

# **BEYOND CSR TO THE SANITATION ECONOMY**

## **TRANSFORMATIONAL BUSINESS & INVESTMENT OPPORTUNITIES IN INDIA**

# The Rise of the Sanitation Sector in India: A Transformational Opportunity for Business, Investment & Society

The sustainable management of water and sanitation underpins wider efforts to end poverty and advance sustainable development. But, the world is not on track to reach Sustainable Development Goal 6 (SDG 6) on Water and Sanitation by the deadline set for 2030, says a new UN report (UN Water, 2018). The World Bank estimates that \$1.14 trillion USD per year in overall global investment is needed to meet SDG targets 6.1 and 6.2, which represents a trillion dollar financing gap, and calls for a new financing paradigm that includes mobilising additional and innovative forms of domestic and international finance—a largely untapped financial resource to the sector (World Bank & UNICEF, 2017). Locally, it is estimated that India loses more than \$106 billion USD per year of its GDP (> 5% of total) due to inadequate sanitation.

It is widely believed that the private sector can and should fund a significant percentage of the investment gap. The private sector should not only be considered a funder but also an implementer of more efficient solutions. Companies are structured to maximise efficiency in order to remain profitable. As such, for companies to step into this implementation role, we must create the right enablers. This means focusing on at scale or scalable projects, establishing streamlined go-to-market models, and creating favourable economics that attract commercial investment.

*It is becoming inevitable that for sanitation systems to be sustainable and resilient for future generations, infrastructure needs to be cost recovering and services delivered in partnership with the private sector and commercial investors.*

The transition to the Sanitation Economy presents a transformational opportunity to ensure a sustainable future for sanitation systems that can provide alternatives to the cost burdened systems of today, towards cost recovery and full of life-improving innovations, business and commercial investment opportunities - that could turn the outlook for SDG 6 around and ensure the resilience of India's progress on sanitation access via the Swachh Bharat Mission.



Vikas Bali  
Chief Executive Officer  
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The transformation lies in the transition to significant opportunity for private sector innovation, new technologies, new sources of water, energy nutrients, and information about human health and behaviour that will attract commercial investment and contribute to sustainable economic growth. In this model, the public sector benefits from private sector expertise, and the private sector sustainably engages in the development agenda through relevant, appropriate commercial constructs.

There is mounting evidence that leading businesses are championing new and exciting areas for business opportunity with a vision for a multi-billion dollar Sanitation Economy. To un-lock these opportunities companies and investors need to take bold action for sanitation solutions that go beyond Corporate Social Responsibility.

We are calling on Indian businesses, entrepreneurs and investors to build the Sanitation Economy in India. Promoting high impact enterprises and achieving good returns on investments made will require sustainable on-the-ground partnerships with multiple stakeholders.

**With this white paper we seek to take stock of the current state of corporate engagement in sanitation solutions, and build the case for businesses to move beyond CSR to un-lock core business opportunities that lie within sanitation systems and have been virtually untapped. Doing so will build an exciting universe of new investment opportunities. India has the opportunity to lead the way, to address this market failure, and showcase the potential of the Sanitation Economy.**



Cheryl Hicks  
Executive Director & CEO  
Toilet Board Coalition

# Current Trends in Private Sector Engagement in Sanitation in India

Addressing the Sanitation crisis in India has been a national priority for the Indian government. In 2014, the Government of India (GoI) launched **Swachh Bharat Abhiyaan** (SBA), a nationwide program with an ambitious goal to end Open Defecation in the country by 2019. An initial total commitment of USD 30 Billion<sup>1</sup> was made for the program that is expected to contribute significantly to India's achievement of Sustainable Development Goal 6 (SDG6) on Clean water and Sanitation. The total project is expected to cost approximately USD 620 Billion.<sup>2</sup>

It is estimated that poor sanitation costs India 5.2% of its GDP annually.<sup>3</sup> One in ten deaths in the country is linked to poor hygiene standards. According to the report of the Joint Monitoring Programme of the United Nations International Children's Emergency Fund and the World Health Organisation (2015), around 44 percent of Indians defecate in the open.

To address the challenge posed by poor sanitation infrastructure and services and achieve positive outcomes from SBA, there has been significant impetus on leveraging corporate partnerships. Government sought active participation from the corporate sector and has set up the Swachh Bharat Kosh (SBK), a fund focussed on sanitation and structured to attract Corporate Social Responsibility (CSR) capital and contributions from individuals and philanthropists.

This fund was a logical way to leverage benefits from the law on Corporate Social Responsibility (CSR) enacted by the Indian Government under the Companies Act 2013 that requires companies with a net worth of USD 76 Mn or more; or turnover of USD 153 Mn or more; or net profit of USD 800,000 or more to spend 2 percent of their average profit in the past three years on social development-related activities listed in Schedule VII of the rules<sup>4</sup>. This law came into effect in April 2014.

## Corporate Social Responsibility (CSR)

In order to steer the focus of the Corporates towards sanitation, the Union Government is also working towards making 30 percent of CSR money towards sanitation mandatory, a step that could see more private investment in the sector of sanitation and waste management. 2014-15 saw India's private sector spending nearly USD 6.1 Mn towards toilet construction under *Swachh Bharat Abhiyaan*. Within two years, the donations seemed to have dwindled, as of the USD 36 Mn (approx.) donated towards Swachh Bharat in 2016-17, USD 32 Mn came from the public sector companies, other companies and charitable organisations accounted for the rest USD 4 Mn.<sup>5</sup>

Recent studies<sup>6</sup> show that corporate sector has responded enthusiastically to government's call to action towards the Sanitation agenda; however, there is scope for more corporates to contribute substantially.

**Investment:** Investing in sanitation has proven to have a high return on investment:

- Every USD 1 spent on better sanitation delivers an average of USD 5 in social, health and economic benefits.
- The sanitation economy is expected to be a USD 62 billion market annually in India by 2030
- Better sanitation will avert 45% of negative health effects.

<sup>1</sup> "MDWS Intensifies Efforts with States to Implement Swachh Bharat Mission", Business Standard, 18 March 2016 (press release)

<sup>2</sup> "Swachh Bharat: PM Narendra Modi launches 'Clean India' mission". Zee News. Retrieved 2 October 2014.

<sup>3</sup> <http://www.downtoearth.org.in/news/lack-of-access-to-sanitation-a-drain-on-global-economy-55604>

<sup>4</sup> <https://www.dasra.org/insight/indian-csr-and-companies-act-2013>

<sup>5</sup> <https://swachhindia.ndtv.com/looking-beyond-csr-can-private-sector-companies-transform-the-sanitation-sector-into-a-profitable-business-model-6911/>

<sup>6</sup> <http://ficci.in/spdocument/20736/CSR-in-WASH.pdf>

## Corporate Engagement for Sanitation in India

Corporates in India follow varied ways of engagement in addressing the Sanitation challenge through the CSR mandate. This diversity in implementation can be broadly classified into three models:

### 1. Donation to implementing partners like NGOs, Non-profits

This is the conventional model followed by corporates who have identified Sanitation as the social cause for their CSR activities. Here the corporates essentially decide on the focus region, budgets and scope of activities and then reach out to interest NGOs who would like to become implementing partners. These types of CSR engagements are of fixed duration and follow the Design, Build, Operate and Transfer (to local community) (DBOT). Figure 2 below, represents the process followed by corporates that have adopted a direct charity/ donation model.

