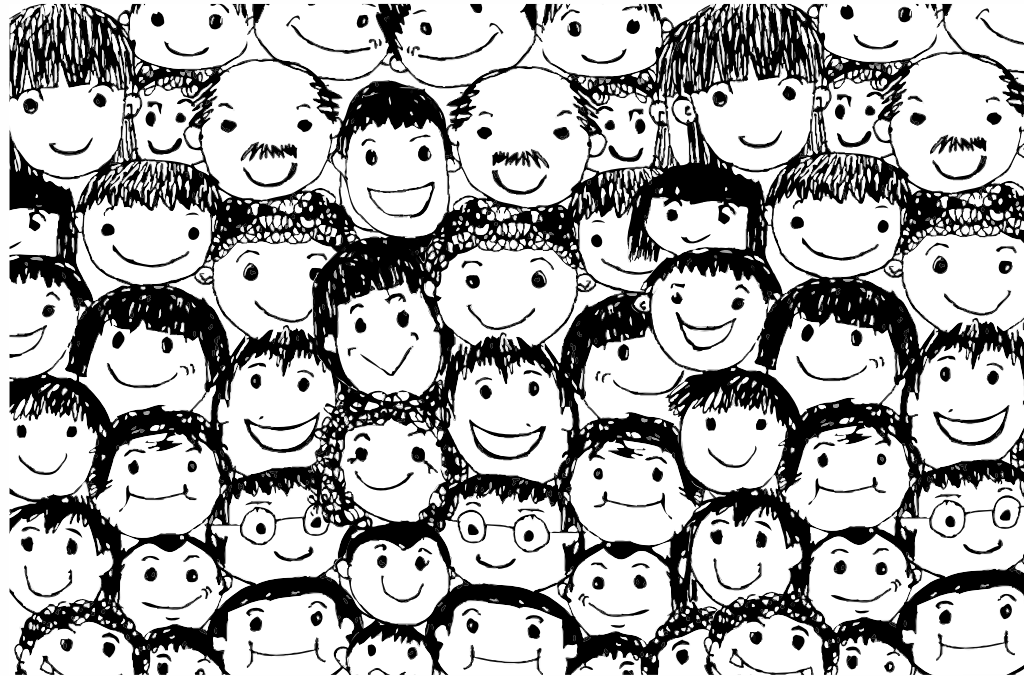
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Individual case studies can be clubbed by topic or geography to demonstrate cumulative impact. The more generalised recommendations from this 'collective' could be applied more generally given their wider knowledge base.

As a way forward, it is critical to ensure case studies as a critical tool for the sector to use it systematically. It needs to serve the purpose of review, qualitative evaluation, learning and replication and shouldn't be restricted to wordsmithing for documentation purposes. The India Sanitation Coalition envisages exactly that and has been advocating cross learning and replication by creating a knowledge platform for collation of knowledge and its dissemination.



Mobile Behaviour Change, HUL



Swachh Bharat Abhiyan necessitates the need for a change in behaviour, along with the creation of infrastructure. Communication plays an important role in changing behaviour. However, communication strategies in villages can be tricky. Hindustan Unilever Limited (HUL) under the banner its flagship WASH program, Swachh Aadat Swachh Bharat has launched a mobile-led rural behaviour change communication model called Swachhata Doot. The program urges factory workers employees to become agents of behaviour change in their villages. It involves spreading awareness about the connection between simple hygiene habits and a healthy life. cleanliness and eradicating diseases in the villages.

The programme creatively bundled various facets to create a strong employee volunteering programme. The facets: a large network of 29 25 factories and 2,000-plus factory employees workers located in remote locations pan India; an innovation in media to

make the message reach far and wide; the will and desire to contribute to the nation. The idea was to empower factory workers to become Swachhata Doots reaching out to villages with the message of 'Swachh aadat' (clean habits).

Each HUL factory works out a congenial schedule that enables volunteering factory employees workers to set aside some time to act as Swachhata Doots. The workers go back to the villages they have come from (or otherwise allocated locations) and use the mobile phone to give a missed call to a number from where audio content stories on each of the three good habits of washing hands with soap, drinking clean water, using a clean toilet are disseminated. The programme has also designed to have multiple touch points in the village: the mohalla (neighbourhood), aanganwadi (mother and child-care centre) and the school. This initiative runs smoothly, with complete ownership of the factory management team including human resources. Right from training of the workforce on what they need to do as Swachhata Doots to executing the programme is planned in a manner that there is no disruption to business.

Through this programme, they have successfully reached over 45 lakh people. A big difference from earlier efforts is that the person communicating the message is from within the community and not an outsider (who has always been treated with suspicion) and as the scale of the programme rests on existing infrastructure of factories and mobile networks, the cost of implementation is very low.



Toilet: Ek Prem Katha

This movie was released in August 2017. Called Toilet: Ek Prem Katha, it is based in Mathura, Uttar Pradesh. Keshav (Akshay Kumar) and Jaya (Bhumi Pednekar) are from two villages near Mathura, where 80 per cent of the households do not have access to toilets. Trouble comes knocking on the first day of their marriage, when Jaya leaves Keshav's house after discovering that there is no toilet in the village. Distraught and desperate, Keshav sets out on the mission to win his love back - he successfully battles huge odds to bring toilets to his village.



However, it is not the film alone that has been giving the biggest push to SBM. SBM has been promoted through marketing and messaging around the film. A Viacom18 Motion Pictures production, Cleanmate a household cleaning brand from Future Consumer, and PVR Cinemas launched this initiative to support the campaign.

Moreover, the Toilet anthem, a song encompassing the spirit of the film, sung by the lead actor himself, was launched with a special karaoke version in Uttar Pradesh by the chief minister. Akshay Kumar was also appointed brand ambassador of the 'Clean UP Mission' by the CM.

Moreover, the film's team is collaborating with CAYA Constructs to improve access to toilets and ensure their proper use; this includes painting 80 toilets across the country with sanitary hygiene-related caricatures and messages. These toilets will be in the states of Haryana, Delhi, Madhya Pradesh, Rajasthan and Maharashtra. To popularize the message of the movie, 25 toilets blocks were inaugurated in 24 hours, by superstar Akshay Kumar on social media. CAYA Constructs used the mass-appeal of the movie to spread the message by releasing a comic book based on proper toilet usage, hand-washing and sanitation benefits. This book was published both in Hindi and English. 25000 copies were distributed across Delhi/NCR for free in slum areas and MCD/government schools.

The film drives home the point about the need for better sanitary conditions and in support of SBM. For the first time in the entertainment industry has such an initiative reached out to more than 5 Million people.

Cement and Plastics, A Winning Combination, ACC Madukkarai Cement Works



The ACC Madukkarai Cement Works, the NGO Hand in Hand along with Madukkarai Special Grade Panchayat, Coimbatore, Tamil Nadu, launched the “Clean & Green Madukkarai” in 2012. This programme was implemented by Thidakazhivu Melanmai Thittam that are self-help groups consisting of 55 women. They are called Green Friends. The programme brought about behavioural change in the community for proper disposal of waste and strengthened the existing panchayat waste management programme.

The key components of the initiative were door to door collection, segregation at source, reduction of landfill and plastic waste. The programme helped the community to see the larger picture of solid waste management and their role to make this initiative successful. Their continuous education and awareness resulted in 100 per cent participation of the community in effective waste disposal.

Every day, Green Friends went house to house and collected garbage that people had separated at source; wet and dry components were placed in separate bins. More than 55 Green Friends covered the 18 wards of Madukkarai. The segregated garbage was taken to community dust bins in every ward and from there to yards where wet garbage was converted into organic manure in vermi-compost pits. The plastic and recyclable wastes were segregated and sent to ACC Cement Works for further handling.

ACC tried out something new with the plastic waste. It was burned in its cement kilns at very high temperatures that minimised environment pollution. This replaced 15 per cent of fossil fuel in the kilns. ACC's 1-million-ton per annum capacity cement plant consumes up to 30,000 tonnes of plastics annually, creating an enormous opportunity for those collecting and transporting plastics waste. Additionally, plastic waste is used in making roads.

The project benefitted 45,000 people directly and 5,000 indirectly. As a result of this initiative, Madukkarai Panchayat became a cleaner community. The people felt the difference; the streets were cleaner and waste disposal was much better.

The project cost was shared by the Panchayat and company in a 70:30 ratio. The projected monthly revenue was around INR. 2, 54,000



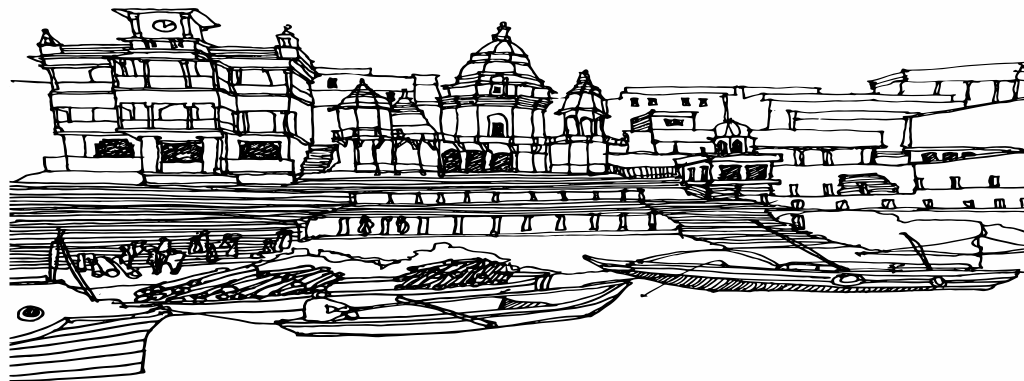
Changing Behaviour for A Clean River, Yamuna Action Plan (YAP)

The Yamuna Action Plan (YAP) was designed to reduce pollution in the Yamuna River through public participation and awareness (PP&A). Activities included socio-economic and environmental up-gradation of neighbourhoods, school health and hygiene, and region-specific innovations. Abhinav India, an NGO, supported the PP&A component of YAP in Uttar Pradesh. It covered the urban and semi-urban areas of the state, starting from Muzaffarnagar and conducted capacity building to complement PP&A.

It conducted surveys and focus group discussions in Muzaffarnagar to gather information about waste disposal. After identifying key stakeholders and mapping waste disposal habits, it developed Information, Education and Communication (IEC) tools for capacity building. Abhinav carried out targeted interventions to mobilize various stakeholders including community leaders, political representatives, government organisations, educational institutions, media groups, companies, etc. It built infrastructure such as garbage collection and handling centres, and provided garbage cans and collection carts to public service providers.

As a result, waste collection and disposal improved when people became more aware of the harmful impacts of improper waste disposal. Workers earned more because of proper disposal.

The major challenge was sensitizing people about waste disposal and the objectives of YAP. The other challenge was lack of space for garbage segregation and disposal sites. To overcome this, Abhinav used behaviour change communication to complement the government's infrastructure development.



Software Leads to Hardware, Jagran Group

In 2015, lack of access to sanitation cost the Indian economy around US \$106.7 billion, almost 5.2 per cent of the GDP and half of the global losses due to sanitation. Diarrhoeal diseases caused by lack of sanitation led to more than 1600 deaths daily of children under five.