*See example 1: Satya Bharti Abhiyan*

### 2. Strategic alignment with core business and partnership with NGOs

Corporates following this model align their CSR efforts along with their core business offering with an aim to create long term sustainable competitive advantage. Mostly FMCG companies in India are adopting this by aligning their brand building strategies with larger WASH sector needs. The planning process includes top down strategic planning and buy-in at a business unit level. It is integrated into the company's market building and brand building efforts. The corporate owns the entire project design, drives execution and is an equal partner in this type of CSR engagement model for sanitation. NGO partners provide on-the-ground connect and community buy-in. Figure 3 below indicatively represents the process followed by corporates that align their strategic business objectives with their CSR giving approach.

*See examples 2: Swachh Aadat, Swachh Bharat & 3: 700 Se 7 Kadam*

### 3. Contribution to *Swachh Bharat Kosh (SBK)*

The Government of India (GoI) has set up a fund to channelize contribution towards *Swachh Bharat Abhiyaan* (SBA) by corporates and individual philanthropists. In this model corporates are able to fulfil their CSR mandate by contributing directly to this fund. The fund is managed by a governing council chaired by Secretary, Department of Expenditure. Other Permanent members are Secretary (Planning), Secretary (Drinking Water and Sanitation), Secretary (Urban Development), Secretary (Housing and Urban Poverty Alleviation), Secretary (Rural Development), Secretary (Panchayati Raj) and Secretary (School Education and Literacy). Departmental Secretaries from Tourism, Culture or any other department are invited as and when their proposals are being deliberated.<sup>7</sup> The projects are implemented through government institutions at state, district and sub-district levels through existing public infrastructure. The state governments apply for project funding from SBK through the governing council. This model is mostly being followed by Public Sector Undertakings (PSUs) and heavy machinery industries. Figure 4 below represents the process followed by corporates that contribute to SBK as their CSR approach.

<sup>7</sup> <http://pib.nic.in/newsite/PrintRelease.aspx?relid=111856>

**Figure 1: Trends in existing CSR projects for sanitation in India**

<b>Specific industry types are more active:</b>	Heavy Engineering and Manufacturing and Fast Moving Consumer Goods (FMCG) companies were more likely to support WASH programs than other industries.
<b>Behaviour Change efforts are often neglected:</b>	Companies are mostly supporting programs related to creating infrastructure, such as the construction of toilets and water facilities, with little focus on programs aimed at influencing behaviour.
<b>Operations and maintenance of toilets is neglected:</b>	While there is focus on constructing toilets, there are little efforts being put on operational and maintenance costs.
<b>CSR budgets for WASH initiatives vary widely:</b>	The median CSR WASH budget was INR 4.65 crore (USD 720k, approximately). It varied from as low as USD 850 to as high as USD 3.6 Bn

## Example 1: Satya Bharti Abhiyan<sup>8</sup>

**Company:** Bharti Foundation, Philanthropic Arm of Bharti Enterprises

**Implementation period:** 2014– Present

**Project Locations:** Ludhiana, Punjab; Haryana, Rajasthan, Delhi

**Budget:** 100 Cr. Or USD 14.6 Mn (approx..)

**Model:** Construction of Toilets and IEC for Behaviour Change

**Beneficiaries:** Rural Village Households

**Project Description:** The aim of the project was to improve sanitation conditions in rural areas of Ludhiana district by providing 100% access to sanitation for households and one separate toilet for girls in government schools, where such facility does not exist. Satya Bharti Abhiyan' initiative has constructed and handed over Individual House Hold Latrines (IHHL) free of cost across Ludhiana district in Punjab. Apart from providing sanitation facilities, the Foundation is also focused on bringing about a behavioural change through various sanitation campaigns spread over six states in India. The aim is to increase awareness among the rural population through Information, Education and Communication (IEC). Through IEC, beneficiaries are sensitised on the importance of using a toilet and towards adopting healthy sanitation practices for a cleaner and safer environment. Diverse channels of communication, ranging from interactive banners to energetic rallies and *Gram Sabhas* helped the Foundation spread awareness among beneficiaries on the proper usage and maintenance of toilets. Through this campaign, over 41,000 children studying in 254 schools run by the Foundation have worked as agents of change to bring awareness amongst the local population. The monitoring and evaluation is done by the Bharti Foundation through sample checks. Detailed daily, weekly and monthly monitoring of operations is done in order to measure villages covered, households identified, progress of construction, awareness for villagers, completion and handover of toilets.

**Impact:** Approximately 18,000 toilets constructed by Bharti Foundation and handed over to rural households in over 1000 villages; 87,000 individuals benefit from the initiative. Awareness campaigns across 689+ villages were organised.

<sup>8</sup> <http://www.csrvision.in/satya-bharti-abhiyan-gives-boost-to-sanitation-in-rural-punjab/>  
<http://www.bhartifoundation.org/page/satya-bharti-abhiyan>  
<http://indiacr.in/bharti-foundations-satya-bharti-abhiyan-helps-make-rural-ludhiana-open-defecation-free/>

## Example 2: Swachh Aadat, Swachh Bharat

**Company:** Hindustan Unilever Ltd.

**Implementation period:** 2015-17

**Project Location:** PAN India (Delhi, Uttar Pradesh, and Maharashtra locations)

**Budget:** INR 27.42 Cr or USD 450,000 (approx.)

**Model:** An ongoing behaviour change model and mass media campaign to drive engagement & awareness.

**Beneficiaries:** Mainly mothers and children in municipal schools.

**Project Description:** This project was in line with the Government of India's Swachh Bharat Abhiyan to promote good health and hygiene practices. The program stressed upon the need to adopt 3 simple good habits – 'Swachh Aadat'. Washing hands 5 times a day, using the toilet for defecation and keeping it clean, and adopting safe drinking water practices – these are 3 simple habits that will go a long way in reducing illnesses in our country. This was a multi-brand behaviour change program. Through the campaign idea of 'Haath Munh aur Bum, Bimari Hogi Kum', HUL has sought to bring alive this message in a fun and engaging manner, celebrating children as the agents of change. The program was undertaken with the support of municipal corporations to reach out to students in municipal schools where a four-week behaviour change program was conducted through engaging activities like skits, demos and jingles. This program covered mothers and other stakeholders in the local community such as doctors and support groups to create awareness and develop champions within schools and the community. This program includes:

**Swachhata Dost:** This is a mobile-led rural behaviour change communication platform, wherein volunteers can become agents of behaviour change in India's villages. They share two-minute audio stories on clean habits through their mobile phones. They reach out to school children, parents and community members thereby positively impacting rural communities.