The Jagran Group joined hands with the RB-led Dettol Banega Swachh India (DBSI) programme that acts as a catalyst and enabler for SBM with an aim to touch and improve lives of 100 million Indians. The programme involves improving WASH to improve nutrition, health of new-borns, diarrhoea and even education.

RB and Jagran Peהל launched an initiative “Changing Behaviour: Creating Sanitation Change Leaders” in 2015. The idea was to drive behaviour change at the grassroots by empowering leaders within the communities such as religious leaders, frontline workers, mothers, caregivers and communities towards hygiene and sanitation in 200 villages in UP and Bihar. They were to make ODF, with better hygiene and sanitation practices for improving newborn health, nutrition and education as well as reducing diarrhoea.

They sent teams to all villages six times a year which resulted in 75 becoming ODF in a year. The following activities were conducted: needs assessment through rapid assessments; development of advocacy/BCC tools; training 2000+ sanitation change leaders from PRIs, N&FBLs, FLWs, mothers & caregivers; capacity building of communities through VHND; sanitation chaupals; digital games; street plays; wall paintings with hygiene and sanitation messages; publicizing government subsidy for toilets and correct toilet designs. Behaviour change and impact was recorded through real-time data entry, monitored and measured to create a sustainable model.

In its second phase, the aim was to upscale the initiative at higher level focusing on “build-use-maintain-treat”. It was replicated in 3 states (3 districts of UP, 1 of Bihar and 7 districts of Maharashtra). In addition to the regular activities, BCC/IEC tools were replicated. These initiatives cumulatively improved lives and had an economic impact. For instance, people made more than 30,000 toilets without financial incentives, and sustained behaviour change.

The RB team was awarded the Urban Maharashtra Open Defecation Free 'Sankalp Purti' by the President of India.



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Danik Jagran, the flagship paper of the Jagran Group, through its reach of 5 crore readers daily, in India's heartland played a crucial role in advocacy and celebrating the successes, which inspired other areas. Its activities included reaching out to the districts to for funds for toilet construction, holding competitions, and answering common questions. A long-term digital campaign using the reach of the paper along with other partners was set-up to ensure effective spread of the initiatives.

The RB team was awarded the Urban Maharashtra Open Defecation Free 'Sankalp Purti' by the President of India.



Menstrual Hygiene as An Empowerment Plank, SACRED

Only 12 per cent of total 355 million² (2011) menstruating women in India use sanitary napkins due to cost issues and availability. UNICEF and NGO SACRED worked for the improvement in rural livelihoods by addressing menstrual hygiene management in rural Jalna district, Maharashtra. The office of SACRED in Aurangabad developed a plan to distribute 'Nirmal' sanitary napkins in the villages in Bhokardan Taluka.

They developed a cadre of Deepshikhas, village women 15 to 25 years old, some of whom were married, with no prior selling experience apart. They developed a business model which included inter-personal communications with customers and selling the sanitary napkins, and educating them about the usage. A sanitary napkin production unit was set up by the self-help group (SHG) of Kedarkheda village to provide employment to the people in that area.

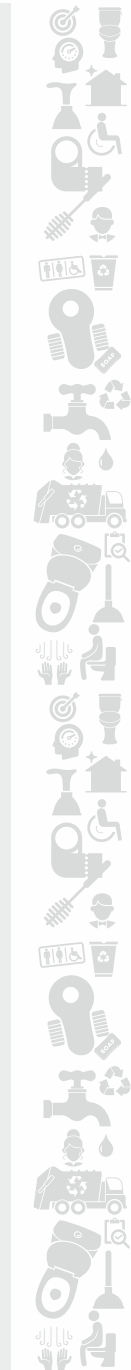
Muruganatham developed a sanitary napkin making machine that operated on a small scale. Unlike a large-scale production model which requires Rs 3.5 crore as capital investment, this machine cost Rs 75,000. This allowed smaller players like SACRED to start making and selling sanitary napkins. They paid special attention to quality.

The 'Nirmal' brand was considered an affordable and quality napkin that was accessible through the Deepshikhas. The napkins were supplied to BPL girls at a nominal cost of Re 1/pack of six while APL girls paid Rs 5/pack.

UNICEF bought the napkins at Rs 19 per packet of 8 pads. It supplied these at Rs 22 per packet to Deepshikhas who got a commission of Rs 2 per packet. The local NGO got Re 1 per packet for warehousing, stock keeping, accounting and reporting back to UNICEF. For bulk sales of more than 50 packets, a discounted rate of Rs 21 was applied.

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[2] Neilson Company and NGO Plan



The programme runs across 23 districts in 16 states. These are Andhra Pradesh, Assam, Bihar, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, New Delhi, Odisha, Rajasthan, Punjab, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand and West Bengal. It has reached about 3,48,157 people, 17 community toilets have been renovated/constructed and over 1,04,000 children have benefitted from WiNS. In the project areas, 64 per cent villages have been declared ODF.

The programme followed this workflow:

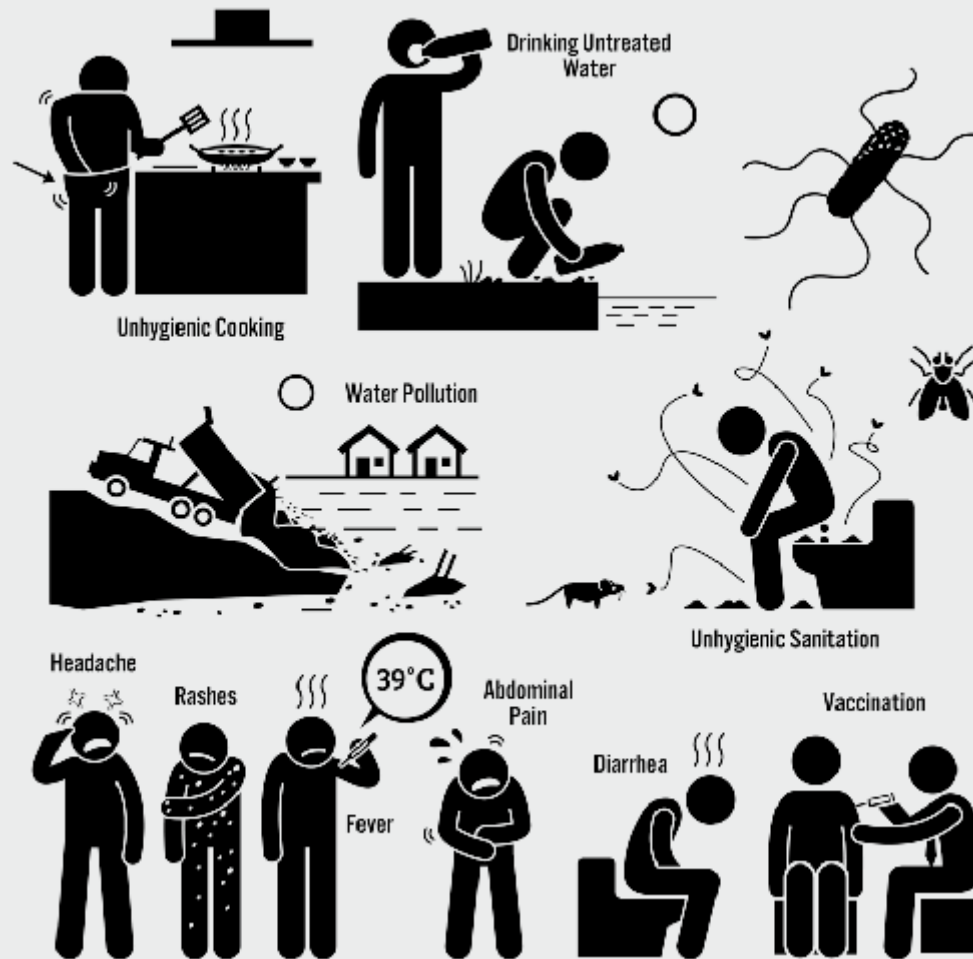
- i. Demand generation through awareness creation using IEC
- ii. Community mobilization and capacity building of CBOs
- iii. Building financial stake of beneficiaries through mandatory contributions for construction, operation and maintenance
- iv. Forging multi-stakeholder partnerships and leveraging SBM funds for BPL households

In IHHT projects, SHGs drive the programme. They generate demand, disseminate WASH practices, liaise with local bodies and tap government schemes for funds. Beneficiary households make a mandatory upfront payment for toilets and the rest comes from ITC as an interest-free loan to CBOs. The repayment amount forms the sanitation corpus and is used to fund construction of more toilets and maintain infrastructure in schools.

ITC's WiNS intervention focuses on age- and gender-appropriate sanitation infrastructure, systems for O&M and capacity building thereby making it self-sustainable.

Modeling Sanitation Through Behaviour Change, YouthAid.in

Challenges to improve sanitation include behaviour change, poor construction, technical limitations, inadequate supply chain, untrained masons and poor solid and liquid waste management. To overcome these, YouthAid provides a one-stop solution that improves sanitation by developing human capital and addresses supply chain gaps in high priority states. The pilot phase has already covered some rural areas of Maharashtra with Swades Foundation, and Chhattisgarh with various NGOs and the government.



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YouthAid.in is helping to establish and strengthen the supply chain by with technical and management support. It connects users to suppliers, and identifies masons and unskilled labourers to build toilets. It provides marketing support through entrepreneurs. It also give them and masons seed capital.

For a twin leach-pit toilet, the profit margin is Rs 250-500 depending on the site and distance from the market. The business model covers the cost of facilitation, technical inputs and a seed fund. The company has trained 35 youths as CLTS facilitators and 15 as masons. Over 100 toilets have been made covering a population of 500.

YouthAid has expanded its focus from construction to support and facilitate institutions and communities to improve operation and maintenance of WASH facilities and SLWM. It has included sanitation linked behaviour change, technical assistance, skill building and construction and promoting entrepreneurs in the sector, including innovative technological options.



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Evaluation results will be disseminated through several channels: discussions with policymakers and stakeholders, presentations to sanitation officials and experts, development of platforms to share process and implementation lessons, the production of a research report and policy publications, and most importantly, by informing the design of the “toolkit” for effective sanitation interventions in low income urban contexts, which is the end goal of this project.

The stages of the project were: Memorandum of Understanding (MoU) between implementing partners, site identification, design and tendering, construction and demand generation activities, handover to communities and O&M of facilities. All these stages were accompanied by research, community mobilisation and outreach and capacity building of municipal officials.

The project resulted in development of gender-segregated smart-community toilet facilities. It aims to deliver 58 community sanitation facilities by December 2018 in Bhubaneswar and Cuttack (32 community toilet facilities in Cuttack and 26 in Bhubaneswar). Currently, the toilets are in various phases of construction.

To ensure economic sustainability, users are charged a fee. Additionally, each WSC shall receive financial benefits for supporting research and data collection and a grant from BMC/CMC. This system follows a bottom-up approach, in sharp contrast to the top-down approach prevalent in the State.



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TEchnoloo



Peepoople: From Waste To Valuable

Peepoople was formed to develop, produce and distribute the Peepoo sanitation solution with the aim of, all people who so desire shall have access to dignified and hygienic sanitation. Peepoople was founded in Stockholm, Sweden in 2006. The Peepoople brand is since October 2016 owned by IAS (International Aid Services)

The foundation with its reach to Kenya, South Africa, South Sudan, Pakistan, Haiti, New Zealand, Syria and Philippines. Its target areas cover Urban slums, slum schools and humanitarian response.

The aim is to provide a solution by starting at the source. Prevent disease transmission as soon as possible through rapid inactivation of pathogens directly after defecation. The United Nations has declared access to sanitation a human right. Yet, it is the most neglected and off-track UN Millennium Development Goal. Thus, Peepoo is formulated from a bottom-up perspective that puts the user's need first. Ergonomically designed to be easy and hygienic to use, simple to produce, and thus possible to be sold to groups with the weakest purchasing power, Peepoo offers a sanitation choice for both individuals and society at large. Peepoo can be utilised as fertiliser and contribute to food security in schools.

Women who benefit the most from using Peepoo are ideal salespeople and distributors. If the used Peepoos are not utilised directly in home gardens, they are collected and managed by the Peepoo collection system.



To engage the youngest, there is also an animated character from different cultures and parts of the world can easily identify with.

Peepoo is an environment-friendly, user-friendly as well as self-sanitising . The urea inside Peepoo inactivates harmful pathogens (bacteria, viruses and parasites) within four weeks. its self-sanitising attributes, Peepoo remains safe to hold and carry after use. Use of water is very limited. Peepoo remains odour-free for at least 24 hours after use and can be stored in the immediate environment.

During initial years the project been financed by Swedish Vinnova and Dutch Simavi funds and is now self supporting.

During initial years the project been financed by Swedish Vinnova and Dutch Simavi funds and is now self supporting.



Better India

The Better India (TBI) is an online media platform that works with media and technology, the motive of 'Positive News for sanitation. Sanitation is one of the most important categories that TBI covers stories around. These are stories about innovative solutions for better sanitation facilities, raising awareness about ill-effects of open defecation, etc. audience is 75% from India and the remaining from abroad. Also, in terms of demographics our largest audience is in the age group of 18 to 35 (66%) and the remaining in the 35+ segment.

There is immense need for such stories that are generally not covered at a large scale. In a country that is currently trying to improve sanitation facilities in the remotest corners, we have individuals who, instead of depending on the government or waiting for action, are taking things in their own hands. The word about their initiatives needs to spread far and wide to inspire action at a large scale. With most of the stories we have seen incredible impact. Once readers come to know about initiatives they make sure they can do everything to help – while some write in to help as volunteers, others help spread the word and also come forward to contribute.

These sanitation-related stories discuss individuals and organizations that have been going out of their ways to ensure that sanitation facilities reach the remotest villages, urban slums, schools, workplaces, and more.

TBI gets in touch with local organisations in areas where they plan to run campaigns around sanitation. The team works with the organisations to get in touch with locals, understand their needs, and then make an editorial content plan and fund raising. Sanitation reportage: The editorial team gets in touch with people behind institutions working in the field of sanitation to understand what were the motivations with which they started working in this field. This is followed by verification procedures, interviews, and producing the story in a way that it inspires our readers to take up similar initiatives or help the protagonists of the stories. The government also gets involved after reading the stories. The campaign has reached 1 million people in total, and INR 400,000 has been collected from the readers.

Plastic, Fantastic Toilets, Saraplast India

Using technology, Saraplast India is developing models to get positive impacts on returns, costs and risks. It aims to provide safe and clean sanitation environs specially for the female population and low income group. About 6250 toilets have been provided around the construction sites and religious events Pan India from 2009 impacting 6 million users.

It is often the first time in their lives that the workers – both men and women – have ever been able to use properly functioning sanitary installations. Saraplast's offering is now generating demand by itself – and this demand has to be met with an increasing supply of portable toilets. The toilets constructed are 100% recyclable and that reused plastics are processed and then added to the new material

“Servicing is the most important element of our business model. We hire out the infrastructure at very low costs. Our main source of revenue is from maintenance and cleaning.”
- Rajeev Kher

”



Think Global Act Local, WSUP Advisory



WSUP Advisory is working with USAID to support the Government of India in achieving SBM. The Urban Sanitation Research Initiative is a programme of rigorous research designed to drive pro-poor sector change in urban sanitation in India, Bangladesh, Ghana and Kenya and globally.

The Urban Sanitation Research Initiative aims to make a substantive contribution to achieving universal urban sanitation coverage in low-income contexts. WSUP Advisory is working with USAID to support the government of India and other nations in achieving the sanitation facilities through Knowledge exchange and sharing of best practice, Targeted, demand-driven technical assistance, support public-private partnerships. It also receives funds from international organisations as well as local organisations.

It is working with the city of Visakhapatnam to eliminate open defecation. In Ghana since 2010, improving the provision of water and sanitation services in Accra and Kumasi, focusing on low income community. WSUP have worked closely with Dhaka Water Supply and Sewerage Authority (DWASA), helping it to create and expand a team focused on increasing connections in low-income communities. It has an impact far beyond the countries where they have a permanent presence, and are committed to sharing evidence

and approaches, towards the achievement. On 10th December 2016, the city of Vizag was declared Open Defecation Free. More than 12 million people have benefitted in Bangladesh and Ghana.

The Initiative combines a unique access to expertise with the ability to tailor make specialist teams to address the specific needs of each assignment, helping its clients to find effective solutions in a highly complex environment. The integrated programmes offer an unrivalled package of support, combining capacity building of all stakeholders and development of relationships between service providers and low income communities to deliver sustainable, improved services. As well as enabling institutional change within service providers, WSUP focuses on developing business models that enable the private sector, especially entrepreneurs, to play a stronger role in water and sanitation. They work to addresses the whole sanitation value chain. They work with sanitation authorities and the private sector to ensure the safe capture and storage of human waste, transport to a safe treatment point and, where possible, re-use as a useful product. Underpinning this approach is the belief that sanitation should be considered a service.



Locate The Public Toilet

Taking a step towards making India cleaner, a Google Map toilet locator was launched to help people find public restrooms. Google Maps will provide information on thousands of public toilets in Delhi National Capital Region and in Madhya Pradesh. Toilets can be located not just through the app on mobile phones (Android and iOS), but on desktop computers as well. Which to encourage citizens to locate toilets and give feedback on Google maps which will help force the civic bodies to improve the public amenities.



The Sanitation Economy, Toilet Board Coalition (TBC)

The Toilet Board Coalition (TBC) is a business led public-private partnership. Its members are multinational corporations, development expert NGOs / IGOs and social investors - all dedicated to enabling smart, sustainable sanitation systems for the future that deliver sanitation to all. In 2016 the TBC launched the Toilet Accelerator, the first accelerator program dedicated to supporting sanitation entrepreneurs in low-income markets to help catalyse new business solutions and innovations.

In 2017, the Toilet Board Coalition introduced the concept of the Sanitation Economy, a future marketplace of untapped business potential helping to tackle the global sanitation crisis, and has assembled growing evidence of significant new benefits for business and society across sectors - an estimated \$62 billion opportunity by 2021 in India alone.

The Sanitation Economy not only provides sanitation, enables education, and facilitates better workplaces for women, but it creates a biological resource system and a new source of information about human health and behaviour. A consistent flow of new resources that can be transformed into energy, animal feed, organic fertilisers that capture nutrients, data, and health information.

Members of the Toilet Board Coalition work together to catalyse a robust business sector to deliver accessible sanitation to all, at speed, at scale, and at a level of profit which ensures sustainability across the value chain by investing in emerging and frontier markets – including the provision of hands-on corporate mentorship and supporting access to capital to scale. The Toilet Accelerator works with sanitation businesses in three ways, initially accelerating, co-innovating (in areas where critical components of the system does not exist) and bundling (sanitation and other Solutions)

The Toilet Accelerator is seeking to work with market-based, innovative, scalable, emerging businesses. The benefits that TBC Toilet Accelerator offers to sanitation businesses are, access to global and local mentors and capital from TBC members and investor network based on investment readiness, business intelligence and experimental learnings; partnership brokering and brand building and also brings in membership to a global peer-to-peer network of sanitation business entrepreneurs and Alumni of the Toilet Accelerator Program.

Accelerating Sanitation, Ennovent, IRC and Taru Leading Edge ('TARU')

Ennovent, IRC and Taru Leading Edge ('TARU') forged a partnership alliance to develop a Sanitation Innovation Accelerator ('Accelerator') for India's rural markets. The initiative brings together international and national technical expertise on Water, Sanitation and Hygiene with a specialization in accelerating innovative solutions for sustainability in low-income markets in developing countries covering huge populations. The aim is to build the Accelerator gradually in several phases to ensure better alignment of activities, resources and effectiveness.

Initially, a pilot was set up with the objective to test the process and systems of the Sanitation Innovation Accelerator. Almost half of the 88 innovations submitted focused on awareness raising approaches or product development and most of the applications lacked a viable business model. 30 businesses complied with all the selection criteria and based on a second round and third round of interviews and due diligence and capacity assessments, 6 innovations were shortlisted for a coaching trajectory to improve their business. During the programme, the cohort members went through a 3 Day boot camp which focused on understanding the larger sanitation sector challenges, discussion of the innovations and its challenges, elements of business models and its importance and an opportunity to clarify any doubts they had regarding the accelerator programme.



The capacity building phase which took place over the next 8 weeks was taken up primarily to infuse the cohort of 6 finalists with a new level of confidence and was done through the provision of Investment-readiness support to the entrepreneurs in the form of capacity building interventions tailored to match their specific requirements. Experts, mentors and service providers from the alliance's networks were brought on board to guide the entrepreneurs and ensure that they are well equipped to present their pitches to investors. Potential investors were also involved during this stage to ensure that an investable pipeline is created for them.

As part of the culmination of the first batch of the Sanitation Innovation Accelerator, TARU, IRC and Ennovent held a Final Showcase event and roundtable discussion on 07th September, 2016. Each cohort member got an opportunity to present their pitches to investors. Based on their business pitch, the winners were announced. The roundtable discussions focused on 4 broad themes and other insights from the programme namely Building a scalable, for-profit revenue driven Sanitation business model, creating breakthrough innovations in solving sanitation challenges, Diversifying Entrepreneurial focus into other parts of the Sanitation Value Chain event also launched the SIA Report titled "Enabling Rural Sanitation-Understanding the Business Perspective"

Through this platform, innovative and effective sanitation solutions were recognized and 3 innovations were rewarded along with a focus on different business and revenue models for such enterprises. was the first of its kind innovation accelerator in the WASH sector that targeted and sourced innovations across the value chain (B-U-M-T)



All Around Plants, Aditya Birla Centre for Community Initiatives and Rural Development Works

The Aditya Birla Centre for Community Initiatives and Rural Development works for the all-around development of the communities around our plants. It partners with government bodies, district authorities, village panchayats and the end beneficiaries. Its focus areas are healthcare, education, sustainable livelihood, infrastructure and espousing social causes. The Centre works in 17 states.

The Centre picked 300 of the 2,500 villages where it works to make them model villages. This involves ensuring self-reliance in all aspects viz., education, healthcare and family welfare, infrastructure, agriculture and watershed management, and working towards sustainable livelihood patterns.

The Centre works in
17 states.