**The Swachh Aadat curriculum** is a 21- day behaviour change curriculum for primary school students. Reaching them young ensures that the knowledge about the importance of clean habits and the positive attitudes towards clean habits are picked up early. The curriculum is taught in classrooms with the help of teachers for approximately 20 minutes for 21 continuous working days. The curriculum combines classroom teaching with practical demonstrations and characters, activities, games etc., are used effectively.

**Impact:** Overall, this project has reached about 75 million people in India mainly via mass media. Goal is to reach 1 billion people. <sup>9</sup>

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<sup>9</sup> <https://www.hul.co.in/sustainable-living/swachh-aadat-swachh-bharat/>

<https://www.csrmandate.org/hul-launches-swachh-aadat-swachh-bharat-to-create-a-nation-of-a-playing-billion/>

[http://ngobox.org/full-news\\_Hindustan-Unilever-Limited:-Spreading-the-message-of-Swachh-Aadat-across-India-The-Hindu\\_22111](http://ngobox.org/full-news_Hindustan-Unilever-Limited:-Spreading-the-message-of-Swachh-Aadat-across-India-The-Hindu_22111)

<https://brandequity.economictimes.indiatimes.com/news/business-of-brands/hul-allies-with-swachh-bharat-to-reach-out-via-rs-75-million-campaign/50037669>

### Example 3: 700 Se 7 Kadam

**Company:** Dabur India

**Implementation period:** May 2014- Present

**Project Location:** 39 villages in Himachal Pradesh, Uttar Pradesh and Uttarakhand.

**Budget:** Ongoing Campaign – INR 67, 29, 000 or USD 100,000 (approx.) combined contribution so far.

**Model:** Social Media Campaign

**Beneficiaries:** Rural Women

#### **Project Description<sup>10</sup>:**

Dabur Sanifresh '700 se 7 kadam' campaign leveraged online and social media to mobilize people to be a part of the movement towards building toilets for women. The '700 se 7 kadam' initiative began with Dabur conducting a detailed survey of the villages to ascertain the status of household toilets. Initially 21 villages in rural Ghaziabad (Uttar Pradesh), 7 villages in Rudrapur (Uttarakhand) and 11 villages in Baddi (Himachal Pradesh) were selected after tremendous research and surveys to make them Open Defecation Free. As per the data collected from village, it was observed that nearly 50 percent of households in most villages do not have individual toilets.

This campaign brought out stories of the many rural women in India who have it really hard when it comes to relieving themselves every day. The campaign – designed in association with digital agency Ogilvy One – was powered by a video and a microsite that features these stories. The campaign worked like this: '700se7kadam' asked people to do any or all of seven tasks and the brand will contribute Re. 1 from the sale of every pack towards building toilets. The tasks could be share the story, take a pledge, notify the brand when a locality does not have a toilet etc. Apart from having '700 se 7 kadam' serve as an interesting catch phrase for the toilet building movement, the campaign makes excellent use of online and social media to mobilise people to be a part of the movement. This was also launched in a timely manner after the Swachh Bharat Mission of the Government of India.

**Impact:** Rs.3.1. million collected towards building toilets in rural India. 8, 30,000 people engaged across social media. Over 2 lakh people pledged their support to this campaign. By the end of 2017, 2,343 toilets were constructed and 12 villages were declared Open Defecation Free. In addition, separate toilet blocks for boys and girls are also being constructed in nearly 20 schools across five states: Uttar Pradesh, Himachal Pradesh, Uttarakhand, Rajasthan and Assam.

### Key Drivers of CSR Engagement in Sanitation in India

Considering various models of CSR for sanitation over last few years along with larger policy level will to drive positive action through partnership, it seems the key drivers for corporate India to channelize their CSR approach towards sanitation include the following aspects:

#### **1. Adherence to the compulsory CSR mandate:**

Continuous thrust of the government to increase adherence to the compulsory CSR mandate is driving many corporates to think of high social impact areas where they would like to contribute. This is combined with overall policy focus of the government on sanitation. Many corporates are hence adopting to contribute to sanitation and to be part of a social impact larger movement.

#### **2. Leveraging policy focus on sanitation to build sustainable competitive advantage:**

Corporates, especially FMCG companies with core business offerings aligned to sanitation sector like soaps, detergents, water purifiers, etc. are leveraging the overall focus on sanitation to build sustainable competitive advantage and build markets in underserved/ less served areas.

#### **3. Impact focus in geographic areas of their operations/ manufacturing:**

Companies with large manufacturing units focus on building the local communities around their operating areas that are often source of labour force for them. These are utilising their CSR spends in local community development and addressing the sanitation challenge by constructing toilets and waste management structures.

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<sup>10</sup> <http://lighthouseinsights.in/dabur-sanifresh-700se7kadam.html/>  
[https://csrbox.org/Impact-stories\\_full\\_Dabur-is-Building-a-Clean-and-Healthy-India\\_34](https://csrbox.org/Impact-stories_full_Dabur-is-Building-a-Clean-and-Healthy-India_34)  
[http://www.afaqs.com/news/story/43361\\_Cause-Related-Marketing-A-look-at-Sani-Freshs-campaign-for-Womens-Dignity](http://www.afaqs.com/news/story/43361_Cause-Related-Marketing-A-look-at-Sani-Freshs-campaign-for-Womens-Dignity)  
<http://indiaccsr.in/dabur-helps-12-villages-to-achieve-open-defecation-free-status/>

## Benefits

There has undoubtedly been immense progress made in improving access to sanitation by working with the Swachh Bharat (Clean India) Mission – with 52 million household toilets built between October 2014 and November 2017, according to Government data. An analysis of data compiled by the corporate affairs ministry showed that a total amount of USD 4.1 Bn has been spent on CSR activities by eligible companies during the period from April 1, 2014 to November 30, 2017.<sup>11</sup> Out of this a total of USD 22 Mn has been spent on Sanitation alone<sup>12</sup>.

In terms of impact for the society, integrated efforts at public policy and corporate levels are gradually contributing to positive sanitation outcomes in India. However, at this point it is difficult to attribute impact made solely by CSR contribution.

India ranks in the top ten for reducing open defecation and improving access to basic sanitation. The government's Economic Survey 2017-18<sup>13</sup> reveals that with the launch of SBA in 2014, the sanitation coverage in rural India has increased substantially from 39 per cent in 2014 to 76 percent in January, 2018. The number of persons defecating in open in rural areas, which were 55 crore in October, 2014 declined to 25 crore in January, 2018. So far, 296 districts and 307,349 villages all over India have been declared Open Defecation Free (ODF). Eight states and two Union Territories. i.e., Sikkim, Himachal Pradesh, Kerala, Haryana, Uttarakhand, Chhattisgarh, Arunachal Pradesh, Gujarat, Daman & Diu and Chandigarh have been declared as ODF completely. The surveys conducted by the National Sample Survey Office (NSSO) and Quality Council of India (QCI) on usage of toilets by the individuals who have access to toilets reported more than 90 per cent of individuals using toilets in 2016 and 2017.