To address sanitation challenges in these villages, the Foundation started by providing water since some were in arid areas. It evolved a multi – pronged strategy based on an integral development plan and leveraged government schemes such as Swajaldhara Yojana, Jalanidhi, Rajiv Gandhi National Drinking Water Scheme, etc., to provide benefits to the villages. It conducted a massive awareness drive on cleanliness, hygiene and sanitation along with district authorities and NGOs. The campaign has a hardware component under which the Foundation has made over 10,000 toilets in a period of 5 years in villages close to its plants. These include community complexes and schools toilets.

About 20% of the project villages have become model villages with good sanitation facilities. Developing model villages in a phased manner is Foundation's strategy: ensuring that development reaches a stage where village committees take over. This has also been possible because of the planning process with milestones and measurable targets, and catalyzing government resources



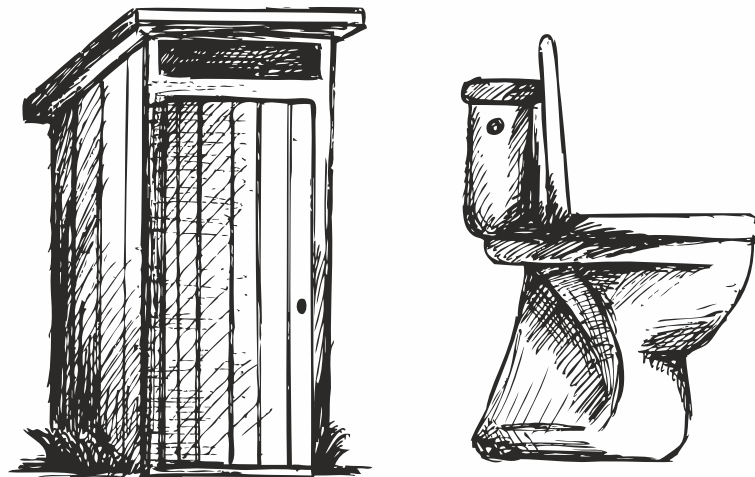
Toilet First and Last

Toilet First is the India's first crowdfunded open defecation portal. Toilet First is a unique initiative to eradicate open defecation by constructing toilets and awareness under SBM. It is a group of young social entrepreneurs and engineers promoting awareness to eradicate open defecation and building toilets.

The Toilet first initiative is Community Public Private Partnership Model that focuses on bridging the resource gap between government funding and project implementation cost. The project brought involvement of citizen towards the development of the city. The crowd funding for the construction of toilet is the first ever crowd funding platform for the construction toilets. The project utilized the skill of the students, created young entrepreneurs and using the best of the digital technology.

The project mainly embedded technology with social cause. The creation of a website crowd-funding platform has helped in contribution from various people and contribution mechanism was through payment gateway.

People are constantly informed about the progress of construction of Toilets. The Toilet First mobile application helped the student community to build toilets for the beneficiary. The project saw huge participation from students and institutions for utilising the skills for the development of the community.



Sanitation - Behaviour Change & Strengthening of Infrastructure go Hand in Hand, DCM Shriram Ltd

DCM Shriram Ltd is a business conglomerate having interests in Fertilisers and Chemicals, Seeds, Sugar, Plastics, and Window systems. The company works in several states - Uttar Pradesh (District Hardoi), Rajasthan (District Kota), Gujarat (District Bharuch).

As part of its CSR initiatives, the company has worked to implement programs around Sanitation in more than one hundred govt Schools. It has also created public toilet facilities, support household toilet construction and conducted sensitization programmes on Water, Health & Sanitation for Schools & Communities.

The Company believes that along with infrastructure, the mindset of people towards unsanitary conditions, open defecation etc. needs to change through regular sensitisation and awareness. It also believes that sanitation habits are easier to inculcate in childhood.

Schools in rural areas often have dysfunctional toilets. As part of the project, communities are sensitized on WASH issues and behaviour change is ensured. The Sanitation projects typically involve supporting Schools to upgrade their sanitation infrastructure, provide sensitization program on WASH, support repair & maintenance and then exit once capacity building is done. The gram panchayat is involved in decision making process. The project uses puppet shows etc to propagate sanitation. Third party Impact Assessment is carried out. The key lesson is that sensitisation on WASH is as important as infrastructure to ensure behaviour change.

The project has reached 20,000 students directly and 50,000 indirectly.

The project has reached 20,000 students directly and 50,000 indirectly.



School Sanitation in Hard-to-Reach Areas : NALCO

National Aluminium Company Limited (NALCO), a public sector Navrantrna company, started a project to support government's Swachh Vidyalaya Abhiyan in 2014 to create quality sanitation facilities in government schools across mostly difficult and underdeveloped areas of Odisha and Andhra Pradesh.

NALCO launched the campaign by beginning construction of sanitation facilities on October 3 2014 in three schools located in Koraput, Angul and Khurdha districts of Odisha. About a month later, NALCO set for itself an ambitious target to provide sanitation facilities in 150 schools of Odisha within a year. Later, the Union Ministry of Human Resource Development (MHRD) asked NALCO to build 355 toilets in 202 schools in Angul and Koraput districts of Odisha and Visakhapatnam district of Andhra Pradesh.

The Herculean task was successfully completed through NALCO Foundation, the (CSR arm of the company). The task was huge as most of the schools that government asked NALCO to intervene were located in remote locations and areas with violent extremist movements.

Most of the schools allotted were located in remote and Maoist-infested areas of Odisha and Andhra Pradesh. Since, some of the schools did not have any approach roads, prefabricated toilets were carried on head loads, crossing rivulets and hillocks. Due to space constraints, designs had to be modified for some of the schools. Besides, summer vacation, monsoon menace, acute shortage of skilled workers & labourers, resolving local issues and theft of construction materials also took their toll.

Going further, NALCO has now adopted the internationally famed religious shrine, Jagannath temple in Puri, where tens of thousands devotees throng daily from different parts, to improve its sanitation and hygiene standards.

Under Swachh Vidyalaya Abhiyan NALCO has constructed 473 toilets in 206 schools (133% of target) in Odisha & Andhra Pradesh before time. It exceeded the target by 35 percent. Additional toilets were built and schools were covered after assessing the ground realities and requests from school authorities and communities. This has drastically improved the condition of schools with respect to sanitation.

It was difficult to reach to some of the areas. Some of the schools did not have any approach roads, pre-fabricated toilets had to be carried on head loads, crossing rivulets and hillocks and installed there. At other places high quality toilets were constructed through conventional means with large reliance on locally available materials and resources.



Wow Poop- Treatment

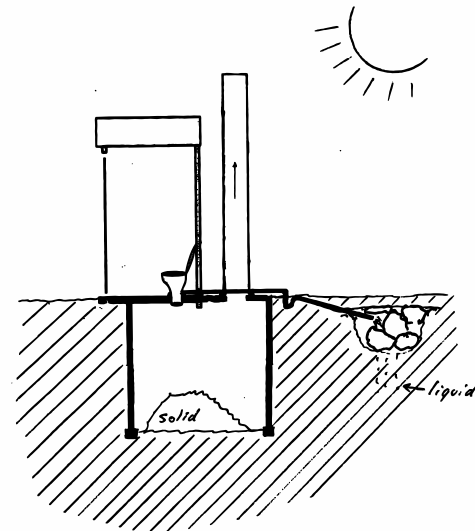
Dry Toilets for Quick Solutions, EarthAuger

The EarthAuger is a home sanitation unit to serve 4-6 people and can also be used in schools or emergency response situations. It has a presence in 12 countries from 2001. EarthAuger is a toilet that can be installed inside the house and get treated solids and liquids out of the house, while avoiding smells and flies, create usable end products and works without power or water. Its team tests toilet design models that meet the needs of low-income rural or urban consumers in terms of affordability, hygiene, adequacy and desirability. (<http://www.earthauger.org/>)

The EarthAuger is a hybrid sanitation system comprising a urine diverting dry toilet (UDDT) and a composting toilet. A composting toilet makes use of naturally occurring bacteria that use the solids as an energy source - as food - and in the process, convert the solids to a more stable form. Composting happens faster and with greatly reduced odors if done aerobically (with oxygen); a UDDT helps with this in that the urine (and any other water) is separated from the solids by the way that the toilet seat/vertical chamber is made. The odors dissipate relatively quickly.

There are a number of ways that EarthAuger enhances composting, drying and odor reduction. First, a cover material is added (like sawdust, coffee grounds, rice hulls, ash, etc.). These materials absorb odors as well as absorb moisture. Ideal composting happens

between 40 and 60% moisture, so it's best to reduce the moisture in poop as soon as possible in the system. Secondly, each 'flush' turns an auger that mixes the poop with the cover material. This action makes the composting happen faster by maintaining aerobic conditions, breaking up chunks of materials and continually moving the materials. Eventually, composting slows because the bacteria have used the solids that are easily broken-down, or the solid matter has dried. It's easy to tell the solids have changed form, as the material that comes out the end has a typical musty odor of rich earth rather than a fecal smell. The black vent tube outside the toilet building also helps drying. As the sun hits this black tube, the air inside heats up, rises and pulls



Taking The Solution to The Problem, CDD

CDD started a project with the Town Municipal Council of Devanahalli to implement a comprehensive faecal sludge management system. It addresses all aspects of the value chain, right from the safe collection of sludge, to its treatment and disposal/reuse. CDD plans to replicate this model in other towns.

Registered in 2005, CDD Society's objective is to provide robust and sustainable post-toilet infrastructure with the aim of improving health and hygiene, preserving the environment and securing water resources. For this, CDD and its partner BORDA, have created solutions for the effective management of wastewater and faecal sludge. Wastewater/faecal sludge management plans developed by them integrate decentralized sanitation solutions. They have also trained government officials to prioritize and scale decentralized sanitation infrastructure.

On World Toilet Day, November 19, 2015, CDD commissioned India's first city-wide, dedicated faecal sludge treatment plant at Devanahalli, near Bengaluru. This treatment unit uses DEWATSTM technology. It treats faecal sludge and produces manure, treated wastewater and biogas as end products, at a very low cost. The current engagement with the municipal council involves implementation of systems for safe collection, transportation, treatment and disposal of faecal sludge.

CDD has also setup DEWATSTM for Bengaluru Metro Rail, MMRDA Office, ITC factories, IIT Gandhinagar, Aravind Eye Hospital, Flipkart and others. These systems treat wastewater generated by 1.5 lakh people everyday. In addition, city sanitation plans for several cities in India and Bangladesh have been prepared by their team.