The Survey notes that there has been substantial reduction in the number of persons defecating in open in rural areas which has had positive health and economic impact in ODF areas. In a report, 'The Financial and Economic Impact of SBM in India', UNICEF estimated that a household in an ODF village in rural India saves Rs 50,000/- every year.

## CSR as Catalytic Capital

Over time CSR approaches in India have evolved and some of the early adopters and flag-bearers like TATA, Mahindra and Mahindra, Bajaj electronics, Hindustan Unilever, etc. are realising that the potential of CSR is not just a transactional outlay but a form of investment with high social and financial returns in the long run. There is recognition to the fact that with deliberate strategic planning, CSR can help corporates align their business interests with larger social and environmental outcomes.

Sanitation in India reveals that the extent of problem is huge and requires multiple partners and strategies to bring about positive change. It is estimated that for access to and availability of water and sanitation for all, India is estimated to require a sum of INR 13 lakh crores (USD 199 billion) till 2030.<sup>14</sup> This is a huge amount and relying only on public money is not an option. The need is to bring in innovative low investment high impact solutions and CSR could definitely play an important role at providing catalytic capital.

Catalytic funding includes investments aimed at leveraging external sources of capital or stimulating innovation and market-based solutions that can be sustainably delivered at scale. examples of catalytic tools include pooled investment funds, matched funding arrangements and credit guarantees—all of which mobilise external resources—as well as vehicles that support market-based solutions such as grand challenges, grant-based venture funds, and program-related investments such as repayable grants or concessional loans.

CSR capital could hence play a catalytic role, for example, they can help in de-risking the solution providers who may not be able to access formal capital at an early stage. CSR could also be leveraged in developing innovative financing mechanisms for covering operating and maintenance costs of toilets with models like microfinance, consumer finance and behaviour change incentives.

<sup>11</sup> [http://economictimes.indiatimes.com/articleshow/62870169.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://economictimes.indiatimes.com/articleshow/62870169.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)

<sup>12</sup> <https://csr.gov.in/CSR/activity.php>

<sup>13</sup> <http://pib.nic.in/PressReleaseIframePage.aspx?PRID=1518055>

<sup>14</sup> [http://www.devalt.org/images/L3\\_ProjectPdfs/AchievingSDGsInIndia\\_DA\\_21Sept.pdf?mid=6&sid=28](http://www.devalt.org/images/L3_ProjectPdfs/AchievingSDGsInIndia_DA_21Sept.pdf?mid=6&sid=28)



# Beyond CSR: Core Business Opportunity in the Sanitation Economy

At the global level, the failure of progress on sanitation during the period 2000-2015, as measured by the Millennium Development Goals (MDGs), was a wake up call for global governments and businesses. In 2015, 2.5 billion people still lived without access to basic sanitation, with 4.4 billion affected by lack of improved sanitation which includes safely managed sewage and seepage waste - More than half the world's population affected by poor sanitation - at a cost of 260 billion to society according to the World Bank. The most affected are lowest-income communities in India, China, Southeast Asia and sub-saharan Africa. As a result, global governments and the global sanitation community (made up of leading international non-profit and charity organisations) sought new solutions via engagement from the private sector and the potential of market-based approaches to sanitation.

An early mover was the Bill and Melinda Gates Foundation (BMGF). In 2011 BMGF launched its "Reinvent the Toilet Challenge(RTC)"<sup>15</sup> which marked over \$265 million USD invested in water, sanitation and hygiene<sup>16</sup>. The RTC increased focus on sanitation, aimed at catalysing disruptive technological solutions for sanitation that were to be designed specifically for the conditions of low-income markets without sewered sanitation infrastructure. In addition to technological innovation, this effort spurred a trickle effect of new business models to deliver these new technologies to the market. Sanitation entrepreneurs or "Sani-preneurs" were born, paving the way towards alternative models for sanitation in low-income markets around the world.

In 2015, a group of global business leaders saw new business opportunity in sanitation and joined forces to establish the Toilet Board Coalition (TBC). As a business-led effort, the Coalition sought to help address the global sanitation crisis by both supporting existing business solutions and innovations in sanitation service delivery, but also to explore new business opportunities in sanitation systems being developed differently in new markets.

## A New Role for Business

Early monitoring results have found that the Sustainable Development Goals (SDGs) 2015-2030, and specifically goal 6 which covers universal access to water and sanitation, is making the least progress of all of the SDGs, continuing the experience of the MDGs.

A paper from UN Water titled *The World is Not on Track*<sup>17</sup> offers a summary of what is going wrong. It concludes mainly that not enough money is being committed by governments - citing that over 80% of countries have insufficient finance to meet national water sanitation and hygiene targets. As a result 4.1 billion people, more than half the world's population, lack access to safely managed sanitation; water pollution is worsening, severely affecting human health, agriculture, ecosystems and their services which are cited to be in continuous decline.

These results paint a clear picture that the provision of sanitation is increasingly costly and difficult.

The Sanitation Economy presents an alternative view: That there is an enormous amount of value in our sanitation systems that has been virtually untapped; that the private sector is increasingly playing a new and important role in bringing innovative solutions to the sector; that there is commercial investment interest in profit-making businesses models in the sector.

Imagine a world where the provision of sanitation services - for all - are cost recovering and the value that lies within sanitation systems (water, nutrients, health information) is monetised to be revenue generating, and delivered through an eco-system of profitable business models which attract commercial investment. This would be an alternative development pathway for governments and supportive NGOs, dramatically reducing the current enormous cost burden of the building and maintenance infrastructure of sanitation systems, while opening up new markets of business opportunity for the private sector.

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<sup>15</sup> Bill and Melinda Gates Foundation, (2013), *WATER, SANITATION & HYGIENE: REINVENT THE TOILET CHALLENGE*, Seattle USA.

<sup>16</sup> <https://www.gatesfoundation.org/Media-Center/Press-Releases/2011/07/Gates-Foundation-Launches-Effort-to-Reinvent-the-Toilet>

<sup>17</sup> <http://www.unwater.org/un-reports-that-world-is-off-track-on-water-and-sanitation-goal/>

## Introducing the Sanitation Economy<sup>18</sup>

*Business solutions for smart, sustainable and resilient sanitation systems that go beyond corporate social responsibility and contribute to a shift from a system of mounting costs to a system abound with business opportunity and new markets.*

Sanitation is every business's business. The Sanitation Economy presents vast potential for global economic growth while addressing one of the most urgent grand challenges of our time, achieving universal access to improved safely-managed sanitation (SDG6). It monetises toilet provision, products and services, biological resources, data and information to provide benefits across the economy and society.