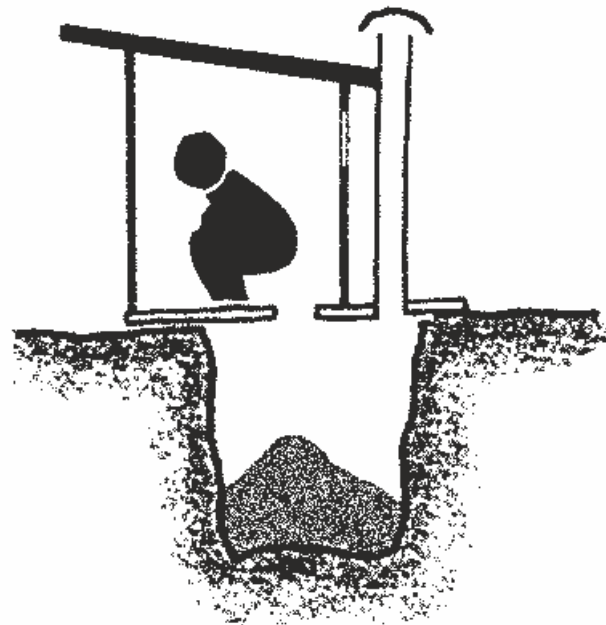


Treating the Lake City's Sewage, Hindustan Zinc limited (HZL)

Hindustan Zinc limited (HZL), a Vedanta Group company in zinc, lead and silver business in 2014 began an initiative to treat and recycle the sewage collected from Udaipur City in the state of Rajasthan. The target was the recycled sewage to be used in various process applications thereby saving the potable water resources. On an average, Udaipur city generates about 70 million liters of sewage per day and cleaning it has been a challenge. Most of the sewage was finding its way to the lakes leading to contamination of water.

In association with Government of Rajasthan, Hindustan Zinc has constructed the first PPP Sewage Treatment Plant (STP) in Udaipur in 2014, with a capacity to treat 20 million litres of sewage daily, which treats 30% of Udaipur's domestic sewage. The company has invested close to INR 170 crore on this project. Taking forward the success of this STP, which has brought significant cleanliness in lakes, Hindustan Zinc is looking forward to scale up its Sewage Treatment Plant project to treat 100% of Udaipur's domestic sewage.

The STP is vital for the city of Udaipur, which is witnessing rapid urbanization and is a popular tourist destination. It will treat city's sewage leading to a substantial reduction in sewage inflow to the lakes and help maintain the beauty of lakes. Besides treating the sewage, Hindustan Zinc's treatment plant will also generate large quantity of manure to be sold by the Udaipur Municipal Corporation to the local bodies, and generate revenues of INR 1 crore every year.



Prefabricated Toilets, CAYA Constructs

Set-up in 2015, CAYA Constructs develops innovative products & services in water and sanitation aimed at the Sustainable Development Goals & aligned with the Swachh Bharat Mission's goal of making India free of open defecation. In a little over 2 years, with 5 patented products, CAYA is providing access to toilets for 700,000 people in 150 cities of India.

CAYA designs and develops product & services as per the sanitation challenges and the population that is being served. The sector being largely unorganized has products that are not designed for masses & do not perform well when used roughly. CAYA's superstructure is a joint-free, durable, high-quality product made using superior precast & Reinforced Cement Concrete (RCC) technology. It is suitable for all geographies & climate and can withstand high usage. These toilet structures can easily be relocated in case of road widening or other infrastructure work saving the cost of demolition & reconstruction. For waste management, CAYA offers pre-cast RCC septic tank & bio-digesters that are useful in the absence of a sewage system. Fecal matter is collected & treated in the bio-digester and the effluent is safe to discharge. CAYA's Super-scalable RCC modular toilets are designed for rural and urban households (IHHL) and also used to make toilet complexes especially in congested or remote areas where it is difficult to transport construction material & equipment. The modular toilets are in the form of panels and can be easily installed in any part of the



Business of Change: Thinking beyond Shitpots

country. Post-installation, household has the option to upgrade by painting, tiling, adding a wash basin, overhead water tank etc. The IHHL units come with twin-pit for waste management.

Lack of maintenance, difficulty in monitoring services in community & public toilets often leads to non-functional toilets. CAYA offers a unique Operations & Maintenance model with app-based monitoring of services that allows large scale supervision. As the products are made of concrete, they are hygienic and easy to clean. To counter the social challenges of toilet cleanliness work, maintenance services are delivered by a highly trained, in-uniform & equipped Swachhta Army. The Sainiks follow a daily cleaning & maintenance regime. To address community based issues CAYA's community engagement team conducts regular IEC and community outreach to encourage usage with activities specifically designed for men, women, children and elderly with discussions around toilet usage and hand washing demonstration.

CAYA was co-founded by Navneet Garg & Ashish Gupta, both with extensive public health experience in India and globally. Their team of 60 has expertise in the entire value chain and is exploring models to develop village level toilet entrepreneurs and address sustainability in urban public toilets.



Promoting Faecal Sludge & Septage Management, NFSSM Alliance

A National Faecal Sludge and Septage Management Alliance (NFSSM) was set up January 2016 with the support of the Bill and Melinda Gates Foundation to build a consensus around, and drive the discourse, on FSSM forward. It now has 26 organizations working towards solutions for both urban and rural areas. There are sub-committees and action groups to carry out specific tasks within specified timelines.

The Alliance works on city sanitation plans, regulatory and institutional frameworks across the sanitation value chain. It works closely with the Ministry of Housing & Urban Affairs (MoHUA) and state governments. So far, it has supported the design of a national declaration for a national goal on FSSM and a convergence of all urban development schemes. This has been signed by Mission Directors. It has also extended its support to the ministry in developing a rapid assessment tool for FSSM budgeting by the urban local bodies, and a primer on FSSM. It has supported ministry to develop the National Policy on Faecal Sludge and Septage Management, which was released nationally in February 2017

The Alliance is supporting the Ministry of Drinking Water and Sanitation (MDWS) towards development of National Level FSSM Implementation Framework for rural areas and Census towns. Advocacy and active involvement in the ground by the Alliance members has resulted in the steady growth of faecal sludge treatment plants (FSTPs). The goal is to set up 5000 in the next three years, support states and ULBs with implementation plans, train stakeholders on FSSM, promote of private entrepreneurship and sector engagement, research on FSSM, Behaviour Change Communication (BCC), promote retrofitting of poorly constructed septic tanks and other onsite sanitation systems, quality assurance of FSSM services, and encourage scale with focus on sustainability.



Multi-Pronged Approach, Suzlon Foundation

At Suzlon Foundation, the implementation approach focused on participatory rural appraisal, formation of health and sanitation committees and institutional mechanisms, preparation of community action plans, capacity building through workshops and exposure visits, input supply community mobilization and behavior change communication, construction of amenities and maintenance of amenities by community. It has worked on programmes in Pondicherry, Maharashtra, Karnataka and Madhya Pradesh.

In Pondicherry, its project with Ekoventure, the Foundation reached out to 600 households. Through 24 SHGs, who worked as change agents and were trained accordingly, each household was provided two SLWM units comprising a barrel with a tap at the bottom, small brick and nylon net/bag. SHGs prepared and distributed activated effective microorganisms (AEM) to each household received every month to use in these units. Each SHG was provided with Rs 25,000 as a revolving fund to be issued as loans to members and 50% of the interest amount was used for menstrual hygiene. The technique was adopted from Dr. Lucas Dengel's manual on "EM Technology". The fluid which is drained everyday from the barrel was used as liquid fertilizer, in pots, garden beds, septic tanks etc. Vegetable seed mini-kits were distributed to nearly 200 women and demonstrations were conducted to lay kitchen gardens using the compost obtained by decomposing the solid waste from the households by using the technology.

This was initiated in Madhya Pradesh's Isarthuni, Gopalpura and Tajpuriya villages, the Foundation worked on positive health reinforced through health awareness sessions for students of 12 schools, school teachers and anganwadi workers. One teacher from each of the 12 schools was trained as a resource person to conduct these sessions. As part of the project, student sanitation rallies were held. The public health department demonstrated construction of soak pits in two villages followed by construction of 200 toilets by the Foundation. A "triggering exercise" was also held in these villages to show contamination of water from waste. A third party evaluation of Isarthuni village declared it open defecation free. It also received the President Award for 'Nirmal Gram Puraskar'.

In Karnataka, the Foundation ran the Pehchan Project in Chikkavaddatti and Murdi villages of Gadag district of Karnataka and Jamgaon, Ghorvad, Advadi villages of Dhule district in Maharashtra. In this school project, to induce behaviour change many school

Long Road to Holistic Sanitation, Appa Patwardhan Sanstha

Dr. S V Mapuskar set up the Appa Patwardhan Sanstha, half a century ago. It has become a torch-bearer for people working in the field of rural sanitation. He implemented the principles of appropriate technology and community ownership at a time when these were not part of the national consciousness. The Sanstha advocates for the use of decentralised, low cost sanitation options, training in sanitation and bio-methanation. It has established DOSIWAM system for integrated waste management.

Dr Mapuskar's tryst with sanitation started one morning in a rural hospital that, he discovered, lacked a toilet. As he made his way through the village to the forest, he made a decision to promote sanitation. He taught himself to make a simple trench toilet with old medicine cartons for the walls of this toilet. Dr. Mapuskar realised he was never called on to treat more than a handful of illnesses - all hygiene related. The need was to tackle the cause of the infections. In 1963, he started a worm infestation survey where he learned that 86% of the residents were infected with worms.

To find out why he examined their faeces and soil samples. They both had worm eggs. He used this to convince the villagers about the origin of the infection. The entire village was dewormed using government medicines. The people of Dehu conducted a massive awareness campaign with processions, household visits, and group discussions etc. under the initiative of Appa Patwardhan. They decided to make Appasaheb Patwardhan's 'sopa sandas' toilets and set up a toilet construction committee. Households wanting toilets deposited Rs 400 with the committee. On this no-profit-no-loss principle, 100 toilets were built in a month. By 1980, the village had achieved 90% coverage.

In 1980, Dr. Mapuskar began promoting the bio-gas toilets developed by Appasaheb Patwardhan. The first family to adopt this built a pay-and-use toilet and earned Rs 700 a month from the sale of compost and generation from a one-time investment of Rs 1300. Today, there are 75 such biogas toilets functioning in the village. Subsequently, he developed a decentralised on-site integrated waste management (DOSIWAM) of which 25 have been set up across the country. Dr. Mapuskar also set up two organisations, the Jyotsna Aarogya Prabodhan and the Appasaheb Tantraniketan to work on health awareness and appropriate technology. The team has also been working on biogas composters for vegetable waste, monitoring for the Sant Gadgebaba Abhiyaan, and lobbying for policy

Beyond The Waste to Wealth Clichés, Clean India Venture Private Limited (CIVL)

The Green Waste Reprocessor is a revolutionary product to recycle organic waste developed by Clean India Venture Private Limited (CIVL). It converts waste from gardens, temples, kitchens and marketplaces into manure and liquid fuel. The manure is branded Earth Life. The reprocessor takes advantage of the fact that 60 per cent of waste is organic.

Instead of clogging landfill sites or being burnt, this is processed into manure and fuel. The company has units in New Delhi, Haryana, Rajasthan, Himachal Pradesh & Rajasthan. Its units are in place in both villages and towns. The objective of the projects is to provide a better solution in the field of waste management along with creating value for the users.

Starting in 2015, the company developed models in Delhi. Clean India Ventures created an ecosystem where all organic waste is reprocessed at the same site, eliminating the need of transportation and landfilling. Its machine tackles the problem at the root eliminating the need for transport. It comes in different capacities, to meet various requirements.

The manure is branded 'Earth Life', which is packed compost prepared by reprocessing green waste through GWR.

CIVL has 8 projects across Delhi, Haryana, Punjab, Rajasthan. While most of them are on paid basis, some are done as trial projects. This is done for the satisfaction of authorities, foreseeing that sooner or later they will switch to the paid model.

The impact is an improvement of waste management, savings in the cost of waste treatment, creating compost, and reduction of harmful gases such as methane.

A challenge to expansion has been getting municipal corporations or private owners to spend on waste management. Each thinks it somebody else's responsibility. The product is well-placed to change this scenario. The low cost reprocessors employ 4 – 5 semi-skilled workmen who could be ragpickers. Awareness about the situation is a key in such kind of projects because segregation and treatment of waste at source is the future.



Working System for Public-Private-Partnership Faecal Sludge Management. Leh

Simple technologies and focused solutions can often solve critical problems effectively, quickly and more cheaply than large projects using advanced technology. In sanitation, the government's focus has been on sophisticated large-scale underground drainage networks connected to large sewage treatment plants (STPs). More recently, however, de-centralized options have come to the fore as large systems are unaffordable and impractical in most Indian cities. Faecal Sludge Management (FSM) is one such option that must be adopted at scale and speed.

The city of Leh (population: 45,000), is also building a traditional centralized sewerage system that should be operational by 2020. Costing over Rs. 90 Crores (US\$ 14 Million), it may cater to only 40% of the population due to narrow roads and mountainous topography--nearly Rs. 50,000 per person served. As there were early signs of groundwater pollution from septic tanks in 2016-2017, the Municipal Committee of Leh (MCL) needed an urgent and effective solution.



It invited BORDA, a leading sanitation engineering NGO, to design an FSM system. The Administrator of MCL, Ms Zahida Bano, gathered local support for FSM, provided land and prioritized rapid implementation. Blue Water Company (BWC), a private limited company, came forward to form a PPP with MCL to finance and operate the system for 5 years.

Due to this partnership between an NGO, the ULB and a private player, contracts could be finalized quickly and the entire system was operational in less than four months. BWC built the faecal sludge treatment plant (FSTP) which is at the heart of the system using simple but carefully designed planted drying beds and DEWATS wastewater technology. The investment was just Rs 1.2 Cr. (Rs 270 per capita).

BWC schedules annual cleaning of all septic tanks in the city, and prepares a monthly plan based on which MCL sends notices to hotels, public buildings and homes, and collects service fees. BWC cleans the septic tank and treats the faecal sludge to meet relevant standards (earlier, faecal sludge was just dumped at the solid waste management site without any treatment or re-use. At the end of the month, BWC provides a list of tanks cleaned to MCL, and the MCL pays 90% of the fees it has collected, to BWC.

Thus, MCL invested no capital upfront to start FSM, and only pays BWC a part of the fee it collects after the service is delivered—the system is financially profitable for MCL. As BWC has invested capital, it has an incentive to provide good quality service and be efficient, to earn a return on investment.

Since becoming operational in August 2017, over 350,000 liters of faecal sludge has been safely collected and treated at the FSTP and even local Army units have signed up for FSM services on their campus. Most ULBs ask two critical questions: (1) How to finance FSM? (2) Who has the expertise to operate it? BWC answered both questions by investing in the infrastructure and operating it on a long-term basis.

This is a robust model where all partners are aligned, and ideal for other cities across India to quick implement and deliver high quality FSM.





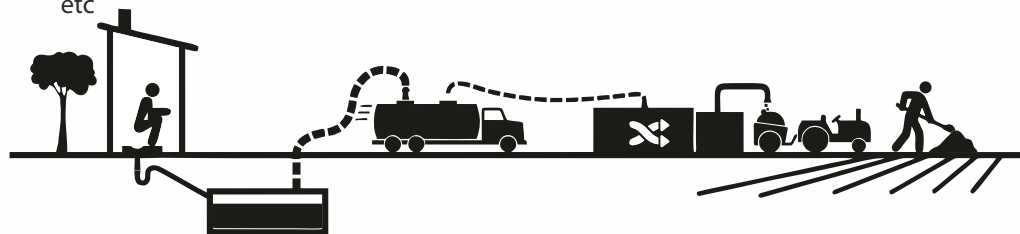
Process

WARANGAL - City-Wide Inclusive Sanitation Engagement

Warangal, a city in the southern part of India, took a comprehensive approach to sanitation improvement through policy formulation, long-term planning, technical innovation, institutional reforms, multi-stakeholder participation and financial reforms. It is the first city in India to introduce and operationalize Fecal Sludge Management (FSM) regulation and promotes sanitation improvement through non-sewered sanitation (NSS) option. Evidence based advocacy, leadership development at city level, citizen awareness campaigns, capacity building of stakeholders particularly the mechanized desludging operators, implementation of innovations across the value chain, extensive use of information and communication technology (ICT) tools for monitoring have played an important role in operationalizing the regulation. Lessons from the city have informed policy at the state and at national level and inspired action by many towns in India and abroad.

The city is working towards developing comprehensive approaches to sanitation improvement with focus on urban poor and vulnerable and is in the process of initiating the following steps:

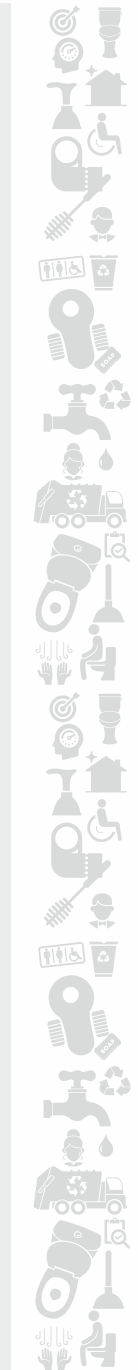
- Established a dedicated NSS Cell responsible for planning, designing, implementing and monitoring NSS/FSM related interventions for enhancing sanitation in Warangal city.
- GIS mapping of all properties to gain complete understanding of toilet typologies and waste generation
- Vulnerability mapping of all slums and low-income settlements to gain deeper understanding and develop customised solutions
- Piloting decentralised treatment systems in low income settlements to demonstrate impact and use the lessons to advocate scale up to all the settlements in Warangal and beyond. Also Implement decentralized waste water treatment plants in parks, hospitals etc



- e. Implement scheduled desludging and bring in financial reforms including subsidy to the poor for desludging
- f. Roll out IEC campaigns to prevent slippage from ODF behaviours and to promote FSM and scheduled desludging
- g. Strengthen operationalising of FSM regulations
- h. Enhance access to inclusive public toilet facilities and IHHL and develop systems to ensure sustained good quality operations and maintenance
- i. Introduce technical review of containment system (toilets) in building approval system to ensure compliance vis-a-vis design guidelines.
- j. Administrative drive and technology support for conversion of insanitary toilets to sanitary toilets
- k. Establishing a sanitation innovation hub to enhance the knowledge base of the relevant stakeholders on sanitation and create a platform for cross learning and collaborations, to build market mechanisms and access to progressive sanitation solutions.

Warangal is poised to implement these initiatives on a mission mode.

FSTP Plant



Organizing A Rural Sanitation Eco-system, Svadha

Svadha is a social business and the only company, globally, establishing organized, rural WASH (water, sanitation, and hygiene) markets to bring quality, affordable, and sustainable WASH solutions in the BoP (Bottom of Pyramid) space. It aggregates from leading national manufacturers to provide an easy one stop solution of high quality and affordable sanitation products. This specially works in rural areas of Odisha and Bihar.

Svadha works on three principle ideas which include, Ecosystem creation which provides supply chain and logistics operation; cutting-edge products, services and processes and creates strategic partnerships to scale and create collective impact. Micro entrepreneur Development, which provides one-stop solution for access to affordable, high quality products, business consulting and training services for efficiency, growth and quality. Through these micro entrepreneurs they create local point of contact for sustained support. They manage strong partnerships with NGOs, institutes and foundations. This integrated system brings greater impact through enhanced livelihoods for our micro entrepreneurs and dignity and health for end consumers.

Svadha works with these micro entrepreneurs in designing specific solutions. The organization does not have a 'one-size fits-all' approach to cater sanitation needs; it designs various technology based solutions to address the challenges in the areas of spanning behavior change communication, toilet design and toilet technology. It develops supply chains to assist rural entrepreneurs in accessing the supplies they need; these services generate revenue for the organization. To assist the rural



populace in accessing adequate sanitation facilities, it also links them to local microfinance institutions.

Svadha currently has more than 300+ entrepreneurs, reaching a total of approximately 120,000+ end-consumers with sanitation solutions and delivered 24000+ toilet packages. Svadha covers 70% percent of districts in Odisha, and hopes to work with 900+ entrepreneurs in three years.

Svadha addresses the full sanitation eco-system, providing one-stop solutions for entrepreneurs seeking business opportunities and customers seeking sanitation services. Svadha negotiates directly with manufacturers, ensuring affordability and quality of products. An important element of the business model is free delivery to micro entrepreneurs, eliminating 'last-mile penalty', facilitating service access to remote communities and alleviating capital investment requirements (as entrepreneurs can buy small shipments instead of excessive bulk). The value proposition thus revolves around convenience for micro entrepreneurs, and Svadha benefits from the entrepreneurs' knowledge of demand in their community. End-consumers benefit through reliable access to quality products.

Svadha's approach ensures a customized, market-based approach to effectively provide sanitation to underserved rural areas with quality products, by both negotiating with local brands for materials and providing hands-on assistance to entrepreneurs and equipping them with tools to expedite and improve the efficacy of sanitation products.

To fulfill the comprehensive WASH requirement of rural consumers, Svadha provides its products and services through several brands such as Svadha Mart (for village entrepreneurs), Svadha lite (for hardware shop entrepreneurs), and Svadha Plus (for women entrepreneurs focusing on total household hygiene and health requirement).



Getting Rag Pickers Their Due, Safai Sena

Safai Sena — an army of cleaners — is a registered group of waste pickers, doorstep waste collectors, itinerant buyers, small junkNa dealers and other types of waste recyclers. Its aim is to ensure that the work of waste recyclers is recognized and that they have safe and secure work conditions. The Sena is the new name for an older organization called Rashtriya Safai Seva Sangathan (RSSS), which was set up in partnership with Chintan in 2001. Since the focus is on waste pickers, Chintan works mainly with organisations of the urban poor, like rag pickers and kabaris. It also works with policymakers, students, parents, teachers, municipality employees, elected representatives and the police. Chintan's initiatives are in the fields of research, campaigns, policy interventions, capacity building of recyclers, and creating awareness about the need for reducing consumption and better waste management among the middle and upper classes of society.

The Sena's vision is that adult waste handlers must be able to upgrade their work to green jobs, which means that apart from being good for the environment, their work should be safe, respected, recognized and clean for us. Hundreds of waste handlers work at the Gazipur and Okhla landfill sites. The team has made a 'Rehabilitation Committee' to guide people towards other work. One of Safai Sena's main objectives has been to ensure decent green jobs for its members. A part of this has been to ensure that waste pickers either directly undertake doorstep collection or they work with contractors in a transparent, fair manner.

After Ramky Infrastructure Limited got the contract for doorstep collection in Faridabad, Haryana, Safai Sena worked with them to ensure that the existing waste pickers were able to upgrade their work through becoming the doorstep collectors under the new system. They have signed a contract and over 200,000 households were serviced in the year 2012. Ramky paid for the costs of supervision, uniforms, and help-lines and Safai Sena executed the doorstep collection, ensuring its members could earn living wages or more. Chintan helped with their training.