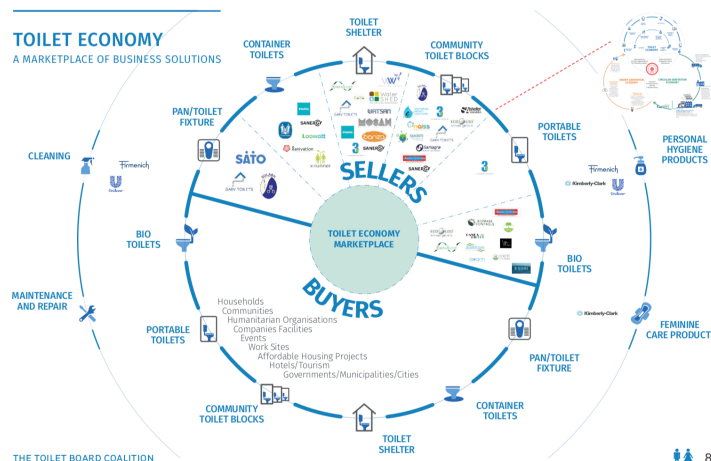
Studies from the Toilet Board Coalition estimate that The Sanitation Economy is a \$31 billion market in India today, and is set to double to over \$62 billion annually by 2021.<sup>19</sup>

This is the biggest opportunity in a century to transform sanitation systems into a smart, sustainable and revenue generating economy. By accelerating the Sanitation

Economy, we can create a robust marketplace of new market opportunity that has been virtually untapped. We can do this while improving lives of the 2.1 billion currently without toilets, and ensuring the capture, safe treatment and use of 3.8 trillion litres (500 Lpp/a x 7.6 billion global population 2017) of toilet resources which is currently lost and untreated; and by leveraging smart technologies to drive efficiency in sanitation systems, while capturing extensive amounts of data to inform business, policy, and health decision making.

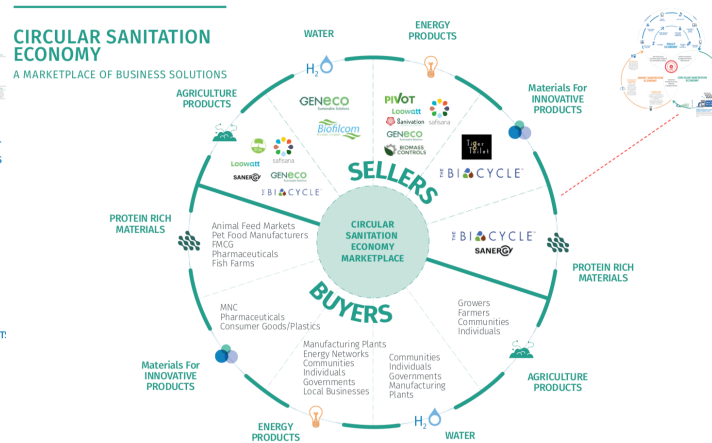
The Sanitation Economy offers new ways of looking at sanitation systems: as a solution provider for sectors and governments facing constraints on essential resources such as water, nutrients, energy and proteins; as a reservoir of information about human health and behaviour; and as a test bed for innovation and new technologies that reinvent the toilet and its ecosystems.

It leverages new business models and disruptive technologies together with established technologies and businesses with scale to transform sanitation systems. The economic case for the Sanitation Economy is clear, evidence of existing business models, demand, and momentum is building.



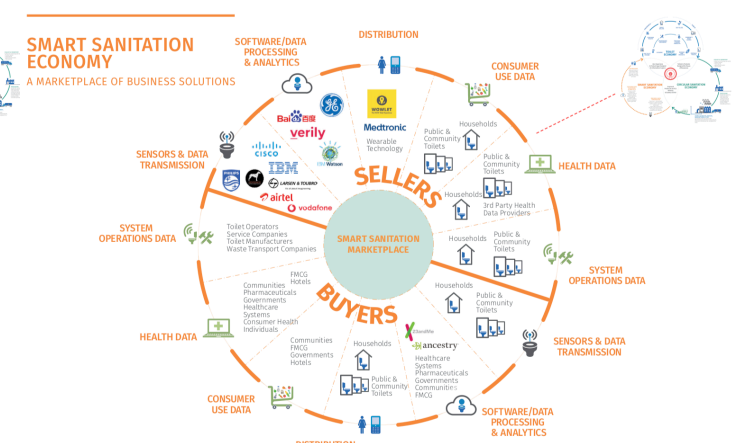
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THE TOILET BOARD COALITION



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THE TOILET BOARD COALITION



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<sup>18</sup> [http://www.toiletboard.org/media/30-Sanitation\\_Economy\\_Final.pdf](http://www.toiletboard.org/media/30-Sanitation_Economy_Final.pdf)

<sup>19</sup> [http://www.toiletboard.org/media/38-The\\_Sanitation\\_Economy\\_in\\_India.pdf](http://www.toiletboard.org/media/38-The_Sanitation_Economy_in_India.pdf)

## What is the Sanitation Economy

The Sanitation Economy links **3** distinct areas for business and societal benefit.

### 1. THE TOILET ECONOMY

Toilet product and service innovation that provides toilets fit for purpose for all contexts and incomes. This spans centralised and decentralised, sewerred and non-sewerred, high water tables and low, low-income to high, rural, urban and peri-urban. Toilet designs apply the Circular Sanitation Economy principals to minimise waste and GHG, and capture data to feed the Smart Sanitation Economy.

#### Market Estimates for India<sup>20</sup>

Toilet construction, operations and maintenance including cleaning are in high demand today to provide universal access to sanitation by 2019. The Toilet Economy is a \$14.3 billion market today and estimated to more than double to \$31.2 billion market per year by 2021. In addition, the toilet upgrade market is already showing that once households have a toilet they spend another 52% of the cost of the original toilet on upgrades and accessories.

Toilet construction is a big opportunity now to 2021, 54% of the current market and estimated to double by 2021 with a sharp decline once Swachh Bharat Mission (SBM) / Clean India goals are met. However, continued population growth expected in India will continue to grow the market.

Construction of household toilets in rural areas is the major contributor to the overall market (70-80%) and is expected to have a market worth of \$17 billion by 2021.

Cleaning, operations, maintenance, and repair will be the recurring revenue opportunity estimated to grow to 14 billion per year by 2021 with 11 billion of that estimated for cleaning products and services, 34% of the market. Community & portable toilets offer a significant market opportunity in the area of maintenance & repair due to their high usage.

Household toilet upgrades will be another recurring opportunity with households already spending an additional 52% of original cost of toilet on upgrades (even in lowest income households) such as tiling and consumables.

The government has considered portable toilets as an immediate solution to address open defecation in urban slums. Government run Urban Local Bodies (ULBs) have been directed to provide portable toilets where community toilets cannot be constructed or are yet to be constructed. This could total about 26,000 community toilet blocks per year.