Safai Sena members are provided masks, gloves and boots. They are looked after financially, taught how to become self-reliant and send their children to good government schools. They get a salary of Rs 8400 and medical insurance.

The Sena runs a waste processing facility at the New Delhi Railway Station—the land has been provided by the Northern Railways. The processing plant daily handles 4 tonnes of waste generated from 18 Rajdhani Express and Shatabdi Express trains, and also from the

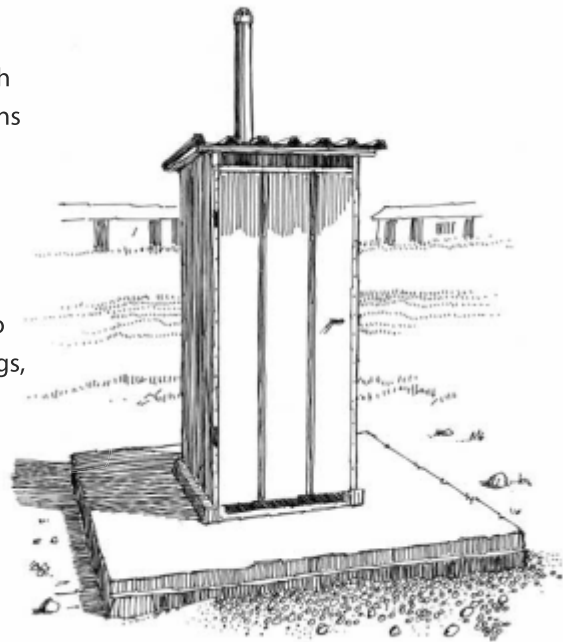
Community Sanitation City-Wide, WASHi

This initiative with WASH institute is a unique model of community sanitation piloted in the Titagarh Municipality of North 24 Parganas District in West Bengal. It is owned and managed by the community and has the potential to be replicated. It seeks to provide 100% access to safe drinking water and sanitation to the communities living in all the 23 wards of the municipality.

Under this project, the focus is on building community-based institutions for the O&M of community sanitary complexes. The model is a pay and use one and each user pays one rupee per day for using the toilets. Water and Sanitation (WATSAN) Committees have been formed and trained for each and every sanitary complex. Bye-laws have been framed and their bank accounts opened. The committees have been trained to manage daily income and expenditure of the sanitary complexes.

The last 12 months data indicates that total income of the sanitary complexes amounts to Rs.7,07,889/- and the expenditure is Rs.5,79,022/- resulting in the saving of Rs.128867/-. This saving amount is available in respective committees' bank account. The Committees have entered into MoU with banks in the municipality to deposit coins every day.

Health and hygiene education is an important component of the project. Various awareness generating activities, such as, street plays, magic shows, video shows, interpersonal and group meetings, etc., have had a positive impact.



The Mammoth Task of Sanitation at Kumbh Melas

Kumbh Melas are one of the most sacred and possibly among the largest religious events of India. Since then “Kumbh Mela” is celebrated once every 12 years in each of the four places on the banks of river Godavari in Nashik, river Kshipra in Ujjain, river Ganges in Haridwar, and at the Prayag Sangam in Allahabad which is the meeting point of the three rivers- Ganges, Yamuna, and Saraswati.

In 2015, Nashik has hosted the Kumbh Mela known as “Sinhastha Kumbh Mela” from July 14 to September 25, 2015. The overall Sinhastha Kumbh Mela includes a collaboration of over 22 Government Departments. This includes the departments of Collectorate Nashik (Kumbhamela Cell), Nashik Municipal Corporation (NMC), Trimbakeshwar Municipal Council, Nashik City Police, Nashik Rural Police, Public Works Department, Irrigation Department, Maharashtra Jivan Pradhikarn, Maharashtra State Road Transport Corporation, Maharashtra State Electricity Distribution Company Ltd. (City), Maharashtra State Electricity Distribution Company Ltd. (Rural), Civil surgeon (For Nashik and Trimbakeshwar), District Health Officer, National Highway Division, Disaster Management Cell, Central Railway, District Information office, Deolali Cantonment Board, Maharashtra Tourism Development Corporation, Forest Department, State Archaeology and Central Archaeology.

NMC had demarcated about 323 acres (322.81 acres) of land comprising of 1900 plots as “Sadhugram” for accommodation and a service centre for the pilgrims and Sadhus. The Sadhugram area was divided into “Akharas”. In terms of sanitation provision, three types of toilet facilities were provided for the devotees and pilgrims – temporary toilets, permanent toilets (already existing public toilets by the Nashik Municipal Corporation or Sulabh) and portable toilets. Temporary toilets were built mostly in the Sadhu Gram area where religious leaders had camps for themselves and their followers. The structure of these toilets was made of tin with pans cemented. The temporary toilets were demolished after the Kumbh Mela. Portable toilets are made of Fibre Reinforced Plastic (FRP) and easy to move/resemble. They were placed in the ghat areas and parking (inner and outer).

NMC has made arrangements for the solid waste management during Kumbh Mela. The solid waste was systematically collected, at specified locations from where it was transported to the waste management site through dumpers. NMC provided an innovative shape of dustbin in the shape of an earthen pot (kumbh/kalash) to engage the public and to

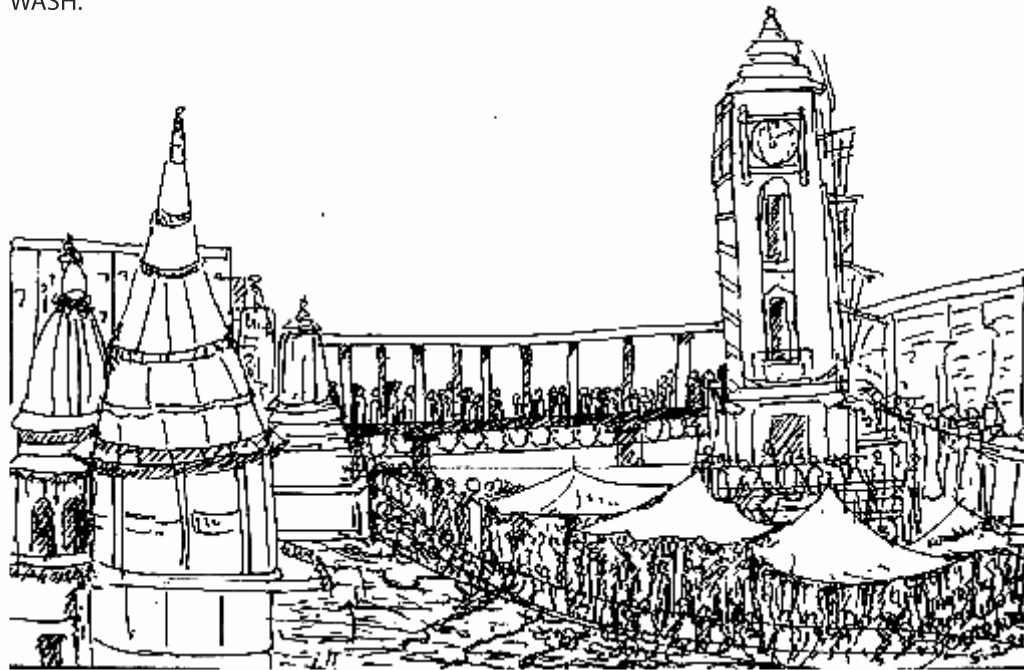


encourage them for proper disposal of waste. Separate manpower/agencies were recruited for sweeping of the streets, parking areas, Sadhugram and ghats on regular basis. Extensive mobilizations of cleaners were done on the days after the Parvani days.

The number of toilets available was estimated at 26,455 toilets at two main sites: 24,975 in Nashik and 1,480 in Trimbakeshwar. All the arrangements from dustbins and communication tools & techniques, all were innovative. WASH infrastructure for this temporary, yet massive, gathering was a humungous challenge.

The Nashik Trimbakeshwar Kumbh Mela (NTKM) no doubt has showcased an excellent example of managing an event where large crowds gathers for the religious activity of holy dip or bath at sacred place for some specific days. There is a lot to learn from the success of this Kumbh Mela. To organize such type of events the key government personal should do the planning in reference to the key attributes in general but very specifically for managing the Water Supply, Sanitation and Hygiene (WASH) infrastructure.

The overall cost estimates come to a total of INR 2378.78 crore as presented on the Maharashtra government website. Unfortunately these data are not disaggregated for WASH.



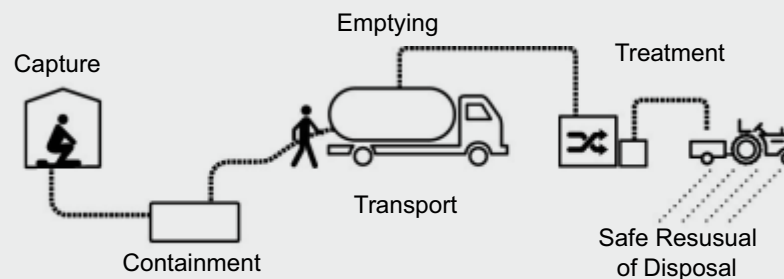
Building Clean Villages

Nirmal Gram Nirman Kendra is a voluntary organization devoted to the cause of Environmental Sanitation since 1983. It is located in village Govardhan in the outskirts of Nashik city, Northern Maharashtra, India. Nirmal Gram Nirman Kendra (NIGRANI) is dedicated to the cause of total attitudinal change in the society towards sanitation. NIGRANI considers sanitation as 'Waste Management Activity'.

It focusses on achieving total attitudinal change in the society and establish an integrated approach towards sanitation laying equal emphasis on the management of all the human related wastes (faeces, urine, solid & liquid wastes). The centre houses toilets with techniques of converting the waste into fertilisers. There is also a biogas plant and solar plant here. Various books and pamphlets are placed all over to provide information about sanitation techniques.

In the Clean India Club campaign, school students of Zilla Parishad schools are taught basic hygiene, sanitation and waste management techniques. The centres have built toilets and wash basins, water from which is directed into the garden area and a biogas plant which has all the kitchen waste going into it. In another Niramlaya Sankalan Abhiyan, offering of flowers in any festivals are not encouraged. Leach pit toilet models have been encouraged. Vermitank, a structure that can take care of all the biodegradable garbage generated in an average Indian household including the garbage from the garden. Community Vermitank is a modified version of Vermitank, which can take care of garbage on a larger scale.

NIGRANI is constantly providing innovative and low cost solutions to problems of villages and cities as regards to insanitation. They have tried to alleviate the sanitation condition in a single city instead of trying to implement the program in multiple small places.



Sanitation for The Poor in VISAKHAPATNAM

Visakhapatnam has 793 slums that is one of the highest proportions of people living in slums (44%) of all cities. A third of the population is connected to the sewer system, and 60% either have on-site facilities or are connected to open channels. The remaining 8% lack access to toilets, which represents 30,000 households resorting to open defecation. There are about 200 community and public toilets catering to about 150,000 people. The city faced a major challenge in eliminating open defecation.

The municipal and state authorities have strived to promote Visakhapatnam as a vibrant metropolis and model on sanitation by political agenda and awareness processes of the Swachh Bharat Mission. The Greater Visakhapatnam Municipal Corporation (GVMC) built partnerships with various stakeholders to promote the sanitation agenda by setting up an advisory cell for technical assistance.