Toilet innovations that enable efficient recovery of Toilet Resources (human excreta) for energy, agricultural products and data are not currently widespread options in India, and are not represented in the market estimates for the Toilet Economy shown here, but could be a key consideration for the future.<sup>21</sup>

#### Example 1: LIXIL Corporation

In 2016, LIXIL created a specialised and dedicated business unit called SSI, or Social Sanitation Initiatives, to accelerate the design and production of new toilet and water technology solutions that are fit for purpose for low income families, water scarce and non-sewerred locations around the world, as well as exploring new systems for the circular sanitation economy. SSI is an entrepreneurial startup nestled inside a \$16 billion company, able to take advantage of the resources and expertise found inside one of the world's largest players in sanitary ware.

Though the SSI unit has several prototypes and/or toilet technologies in development, it already operates a commercial business in its award-winning SATO brand of products (<http://www.sato.lixil.com/>). Launched in 2013 with one model – the “SATO Pan” – this business is now global, offering a range of products tailored to local market preferences. SATO delivers improved sanitation to over 6 million users in over 15 countries today. SATO products are designed and produced to suit the needs and preferences of users in different regions and offer high quality, durable products with price points that start at \$2 per pan. Created to improve the user experience and safety of open-pit latrines in rural communities, SATO products enable communities to achieve ODF goals with convenient, affordable, and sustainable product innovations.

LIXIL has set a target of improving access to sanitation and hygiene for 100 million people by the year 2020. To date, it has established manufacturing license agreements in five countries including Bangladesh, India and Uganda, and working with local companies to expand further in countries such as Nigeria, Ethiopia and South Africa. In addition, LIXIL is trialing the Portable Toilet Systems (PTS), a container based system for urban areas, that is expected to launch in the near future.

<sup>20</sup> [http://www.toiletboard.org/media/38-The\\_Sanitation\\_Economy\\_in\\_India.pdf](http://www.toiletboard.org/media/38-The_Sanitation_Economy_in_India.pdf)

<sup>21</sup> Ministry of Housing and Urban affairs, (2017), Guidelines for Swachh Bharat Mission – Urban, India.

## 2. THE CIRCULAR SANITATION ECONOMY

Toilet Resources (the TBC's preferred term for human waste) that feed into a system which replaces traditional waste management with a Circular Economy approach. It connects the biocycle, using multiple forms of biological waste, recovering nutrients and water, creating value-adding products such as renewable energy, organic fertilisers, proteins, and more.

### Market Estimates for India<sup>22</sup>

The recovery of toilet resources for water, energy and agriculture are in pilot phases around the country but are already worth an estimated \$13.8 billion today and could be worth \$24.6 billion by 2021.

Water is currently the largest potential market (77%)<sup>23</sup> of the overall market for products from biological waste. Treated water could replace current water usage in manufacturing / industrial sectors.

Organic fertilisers (or compost) could become more prevalent in the market due to current government incentives and as modern farming practices trend towards more organic base with mineral supplements. The compost market in India currently

represents (6%)<sup>24</sup> of the potential market for products from biological waste. It is a high potential market segment which is expected to grow significantly as the Indian government has mandated its production and providing support for its marketing.

Demand for proteins for poultry and aquaculture are growing in India. India is the largest and fastest growing compound feed market. The protein feed market currently represents 4% of the potential market for products from biological waste). Aqua feed comprises (43%)<sup>25</sup> of market share in the overall protein feed market, poultry feed has the major share (57%)<sup>26</sup>.

Electricity from biogas is the second-largest current potential market (at 12%)<sup>27</sup> of the overall market (for products from Toilet Resources). The future potential market is expected to grow as the government aims to increase its renewable energy sources and electricity from biogas is part of a major initiative in the area of waste to energy.

### Example 2: KIMBERLY-CLARK

Increasing access to sanitation is a core focus of Kimberly-Clark's global 2022 Social Impact goal to improve the lives of 25 million people, along with helping children thrive and empowering women and girls. The Company aims to help accelerate the development of the Sanitation Economy and new circular business models that approach human waste, or Toilet Resources differently. Looking to the future, Kimberly-Clark is bringing its innovation capabilities to help develop commercially sustainable and scalable solutions to the sanitation crisis. As a participant in the Toilet Board Coalition's "Toilet Accelerator" programme, Kimberly-Clark employees mentor local entrepreneurs to develop new technology, programmes and business models, which convert waste from a cost to a valuable resource with the ultimate aim of creating a self-sustaining Sanitation Economy.

In 2017 members of Kimberly-Clark's Corporate Research & Engineering team have been helping to mentor BioCycle, an innovative South African business, on the development of a unique production technology which uses fly larvae to convert waste into high value products including animal feed and biodiesel. This is just one solution of many in the Circular Sanitation Economy where entrepreneurs around the world seek to generate revenue from waste, creating an economic incentive to develop new sanitation systems in underserved regions.

<sup>22</sup> [http://www.toiletboard.org/media/38-The\\_Sanitation\\_Economy\\_in\\_India.pdf](http://www.toiletboard.org/media/38-The_Sanitation_Economy_in_India.pdf)

<sup>23</sup> Ministry of Environment, Forest & Climate Change - Central Pollution Control Board (CPCB), (2015), Annual Report 2014-2015, Chan- du Press, New Delhi.

<sup>24</sup> Non-hazardous waste

<sup>25</sup> J.S. Kamyotra and R.M. Bhardwaj, (2011), India Infrastructure Report 2011 - Municipal Wastewater Management in India, Oxford University Press, p. 299, India.

<sup>26</sup> The Times of India, (June 2015), Farmers must learn to managing agro waste: Experts, 150 million tonnes of agri waste generated in India, estimated basis on growth for 2017 to 2021, <https://timesofindia.indiatimes.com/city/nagpur/Farmers-must-learn-to-managing-agro-waste-Experts/articleshow/47569956.cms>

<sup>27</sup> Fecal sludge collected in any system (sewage line or septic tank)

## THE SMART SANITATION ECONOMY

Digitised sanitation systems that optimise data for operating efficiencies, maintenance, plus consumer use and health information insights. Sanitation is included in smart cities architecture monitoring public toilet usage, sewage treatment, health indicators, and detects needs for maintenance and repair throughout the system.

### Market Estimates for India<sup>28</sup>

The digitisation of sanitation systems and capture of data from them is today undeveloped and untapped but could generate an estimated 6 billion by 2021. The market for health data through smart toilets could be a strong opportunity to derive new value from sanitation systems while adding value to the healthcare system.

If sanitation is brought into smart city design it could tap into an estimated \$47.7 billion market by 2023 enabling the vast reservoir of information on human health and behaviour that lives in our sewage to be monitored. New markets for sensor makers, data analytics, internet of things (IoT), public health, consumer healthcare, pharmaceuticals, insurance etc.