This dealt with sanitation, collection, transport and treatment. It made drainage, sewers and water treatment infrastructure to enable the safe transport and treatment of sewage and storm water. Faecal sludge management systems were developed and implemented for safe disposal.

What worked in Visakhapatnam was a combination of strong leadership and highly specialised technical support that led to the design of a strategy that balanced the need to quickly achieve impact at scale and the longer process required to ensure quality and sustainability.

The GVMC utilised Swachh Bharat and Smart Cities missions to acquire funds, develop policies and procedure to create an environment where sanitation efforts can grow. Open defecation was eliminated in the city.



Nadia Showed What was Possible

Nadia was the first district that took Swachh Bharat Abhiyan to a new height and was declared as first ODF district in the year 2015 in India. The District administration took major initiative to use the full potential of the convergence and took upon themselves the challenge to achieve complete coverage of the households with toilet facilities within a very short span of time.

Nadia is one of the rural backwards districts of West Bengal, state in India with 5.14 million population, where around 2 million people (40%) practiced open defecation. Open defecation was one of the main reasons of the contamination of water sources resulting in 10,4467 cases of diarrheal diseases; 28 cases of diarrheal deaths; 1195 cases of severely malnourished children and 81664 of moderately malnourished children in Nadia in 2012-13.

Whereas in Bangladesh which is a neighboring country of Nadia district in West Bengal has only 4% people defecating in open as per the report of WHO and Bangladesh Demographic and Health Survey as compared to 40% open defecation in West Bengal triggered the District Magistrate to make Nadia open defecation free. Nadia attained this stupendous feat under the leadership of the district administration, which pooled in the strengths of the Zilla Parishad and the power of the people to turn the Sabar Shouchagar (Toilet-for-All) campaign into a people's movement.

Sabar Shouchagar of Nadia stands apart as one of the best evidence based models for reaching open defecation free status in record time. Overall, noticeable accelerated sanitation coverage is seen in Nadia district with greater community involvement, including women and children. There is significant post-construction monitoring to ensure people do not abandon the toilets and go back to defecate in the open.

While the programme was able to successfully achieve its goal in a set time-frame, certain challenges were pointed out by the key stakeholders:

Timely flow of funds from the state to the district had been a key challenge during implementation.

While the district promoted a single model (double leach pit technology) for toilet construction, there was a widespread perception among households that the leach pits filled faster. In some blocks there were instances of households filling up one of the two



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leach pits and making the other pit deeper without the knowledge of the officials concerned. Monitoring such cases was a challenge.

The district did not have block coordinators in all blocks to oversee the implementation processes.

- Providing toilets to families outside the baseline survey
- Providing toilets to excluded population such as in brick kilns, near ponds, mango orchards
Generating awareness among care-givers for disposing child excreta safely
- Sustaining the momentum of campaign despite elections (Parliament, by-elections, municipal elections)
- Providing toilets at public places on highway dhabas and market places
- Mobilising stakeholders in urban areas for providing toilets to families without toilets
- Sustaining the ODF status through social governance system



Eliminating Slippages in Open Defecation Free in Maharashtra's Cities, HSBC

In 2017, HSBC launched a multi-stakeholder programme between the company, government and an NGO to sustain ODF in urban areas in Maharashtra. This partnership started at the India Sanitation Coalition where HSBC met the Maharashtra Principal Secretary for Water and Sanitation. It builds on HSBC's past experience in supporting water, sanitation and hygiene projects since 2014 with seven NGOs (Swades Foundation, Mandeshi Foundation, Sulabh, FORCE, Jal Bhagirathi Foundation, BAIF and WOTR), which have benefited over 76,000 people in rural and urban areas in four states.

The aim of HSBC's project is to create durable gains in sanitation coverage in 21 high priority cities in Maharashtra. This multi-stakeholder partnership places communities at the centre and leverages the core competencies of other partners to facilitate access to safe sanitation for 20-50% of the population of these cities who would otherwise defecate in the open.

HSBC convenes and provides financial resources, the Swachh Maharashtra Mission for Urban Areas (SMMUA) connects with urban local bodies and provides sanitation subsidies, and the NGOs implement intensive behaviour change interventions, train masons, enable



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households to unlock subsidies and track behaviour change. Over the four years (2017-2020), this project will reach about 224,869 people in 21 cities.

The project also includes a partnership with Hindustan Unilever to build four Suvidha water and sanitation complexes on a model developed by HUL in Mumbai's slums. This will be done in partnership with SMMUA and the Municipal Corporation of Greater Mumbai. The project is being implemented by a Mumbai based NGO, United Way of Mumbai.

The partners in the project are HSBC India, Swacch Maharashtra Mission for Urban Areas, CEPT University, Gujarat Mahila SEWA Housing Trust (MHT), Kherwadi Social Welfare Association (KSWA), Rural Development Organisation Trust (RDO Trust), Ecosan Services Foundation (ESF). To ensure both buy in and long term sustainability are addressed, in each city, community groups are created to conduct surveys and establish sanitary gaps, and monitor the sanitary complexes.

This model empowers communities with the knowledge, resources, and tools to drive sanitation coverage. Given the leveraging of subsidies and access to sanitation credit, this project makes efficient and judicious use of resources to maximize impact.



Nanded Takes The Community-Led Route

This case profiles the positive results achieved by Nanded Waghala Municipal Corporation (NWMC) through adoption of Community-led Total Sanitation (CLTS) approach on a city-wide scale to address all aspects of sanitation including open defecation, solid waste management, drainage, water security etc.

Nanded had prepared a City Sanitation Plan in February 2011 to identify the sanitation related challenges and action plan for the city with the active participation from community and successfully made over 85 neighbourhoods open defecation free. Nanded ranked 198th out of the 423 cities under the National Urban Sanitation Ranking undertaken by Ministry of Urban Development, highlighting the relatively poor sanitation situation in the city. In 2011, NWMC prepared a City Sanitation Plan, which helped in identifying the existing sewerage system was practically non-functional and the solid waste management system was not effective. About 46% of the total population was staying in slums where open defecation was prevalent. Around 20% of the city population was defecating in open. Additionally negligence towards maintenance of Multiuser community toilets was observed.

NWMC appointed two private firms, Knowledge Links and Feedback Foundation to carry out the work of 'behavioural change' for sanitation in Nanded city and preparatory activities included city level workshops, prabhag level workshops which were organized for a period of three days and the real work with communities.

Of the 342 neighbourhoods, 238 were organised neighbourhoods and initiated actions to improve sanitation. Sanitation committees are formed in 157 neighbourhoods. Solid waste collection is done by private operator, 115 neighbourhoods regularly monitor the process of garbage collection. Drain cleaning is done by the communities. 129 neighbourhoods are involved in storm water drain cleaning. Since then, 85 neighbourhoods are open defecation free and 34 neighbourhoods became garbage free

With a spending of less than 1% of its budget on sanitation, NWMC managed to achieve positive impacts through its community led approach. Community participation is an important part of the provision of the urban infrastructure whether its demand based planning or management of the facility. There are many cases where the community participation was undertaken in a manner such as for managing public toilet complexes. Communities are claiming newer roles and responsibilities towards the sanitation issues and



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are becoming more active. ULBs can leverage the strength and capability of communities to allow them to take the ownership of the municipal assets and its upkeep. After initiation of the CLTS in Nanded, various committees were formed and reports of those committees were prepared. In fact, in many Indian cities, ward committees exist and can be given the task of sanitation management as well. In case of Nanded, communities that are mobilized and taking actions, revealed that most leaders at community level are women. Communities can be involved with the help of supporting agencies and with the use of government supported programmes



Citizen Led Sanitation

Citizen's First project ensure a change that possible only through sustained pressure from community people and their representative Civil Society Organizations (CSO). This project on Water Supply Sector Reforms and accountability has endeavoured to acquire greater transparency and public participation in the government decision-making process. This aims at ensuring their rights, to improve their standard of living, sustainable communities by creating a space where people get sentient of schemes that were formulated. The thought process initiated to build the capacities of community people, particularly marginalized, in identifying their problem and facilitate them to build up their competence for negotiations with concerned stakeholders.

SaciWATERs brings special emphasis on the issue by developing an inclusive and cross-sectoral strategy through policy and institutional initiatives. It works towards strengthening the already existing citizens platform, and secondly it was to activate government's WASH related service delivery in three existing wards and to ensure access to WASH in all the schools in these wards

Basti vikas manch (BVM), a vibrant platform of advocacy and lobbying for poor household areas, is established at the local as well as city level to monitor water, hygiene and sanitation situation on its own and interface with the government to resolve their issues.

To empower the community on WASH issues through community mobilization, strengthen local level institutions (BVM's) ,Capacity building for students, Guiding the community on monitoring. Regular training for the BVM members, Advocacy with the govt, sharing of info with the community, ensuring recurrent follow ups are some of the activities

The impact created at City Level Interface resulted in sanctioning a budget if INR 8.5 lakhs for the fencing of the open, the supreme statutory body of Hyderabad i.e., GHMC looked into their voice of rights and demands for resolving solid waste management issue and were handed over to the BVM team for further supervision.

More than 400 children
participated in
World Toilet Day

Paying for Sanitation From Water, Sanitation and Health Rights in India (SHRI)

Sanitation and Health Rights in India (SHRI) believes that all men, women, and children deserve to live a life dignified by access to improved sanitation. Elimination of outdoor defecation in rural Bihar, by building toilet blocks, training local sanitation workers, and leveraging methane waste as affordable household electricity through rechargeable battery rental have been made are steps towards this goal.

SHRI constructs public toilet facilities on government land for Rs 19.5 lakhs apiece. Each includes 8 toilets for men, 8 for women, plumbing, hand washing stations, and a biogas digester. Anaerobic digestion produces methane gas which is used as energy by powering a generator. SHRI's water filtration system is installed through a partnership with DrinkWell Systems. Water is sold to customers for \$0.008 per liter. ATM technology allows customers to pre-pay for their water and simply swipe their card to dispense it.

It costs about Rs 50000 per month to maintain each toilet. This includes salaries for 6 staff, who track toilet attendance and ensure the facility is kept clean at all times. It also includes all cleaning supplies and extra diesel for the generator to supplement energy demands not met by the methane gas.

By utilizing the revenue from water sales to offset this monthly cost, SHRI's community sanitation facilities are self-sustaining. Another way of sustaining work is by harnessing methane gas found in human waste to generate electricity that charges portable batteries, which power LEDs and other small electronics. These batteries are rented out to the 400 million Indians who live without electricity, creating a sustainable and environmental business model that can be scaled throughout India.



**Treat Me Well And Keep
Me Clean, I'll Not Tell
Anyone, What I Have**

Seen!

© 1998



About India Sanitation Coalition

The India Sanitation Coalition (ISC) is an inclusive platform, launched on June 25, 2015 with the vision to enable and to support an ecosystem for sustainable sanitation. We support cross-learning, sharing of good practices, and works through partnerships and collaborations. We encourages multi-stakeholder dialogue and creates interfaces between corporates, government, development partners, media, SMEs, and communities. ISC defines sustainable sanitation to include the entire value chain of Build, Use, Maintain and Treat (BUMT). ISC currently have over 150 organizations that are engaging with us in various capacities to spread the reach of sustainable sanitation.

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