The Indian government's \$7.3 billion Smart City mission is aimed at applying smart solutions to improve infrastructure and service delivery in Indian cities.

The Smart Cities Market revenue in India is expected to grow at a Compound Annual Growth Rate of 18.5% during the forecast period 2017–2023 to touch an aggregate of \$47.70 billion by 2023.

The Indian government plans to create a \$15 billion IoT market in the country.

The Global Big Data in Healthcare Market is estimated at \$34.27 Billion 2015-2022. The global (IoT) healthcare market is estimated to grow from USD 32.4 billion in 2015 to USD 163.2 billion by 2020. The IoT healthcare market is expected to have a CAGR

(compound annual growth rate) of 43.01% during the period 2016-2022, mainly driven by growing investments in the healthcare market by governments and various other stakeholders<sup>29</sup>.

Healthcare spending in the Indian economy is forecasted to grow 16% per year, from INR 5 trillion in 2011 to INR 19 trillion by 2020.<sup>30</sup> The market share for government spend on disease surveillance is ~54% of the total market.

India currently possesses half of one hospital bed per thousand of its population, with almost three million new hospital beds expected to be required to meet demand by 2025<sup>31</sup>

India's rural populations struggle to have basic healthcare needs met, only 13% of rural populations have access to primary healthcare centres, and fewer than 10% have access to a hospital – healthcare challenges are compounded by poor sanitary conditions<sup>32</sup>

Senior-level pathologists in India are short in numbers to serve 120,000+ pathology labs across the country<sup>33</sup>

Less than 25 percent of India's population currently has any form of health insurance coverage<sup>34</sup>

### Global & Local Market Development

Improved sanitation, reducing pollution and infection, is the world's biggest preventive health opportunity. It can also provide a wealth of data, about human health and behaviour becoming the early warning system driving preventative healthcare, more effective and efficient than is possible today. The Toilet Board Coalition is now collaborating with the European Space Agency to catalyse new technologies and business models to realise this possibility. In the city of Pune, India we have partnered with the Municipal Corporation to co-create a roadmap for the development of Smart Sanitation Cities.

<sup>28</sup> [http://www.toiletboard.org/media/38-The\\_Sanitation\\_Economy\\_in\\_India.pdf](http://www.toiletboard.org/media/38-The_Sanitation_Economy_in_India.pdf)

<sup>29</sup> Healthcare IoT market to grow at a CAGR of 43% to 2022 says a global report available at ReportsWeb.com. (2016, Feb 18).

<sup>30</sup> BMI Research, (2015) India Pharmaceuticals and Healthcare report.

<sup>31</sup> "Healthcare." Indian Brand Equity Foundation download, accessed January 25, 2017. January 2017. <http://www.ibef.org/download/Healthcare-January-2017.pdf>

<sup>32</sup> Panagariya, Ashok. "The Challenges and innovative solutions to rural health dilemma." National Center for Biotechnology Information. Annals of Neurosciences. October 2014. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4248476/>

<sup>33</sup> Suparna Goswami – Forbes, (2017), These 3 Healthcare Startups are tapping into India's soon-to-be booming IoT Market, <https://www.forbes.com/sites/suparnagoswami/2017/02/22/3-healthcare-startups-tapping-into-indias-soon-to-be-booming-iot-market/#b6ce7d050402>

<sup>34</sup> "Healthcare." Indian Brand Equity Foundation download, accessed January 25, 2017. January 2017. <http://www.ibef.org/download/Healthcare-January-2017.pdf>

### Example 3: TATA TRUSTS

The vision of Tata Trusts is to impact positively the lives of 100 million underserved people in India by 2021. One of the key themes for Tata Trusts is the area of Water, Sanitation and Hygiene, where Tata Trusts aims to create a healthy future for underserved people by providing safe, assured and adequate drinking water through direct interventions; and by facilitating improved sanitation and hygiene facilities. In 2017, Tata Trusts launched Zila Swachh Bharat Preraks (ZSBP), a cadre of 600 skilled “young professionals” to support the administration to implement the SBM, one in each district, across India. An initiative the Prime Minister of India called, “praiseworthy” via Twitter. In the last few years, the Indian economy has been one of the fastest-growing. This has meant growth opportunities for businesses across sectors, and more specifically for the Sanitation Economy related to the drive under the SBM. The Tata Group companies are getting involved to test new potential business solutions across the Sanitation Economy. Tata Trusts is supporting new toilet and waste management businesses across India, as also identifying new opportunities to create Smart Sanitation solutions.

In 2017, with the Toilet Board Coalition, Tata Trusts has supported the linkage of global and local businesses to the Pune Municipal Corporation to create the world's first Smart Sanitation City. This initiative leverages two main areas of focus and growth in India today, sanitation systems and smart cities infrastructure, where India's strong IT sector can be leveraged. Sanitation systems can leverage the sensors being implemented around cities to collect data and information, which amongst other uses, helps support repair and maintenance in the water and sanitation management systems. Monitoring capabilities of the smart cities platform can track behaviour change and usage patterns. Further, additional possibilities are opening up for the future - new sensor technologies and usage in the sanitation system and the toilets that may help data-driven personal health monitoring, public health decision-making, and many others.

## Key Drivers for Business Engagement in the Sanitation Economy

The Sanitation Economy is smart, sustainable, innovative, cost saving and revenue generating. Many businesses do not see their exposure to poor sanitation and have lacked a toolbox of business solutions to address potential risks. The costs to governments and businesses associated with the implementation of centralised sanitation systems - and the costs to society in the case of poor or non-existent sanitation systems - are well documented, US \$260 billion according to the World Bank.

Progress in technological developments, new business models and political will for alternative sanitation solutions that address low-income, water scarce, and non-sewered contexts have evolved significantly over the past decade, and are on the rise. Alternative toilet and waste management solutions can be delivered through the market at a lower cost to governments; can generate revenue for business owners; and can be net producers of valuable resources such as water, energy, nutrients, proteins, data and information. These alternative and complementary models present a new development pathway of opportunities for governments and the business sector to achieve SDG 6, universal access to improved sanitation.

By accelerating the Sanitation Economy, businesses can capture significant benefits:

1. Access to the growing emerging market customer base (2.1 billion people globally that need basic sanitation. 61% of the global population do not yet have access to improved sanitation including waste management).
2. Competitive advantage and innovation, creating smart, sustainable sanitation systems for the future.
3. Contribution to sustainability targets - addressing resource scarcity (such as water for manufacturing and nutrients in agriculture), climate change and zero waste policies.
4. Reducing costs and accessing new resources through the Circular Sanitation Economy - valuing sanitation waste as “Toilet Resources” and generating new revenue from valuable products derived from Toilet Resources such as energy and fuel, nutrients, proteins, water, information and more.
5. Access to new data and information for operational decision-making and potentially new market opportunities by leveraging the mobile, digital, big data and smart mega-trends for sanitation.

## Benefits

There are immediate opportunities for business and governments to build demand for the Sanitation Economy and realise significant benefits:

- \*Opportunity for businesses across sectors to ensure sanitation access for employees and communities where they operate
- \*Opportunity for businesses across sectors contribute their own toilet resources to the sanitation economy to achieve zero waste targets and generate new revenue streams
- \*Opportunity for operators to leverage new business models to enable benefits faster and at lower cost
- \*Opportunity for smart cities solution providers to integrate sanitation systems into smart infrastructure and information architecture.
- \*Opportunity for governments to deliver sanitation services faster, at lower cost and with revenue generation and promotion of new markets for private sector engagement and investment

## The Investment Case for the Sanitation Economy

Sanitation is a basic need. As such it presents a recession-proof opportunity much like health and food. Every person in the global population requires sanitation services every day. The demand is enormous and durable. The supply side is growing as well. Customer value propositions are emerging from the traditional beneficiary-led approach.

The Swachh Bharat Mission has spurred an economic bonanza - Euromonitor reports an 81 percent jump in sales of concrete building materials and 48 percent increase in bathroom and sanitary-ware products in India.<sup>35</sup>

As the sanitation sector transforms *Beyond CSR* to the privatisation of sanitation services and the development of commercially scalable business models, the Sanitation Economy opens up the investment case for various forms of private capital.

This type of transformation has already been evidenced by the privatisation of the telecommunications industry in India for example. Parallels can also be drawn in the growth of the microfinance sector in India. The ecosystems needed to be built to convert non-profit or social businesses to for-profit businesses. The sector needed to

become talent attractive to bring more entrepreneurs into the sector. For-profit business models, run by top talent executives attract investors.

The Sanitation Economy presents the economic case for the privatisation of the sanitation sector and shift from non-profit service delivery to for-profit service delivery. Demand from large business partners for service provision, creates the demand for commercially robust business models that can operate at scale, and this prospect of profitability attracts talent.

### Transformation from Non-Profit to For-Profit, Investable Business Models

Investors have a keen eye for scalability. Their returns depend on consistent future performance.

The presence of large unrestricted markets (markets free from government control) offers ample room for growth for companies to mine future and profitable revenue streams. While the sanitation market is by all means very large and growing, government gate-keeping can constrain growth. Therefore, large unrestricted markets are an important feature for scalability.

The transition to commercially robust business models from non-profit sanitation models also requires training and capacity building of the talent. A high quality execution team is essential for private investment. As the business prepares for scale up, a differentiated team with complementary skill sets is required to develop the various functional requirements: finance, sales, marketing, technology etc.

### Innovative Investment Mechanisms for the Sanitation Sector

Very recently there has also been a spur of investment product innovation, which are starting to enable new investment opportunities in the sector. One such development has been the social (SIB) and development impact bonds (DIB) mechanism, a form of Results-Based Financing that the UN has highlighted as particularly applicable to WASH<sup>36</sup>. Development Impact Bonds (DIBs) combine (i) Contingent funding of impact by donors against a pre-agreed set of outcomes metrics, (ii) Private investors who provide pre-financing for an intervention and take on the risk of under-performance, and (iii) A contractual framework that incentivises frontline service providers to track progress and adapt the intervention as it proceeds, to maximise the likelihood of success.

This investment product development could enable the transition grant funding to commercial financing for the sanitation sector.

<sup>35</sup> <https://www.bloomberg.com/news/articles/2018-07-30/world-s-biggest-toilet-building-spree-is-a-windfall-in-india>

<sup>36</sup> UN Information Brief (2015) *Implementing Water, Sanitation and Hygiene*



# Conclusion & Call to Action

## Enabling Transformation - Creating the Future

The world is not on track to reach SDG6. The estimated amount of investments needed to achieve SDG6 are in the trillions annually, presenting a significant funding gap. The world is calling on the private sector and private investment for solutions.

It is estimated that India loses more than \$106 billion USD per year of its GDP (> 5% of total) due to inadequate sanitation. Promoting high impact enterprises and achieving good returns on investments made would require sustainable on-ground partnerships with multiple stakeholders.

We need transformation.

The Sanitation Economy presents a vision for transformation, full of vast new opportunities for business, that go *Beyond CSR*. The investment community is rallying around new and innovative investment mechanisms for the sector. The momentum and commitment in India to achieve universal access to sanitation, via the Swachh Bharat Mission, present a unique opportunity for India to lead and provide a new model for the world.

What we need now is to activate corporate demand for the Sanitation Economy at scale and to build the supporting entrepreneurial ecosystems that will become talent and investment attractive.

## We Can't Wait!

We are calling on Indian businesses, entrepreneurs and investors to build the Sanitation Economy in India.

To catalyse action, the Toilet Board Coalition and Aavishkaar-Intellectap will run a series of challenges to help seed the market, build business ecosystems and un-lock commercial investment.

How to get involved:

Large companies and institutional buyers can initiate a challenge or tender by identifying gaps in solutions needed to un-lock demand and grow the pool of solutions, while building entrepreneurial ecosystems.

Service providers can apply with their solutions and be supported by business experts via the Toilet Board Coalition Accelerator programme aimed at accelerating start-ups into scalable, high-impact businesses in the sector.

Investors can provide seed/venture capital, or participate in innovative investment mechanisms for the sector, de-risked by validation of technologies and solutions by experts, and at a reduced transaction cost with due diligence and capacity building provided by the program.





#### ABOUT AAVISHKAAR-INTELLECAP

The Aavishkaar-Intellectap Group are global pioneers in taking an entrepreneurship-based approach towards development. Driven by a vision to Build Business with/for the other 3 Billion economically underserved, the Group focus is on developing the entire entrepreneurial ecosystem in the continent of Asia and Africa.

Founded in 2002 with just US \$ 100, the Group now manages assets of over USD 650 million, with 3,500+ employees present in India, Indonesia, Bangladesh, Kenya and USA. The Aavishkaar and Intellectap Group financial ecosystem include Equity funds, Venture debt vehicle, Microfinance and Advisory business including Investment banking.

Find out more at: <http://www.aavishkaar.in> <http://intellectap.com>



#### ABOUT THE TOILET BOARD COALITION (TBC)

The TBC is a business-led partnership with the ambition to address the global sanitation crisis by accelerating the Sanitation Economy.

The TBC is enabling private sector engagement; connecting large and small companies; and ensuring close collaboration between private, public and non-profit sectors with the common goal to achieve Sustainable Development Goal 6 (SDG6), universal access to sanitation.

The TBC runs the Toilet Accelerator, the world's 1st accelerator program dedicated to sanitation entrepreneurs in low-income markets.

The members of the Toilet Board Coalition believe that accelerating the Sanitation Economy will deliver significant impact to business and society.

Find out more at [www.toiletboard.org](http://www.toiletboard.org).

#### Toilet Board Coalition (TBC) Members:

