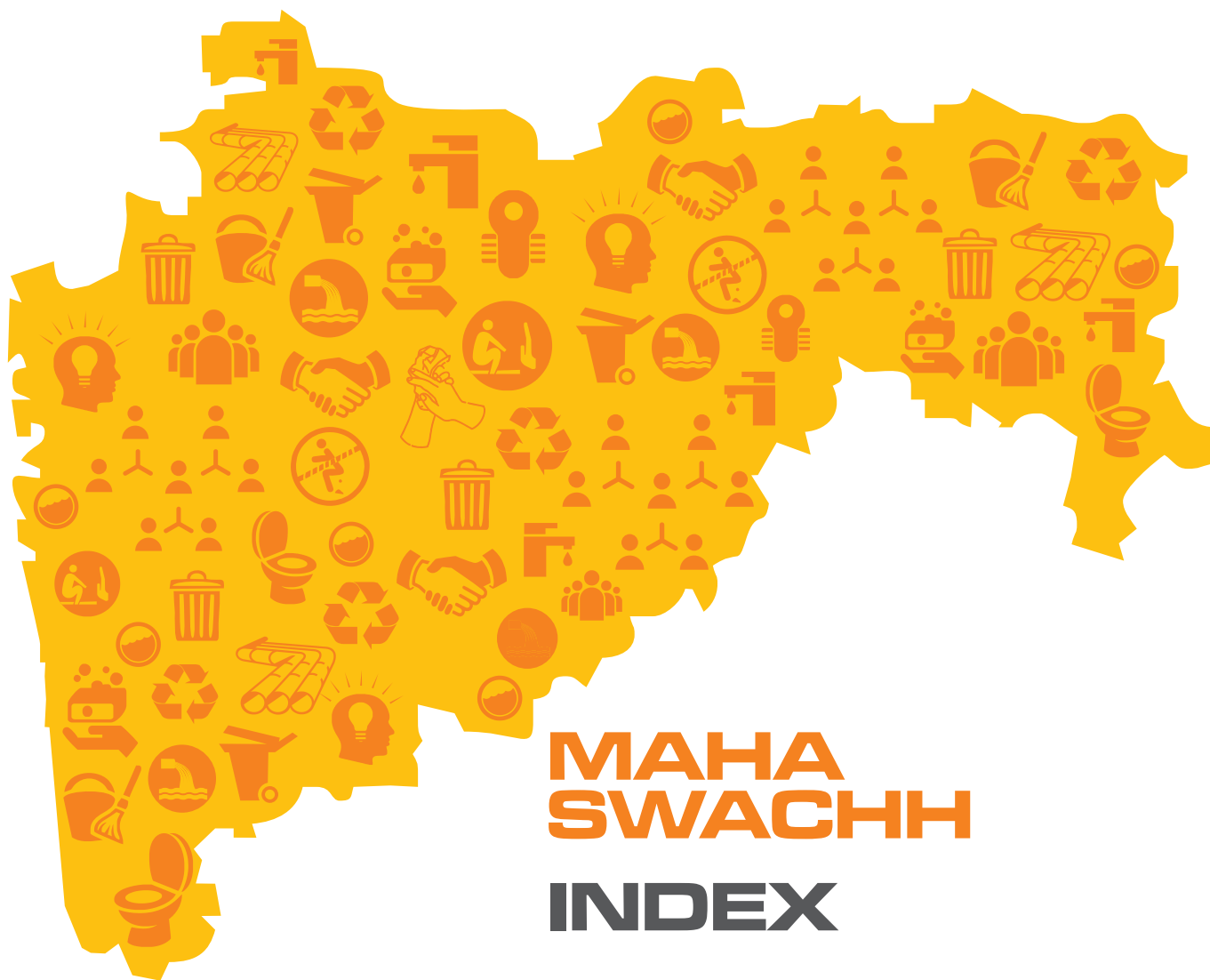




*Helping Communities that need it most with
Dettol Banega Swachh India*



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MAHA SWACHH INDEX

	Page
Foreword	01
Editor's Note	02
The Context	03
Dipstick Survey- Hygiene and Sanitation	10
The Methodology	10
The Analysis	11
Focus Group Thoughts	18
The Key Challenges	20
Strategic Framework / Core Strategies	21
District-wise Assessment	24
Potential Impact	31



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FOREWORD

It is indeed a pleasure to present this strategic audit baseline report – it marks a step change in the Dettol Banega Swachh India journey. The DBSI programme, led by the RB-Pehel (Jagran) partnership, with an aim to support the state government's laudable efforts to achieve the goals of the **Swachh Maharashtra Mission**, is delivering holistic change to some of the worst performing districts in Maharashtra and arguably in the country, when measured against hygiene, health and sanitation parameters.

The (DBSI) initiative since its inception has enhanced hygiene, sanitation and therefore public health standards of communities across rural and urban India; thus touching and improving the qualities of lives of millions of Indians not only through better WASH standards but by saving lives of children while also significantly contributing to both immediate and long term economic growth.

However, until now, DBSI has had focused on one strand at a time in one community, but here In Maharashtra we are bringing together all the strands in one cohesive force. The ambition doesn't stop there; we are working in tandem with other stakeholders & experts across sectors to ensure an effective & sustainable infrastructure is in place to support and sustain the behavior change – an ambitious goal and undoubtedly challenging one at that.

However we are committed to delivering it through a recently developed strategic framework (with input from wide range of stakeholders including citizens) that brings together the various elements to be deployed in a manner that meet the needs and aspiration of the respective communities in **Bhiwandi, Buldhana, Jalna, Malegaon, Nanded and Parbhani**.

This report highlights the results of an in-depth qualitative and quantitative study built on the foundations of the recently concluded Swachh Survekshan – identifying the key bottle-necks that act as barriers to improved hygiene and sanitation and the strategies that the programme would pursue to transform each individual district concurrently.

Each of these districts significantly underperformed across the key parameters of hygiene, sanitation and public health standards in **Swachh Survekshan** and lagged miles behind both national and state leaders across the range of criteria. Unless these districts, like so many others across the country, are holistically transformed – the dream of a New and Clean India would remain illusive. As committed stakeholders who firmly believe in the national Swachh Bharat Mission (SBM) and the state Swachh Maharashtra Mission; it was only natural that two organisations who are driven by the purpose of improving quality of life of communities especially those less fortunate: the RB – Jagran partnership couldn't sit idly by – hence this initiative.

Undoubtedly the challenge is daunting but I remain confident that the RB-Pehel partnership that has been so effective in helping millions of people will rise to this new challenge and be the **“force for good”** in improving quality of lives for residents. I thank the entire Jagran team for their continued support and leadership in helping deliver improved quality of life to millions of Indians through DBSI.

Finally, my team at RB India – you have once again demonstrated and exemplified that “Purpose” is not just a tagline but an ethos that drives our entire organization. Without you none of this would have been possible.

Sincerely

Nitish Kapoor

SVP

RB – South Asia



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EDITOR'S NOTE

The Swachh Maharashtra Mission has been a pioneer within the national Swachh Bharat Mission, launched with an aim to ensure all urban areas in the state attain not only ODF status but also holistic transformation of hygiene and sanitation by this year (2017). Even if the later is not achieved the former i.e. ODF status for all urban spaces in Maharashtra would be achieved by 2nd October 2017.

Not in the very recent past - the state was most likely to fall short of the goal albeit by a small margin, unless significantly poor performers such as these six districts - **Bhiwandi, Buldhana, Jalna, Malegaon, Nanded and Parbhani**; were transformed.

The senior leadership at the RB-Jagran partnership decided that as committed partners to both the national Swachh Bharat Mission (SBM) and Swachh Maharashtra Mission (SMM) – it was indeed important for DBSI to launch a holistic transformation of hygiene and sanitation led by a cohesive trans-generational behavior change by bringing together all the strands of the Dettol Banega Swachh India (DBSI).

Our network of experts developed a framework that incorporates cross cutting elements such as a strategic audit and importance of building effective partnerships at all levels with core trans-generational behavior change strategies alongside developing the tools needed for an effective and ecologically sustainable enabling infrastructure that combined together can significantly enhance the quality of life of Indians through holistic improvement in hygiene and sanitation; thus improving public health standards.

This focus on driving integrated holistic change in WASH & health paradigm is a major milestone in the Dettol Banega Swachh India (DBSI) story – a journey that began with a simple “Mera Dus Guz” and expanded through the Sanitation Change Leaders, the Dettol Schools programme and the Hygiene Index.

This new evolved DBSI initiative, delivered through the RB-Pehel partnership, brings together these strands and the knowledge & experience of each in one unified force to drive holistic transformation. However, this intervention is designed to meet the needs and aspirations of each of the local areas broken down into components such as each village and ward.

This report is therefore more than a baseline study – it is the foundation of a design based solution approach and identifies the key problems and challenges while laying out the path to solve the hygiene and sanitation challenges in each district. Based on the results for urban Maharashtra, the approach has been able to address one of the critical components – open defecation.

My grateful thanks to the stakeholders who have contributed to this effort especially my colleagues in RB-Jagran for their commitment, support and proactive effort to deliver a new and clean India.

Sincerely

Ravi Bhatnagar

Head of External Affairs and Partnerships

RB - India



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THE CONTEXT



India's pledge to achieve an Open Defecation Free status by October 2nd, 2019 serves as a *raison d'être* for the **Swachh Bharat Mission (SBM)**. Since its inception on 2nd October 2014, this mission has evolved into a full-fledged "Jan Andolan" led by Prime Minister Modi.

SBM aims to ensure access to sanitation facilities throughout India by 2019, including toilets, solid and liquid waste disposal systems and village cleanliness. While provision of drinking water and sanitation services are the responsibility of governments, the Swachh Bharat Mission relies upon a comprehensive and cross-sectoral services is the approach, harnessing the expertise and abilities of myriad stakeholders, both public and private, the third sector, the development sector among others at both the strategic and operational level.

In addition to meeting India's developmental needs, the Swachh Bharat Mission complements the Sustainable Development Goals (SDGs) that have been spearheaded by the United Nations under the official rubric of "Transforming our World: the 2030 Agenda for Sustainable Development". It comprises 17 global goals across 169 targets that cover a vast range of development issues for achieving inclusive development.



According to a report published by the Oxford Poverty and Human Development Initiative, India has been ranked 37th out of 103 nations in the 2017 global Multi-Dimensional Poverty Index (MPI). **The 2017 global MPI covers 76% of the world's population across 103 countries. In absolute terms, India accounts for the highest number of poor people. More than 528 million (52.8 crore) Indians are poor.**

Globally, 2.3 billion people still lack access to basic sanitation facilities. Of these, 892 million people resort to open defecation (WHO 2015). **The 2015 Swachhta Status Report of the NSSO (National Sample Survey Office) estimates that 7.5% of India's urban population and 52.1% of the rural population defecate in the open.**

These figures highlight the significance of India at the global level in achieving the Sustainable Development Goals (SDGs). India was an active player in the shaping of SDGs and hence its national development goals mirror these. **The cornerstone of the Indian development agenda is formed by the adage "Sabka Sath Sabka Vikas" ("Collective Effort, Inclusive Growth") as popularized by Prime Minister Narendra Modi. Thus, the SDGs offer a platform for India to emerge as a powerful international leader for comparable countries.**

The Swachh Bharat Mission is subsumed under Goal 6 of the SDGs - Improved Sanitation and Water. It is directly related to target 6.2 i.e. achieving access to adequate and equitable sanitation and hygiene for all, while ending open defecation and paying special attention to the needs of women and girls as well as those in vulnerable situations. However, securing clean drinking water and sustainable sanitation management is also interlined with multiple SDGs.



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Eradication of poverty (**Goal 1**), hidden hunger and malnutrition (**Goal 2**) require access to safe drinking water and sanitation facilities.

Both distinctly impact public health (**Goal 3**) as 1.2 million children below the age of 5 (20% of the global population) died due to diseases such as pneumonia and diarrhea in 2015.

Women, girls and differently-abled people are especially disadvantaged in the absence of adequate and easy toilet access. Hence, inclusivity (**Goal 4**), gender equality (**Goal 5**) and inequality (**Goal 10**) is also linked with water and sanitation. 23% of girl children drop out of schools due to lack of adequate toilet facilities for them.

4 out of 10 children across all income groups are affected by stunting and lower body mass index, which hampers cognitive development and subsequent sustained economic growth based on productive employment (**Goal 8**).

Inclusive water distribution, effective water and sewage management, safe and adequate drinking water and sanitation facilities are crucial factors that make cities and human settlements inclusive, safe, resilient and sustainable (**Goal 12**).

It also curbs pollution from accumulated domestic waste (**Goal 14**). The accountability of effective and inclusive institutions responsible for facilitating and providing water and sanitation for all promotes peace and justice (**Goal 16**).

The cross learning of knowledge and innovation, supporting capacity enhancement and technology transfer in the water and sanitation sector can accelerate and enhance implementation, access and sustainability (**Goal 17**).

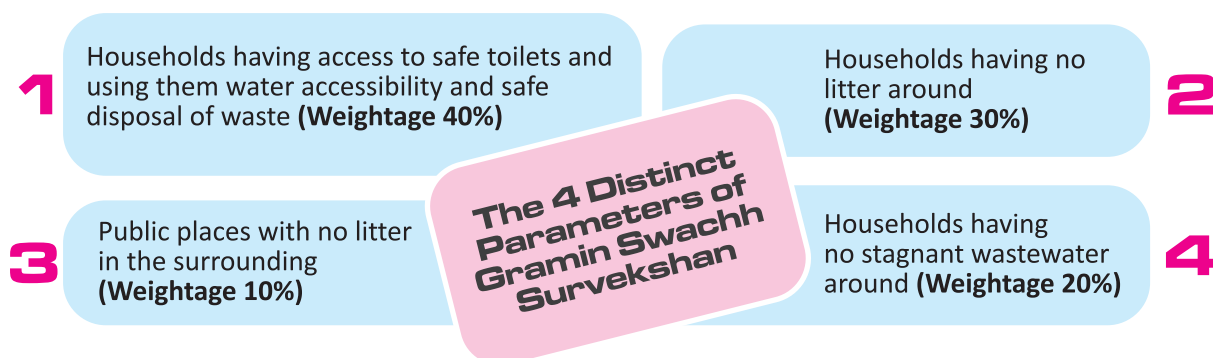
Open defecation perpetuates a vicious cycle of disease and poverty. The combined economic toll of inadequate hygiene and sanitation costs the Indian economy an estimated \$120 billion annually; an economic cost that India can ill-afford especially during its rapid transformation driven by initiatives like the SBM aimed at inclusive 'Development For All' (**Sabka Sath Sabka Vikas**).

Tracking SBM's Implementation: “Swachh Survekshan”

In order to evaluate the progress made under the Swachh Bharat Mission, the Ministry of Urban Development (MoUD) started the “Swachh Survekshan” survey that ranks cities on cleanliness as well as other aspects of urban sanitation. The first round of Swachh Survekshan was conducted among 73 cities in India and emboldened by the unprecedented success of this initiative, the second round was conducted in January 2017 across 434 Indian cities, consisting of populations over a lakh. This included a more proactive approach wherein various capacity building initiatives were planned to ensure preparedness and empowerment in terms of service delivery on various sanitation parameters.

The Quality Council of India (QCI) on behalf of the Ministry of Urban Development conducts the Swachh Survekshan. The underlying idea is to implement the SBM-Urban, based on a multi-pronged strategy, by creating an enabling environment for states and cities to roll out the SBM on multiple levels while simultaneously encouraging local citizens and stakeholders to actively participate as well. The “Swachh Survekshan” effectively meets both these objectives.

There is a relatively greater dependence on public provisions of essential services in rural areas as compared to the urban areas. **To improve the sanitation coverage in rural India, the Gramin Swachh Survekshan (SBM-G) was launched in May 2016 by the Ministry of Drinking Water and Sanitation.** A total of 22 hill districts and 53 plain areas were assessed. In May-June 2017, the QCI surveyed 1.4 lakh rural households across 4626 villages. The observed overall toilet coverage in these areas is 62.45%. 91.29% of the people have and use toilet access.



Thus, SBM has two key strands i.e. Swachh Bharat Urban and Swachh Bharat Gramin. The sheer magnitude of the response garnered by Swachh Survekshan has made it a significant measure of India's sanitation status as it enables cities and rural areas alike to measure themselves against other comparable areas as well as draw up roadmaps to scale up their efforts towards a Clean India.

This helps foster a sense of healthy competition among cities, districts, regions and states to improve their cleanliness standards. Thus, it serves as a critical tool for acceleration towards a “Swachh” status by encouraging citizen participation and awareness creation among all sections of society for collective endeavors to create cleaner urban spaces.



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MAHARASHTRA & SWACHH BHARAT MISSION

Maharashtra is the second most populous state and third largest state by area in India. It is also among the wealthiest and most industrialised states in India. Thus, Maharashtra has a significant impact on India's overall sanitation and cleanliness standards. **The Government of Maharashtra launched the Swachh Maharashtra Abhiyan at the state level. The mission is being implemented by the Urban Development Department (UDD) through a dedicated Swachh Maharashtra Mission Directorate. At the city level, the Urban Local Bodies (ULBs) are responsible.**

Maharashtra has a total of 265 Urban Local Bodies. According to the 2011 Census of India, its urban population is 5,08,27,431 i.e. 45.23% of the state's total population. Unsurprisingly, Maharashtra has the second largest number of cities (44) among the 434 cities that participated in the Swachh Survekshan 2017. Given the expanse of the state of Maharashtra, especially in terms of its people and wealth, its performance in the Swachh Survekshan paints an interesting picture, complete with contradictions alongside massively untapped potential.

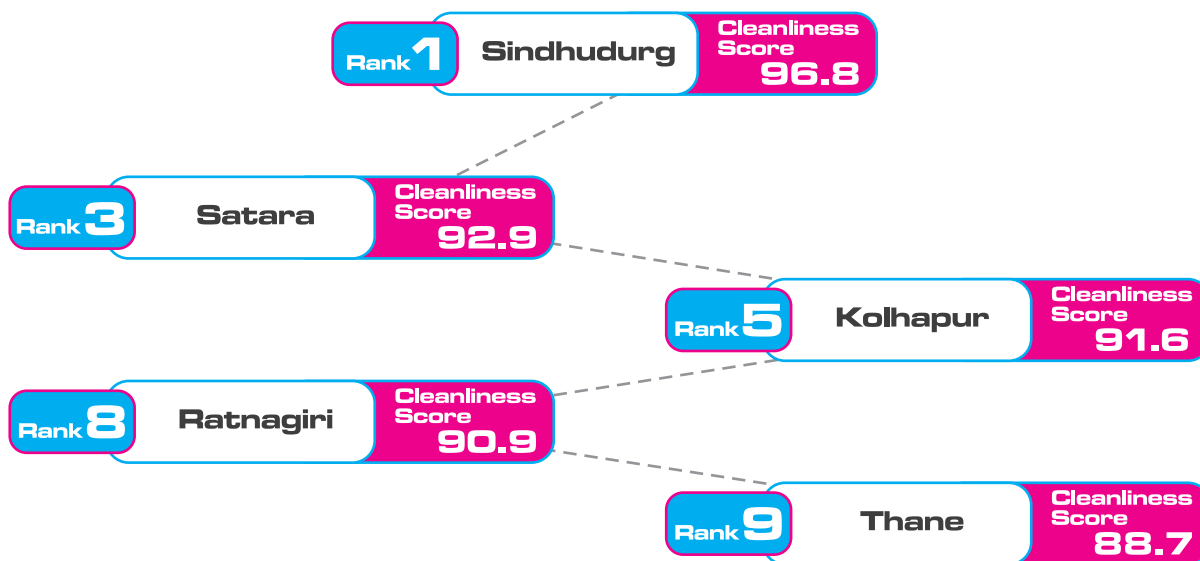
- **Navi Mumbai is the only city that figures in the Top 10.** In 2014, before the launch of the Swachh Bharat Mission, an initial survey ranked it at number 13.

Navi Mumbai has shown considerable improvement as it moved from being 12th in 2016 to 8th in 2017. In the 2016 survey, half of the top 20 cities were in Maharashtra

- **With Pune at the 13th position**, there are only two cities in the state that have reached the Top 20. Seven cities have found a place in the top 100 i.e. Ambarnath (89th), Chandrapur (76th), Pimpri-Chinchwad (72nd), Shirdi (56th), Greater Mumbai (29th), Pune (13th) and Navi Mumbai (8th)

- At the other end of the spectrum, **Maharashtra also has the second worst city, Bhusawal, ranked 433rd.** 8 cities fall in the 300-400 range. The remaining 28 cities are roughly equally divided in the 100-200 and 200-300 range

The **Rural Assessment Index** reveals similar levels of disparity within Maharashtra. With a cleanliness score of **96.8**, **Sindhudurg** has been given the **1st rank** as the cleanest district in India within the “Plains” category. Out of the 53 best performing districts covered in the “Plains” category, 4 other districts in Maharashtra fall among the top 10.



However as this report will demonstrate, similar to the urban Maharashtra, the rural parts of the state too have varied standards in hygiene, sanitation & health standards, with many areas having significantly inadequate performances across those parameters.

This report focuses on some of the marginalized districts in Maharashtra where public health standards leave much to be desired for, along with key hygiene and sanitation criteria standards.

RB and Pehel, Jagran’s strategic partnership – have harnessed the experience of their successful collaboration through various strands of RB’s flagship Dettol Banega Swachh India (DBSI) and using it to transform over 40 underperforming cities in Maharashtra to clean from underperforming to clean urban living spaces.



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DETTOL BANEGA SWACCH INDIA

In a proactive bid to support the Hon. Prime Minister Narendra Modi led Swachh Bharat Mission, RB has launched a five year 100 Crore Dettol Banega Swachh India (DBSI) programme with an ambitious aim to reach out to and improve the hygiene and sanitation status of 100 million Indians.

The programme is based on 4 key pillars: Driving habit change and Attitude towards hand hygiene, Ensuring mass reach, Ensuring best in-class on ground execution, and Using RB India's expertise in hygiene related products to improve the state of sanitation. The programme is delivered with its core partners Pehel – the CSR arm of Jagran Group and various stakeholders including World Health Organisation, Aga Khan Foundation, Global Interfaith Wash Alliance, World Toilet College, Tata Trusts, USAID, various state governments and of course, the Government of India among many others.

The DBSI programme has various strands that are targeted towards various end-users with an aim to reaffirm the key behavioral change messages to improve hygiene, sanitation & health standards. With the demonstrable success in transforming communities through various strands, the RB-Jagran partnership has decided to take up the responsibilities of holistically transforming communities by harnessing the collective strength of the DBSI strands as well as working in partnership with experts and government. The RB-Jagran team has developed, in consultation with all key stakeholders operating in the Indian WASH arena, a strategic framework with core strategies that are key to delivering sustainable improvements to hygiene, sanitation and public health.

The DBSI deployment in the 6 underperforming districts in Maharashtra is part of the RB-Jagran team's new approach towards holistic transformation through improvements across all parameters of hygiene, sanitation and public health.

In order to understand the specific challenges and develop an evidence based approach to the transformation strategy, the programme conducted a dipstick survey across the 6 districts.

This report explores the dipstick survey results in detail and lays out the strategies that DBSI has adopted to improve hygiene, sanitation and health standards in these cities.





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DIPSTICK SURVEY HYGIENE AND SANITATION

In an effort to understand specific challenges that need to be addressed, the DBSI program conducted a detailed representative Dipstick Survey across urban and rural households among 6 chosen districts in Maharashtra i.e. Bhiwandi, Malegaon, Jalna, Parbhani, Buldana and Nanded. A total of 1200 households were surveyed across the rural and urban districts. This included 100 urban households and 150 rural households each. Two districts, Bhiwandi and Malegaon, included only urban sample coverage.

The survey was designed to assess the state of hygiene and sanitation across a range of criteria including ODF, waste management, awareness of SBM along with knowledge and practices of hand washing among others.

THE METHODOLOGY

Adopting the PSI model of Behaviour Change the study will be carried out both at the community level and service provider level.

At the community level quantitative and qualitative information will be collected using the structured questionnaire and Focus Group Discussions. And at the provider level qualitative information will be collected through informal discussions.

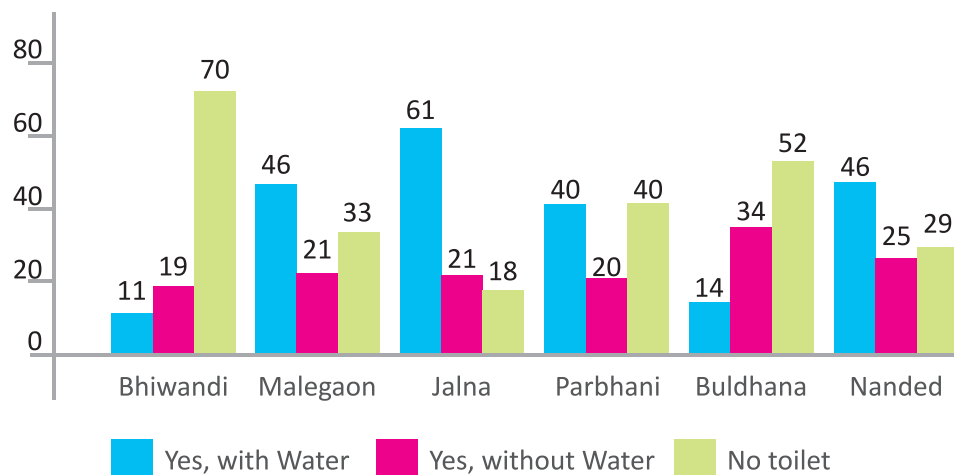


THE ANALYSIS

The focus of DBSI for this particular project, as has already been highlighted previously in the report, has been on those areas in the state of Maharashtra that were deemed to be laggards in the Swachh Survekshan surveys of both rural and urban India.

Broadly, the Swachh Survekshan findings and the DBSI Dipstick Survey results converge although the latter have identified in greater detail the underlying causes of the performance results with a bid to target those specific challenges for improvement. The key findings of the survey results across the target districts are as follows:

Urban Toilet Facilities – Across Target Districts.



Across the six districts, 7,51,036 people have toilets with water in the urban areas. 8,02,980 urban people have toilets without water and 14,40,448 urban people do not have toilets at all.

According to respondents, while there has been construction of toilets, the pace hasn't been aggressive enough to truly make a difference since 2014. The primary reasons for not having enough toilets are due to lack of space even for community toilets in some urban spaces and of course the economic constraints that deter both urban and rural households to not have toilets at home.

People across 6 Districts

7,51,036

Toilets with water

8,02,980

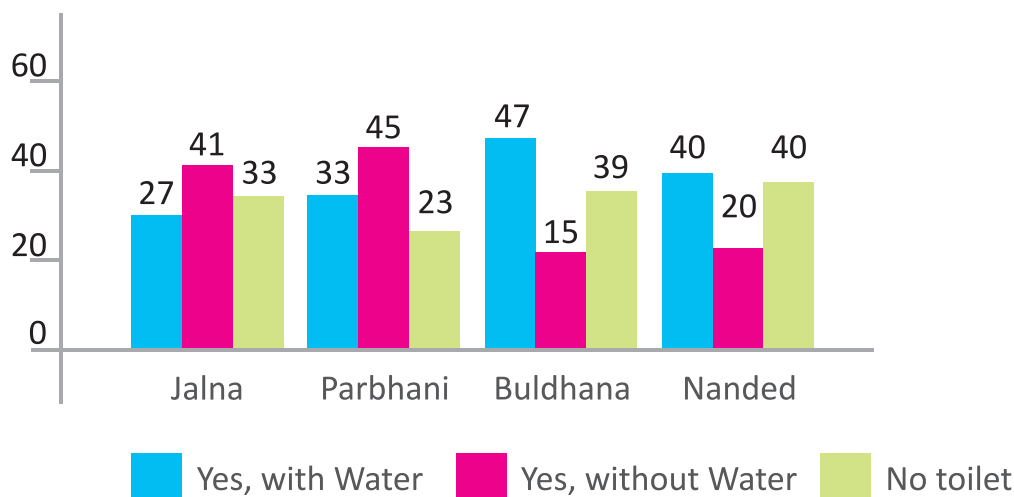
Toilets without water

14,40,448

Do NOT have Toilets



Toilet Facilities in Rural Areas across Target Districts



Across the four districts, 8,01,592 people have toilets with water in the rural areas. 3,90,428 rural people have toilets without water and 6,88,596 rural people do not have toilets at all. According to respondents, while there has been construction of toilets, the pace hasn't been aggressive enough to truly make a difference since 2014.

The primary reasons for not having enough toilets are mainly economic constraints and lack of ownership of houses that deter both urban and rural households to not have toilets at home. Moreover, people just find it more convenient to openly defecate in the fields, bushes, along the river side etc.

People across 4 Districts

8,01,592

Toilets with water

3,90,428

Toilets without water

6,88,596

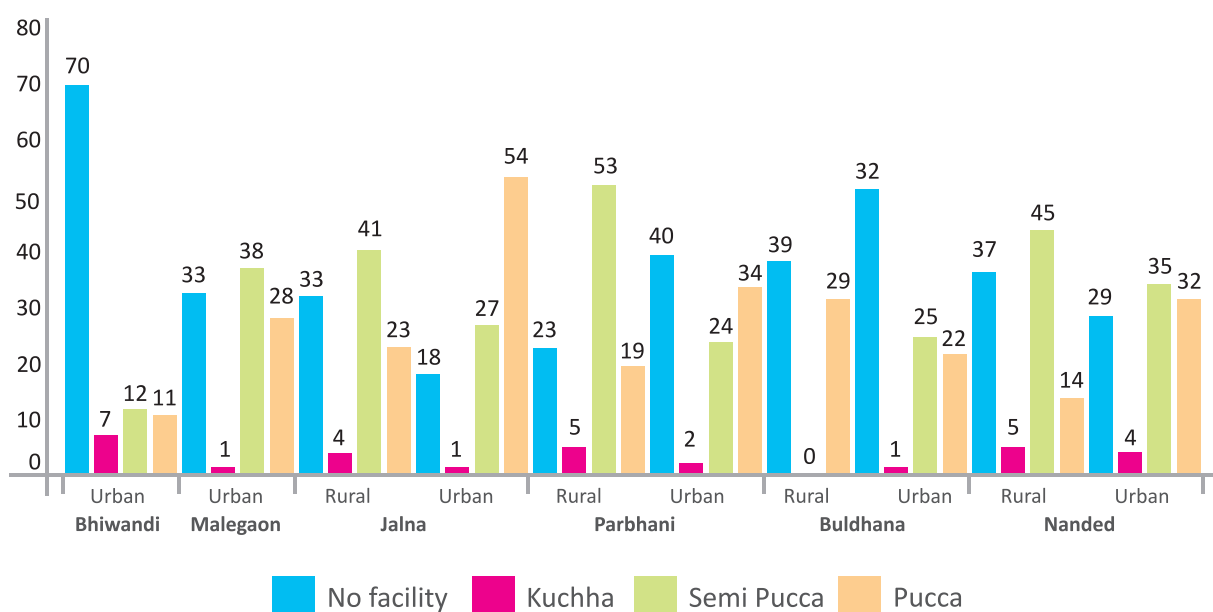
Do NOT have Toilets



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Types of Toilet across Target Districts



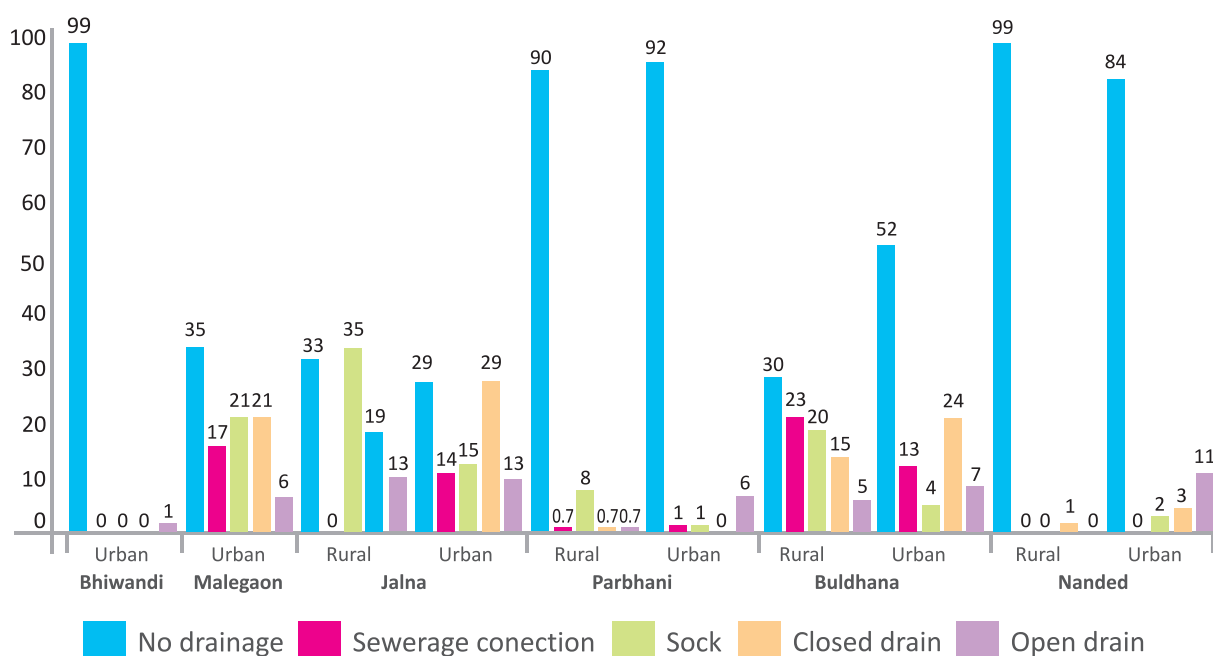
80% of the rural people who openly defecate, go to fields in the early mornings. This figure for the urban people is significantly higher at **92.8%**. In the rural areas, **87.6%** people go all alone for open defecation while **95.5%** people in the urban areas do the same.

According to the respondents, **87.6%** of the rural people who resort to open defecation are not stopped by anyone. Likewise, in the urban areas, **72.1%** of those who OD are not stopped by say, municipal authorities, aanganwadi workers etc.



Drainage Facilities across Target Districts

Drainage is a major problem in both Rural and Urban areas of all districts



Across the 4 districts surveyed in the rural areas, 16,63,156 people have access to no drainage. 31,42,276 people in the urban areas across the 6 districts surveyed have no access to drainage.

Poor maintenance, blockage and disposal of kitchen waste in the drains are some of the reasons that hamper access to drainage across the regions.

People across 4 Districts

16,63,156

No access to drainage

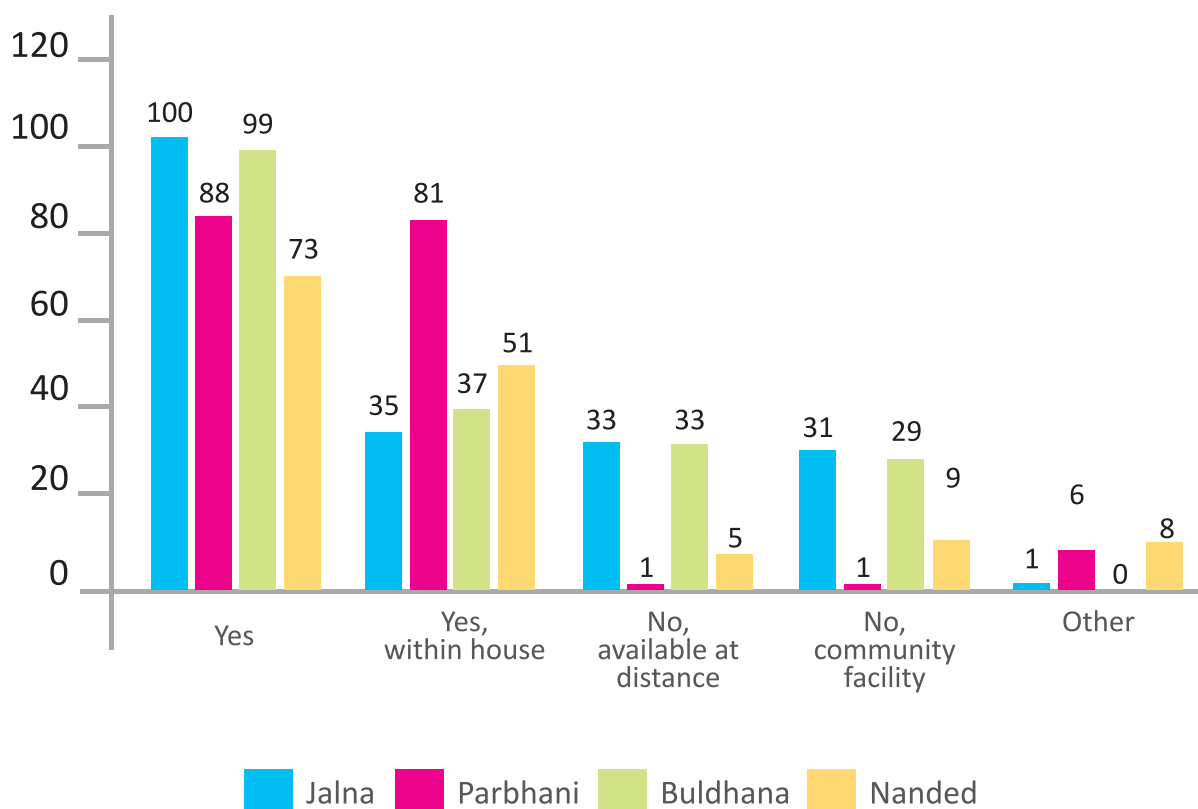
People across 6 Districts

31,42,276

No access to drainage



Drinking Water facility in Rural areas across Target Districts



Across the rural areas among the 4 districts, 2,93,294 households have access to drinking water within the house itself. 6,31,454 households in the urban areas across 6 districts have access to drinking water within the house.

According to the respondents, most districts have good water facilities.

**Rural areas
across 4 Districts**

2,93,294

drinking water
within house

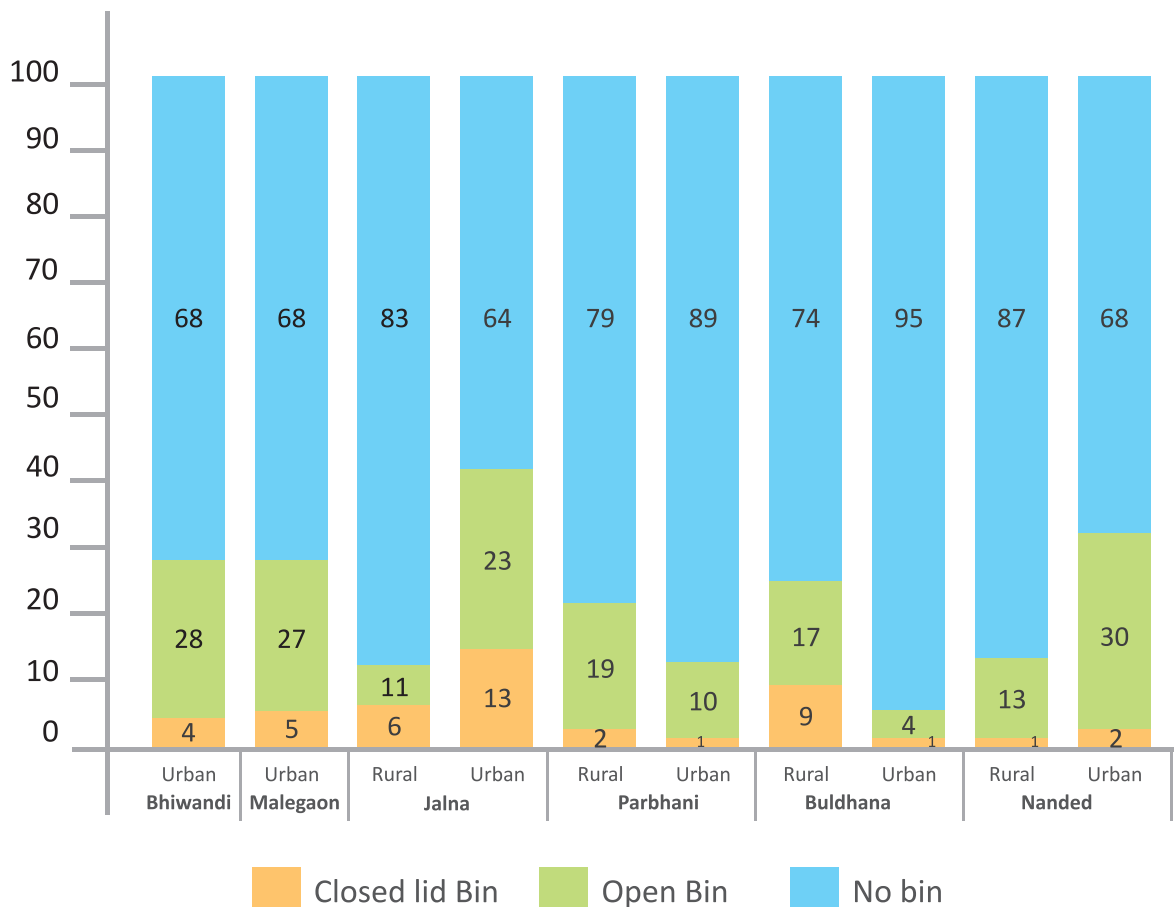
**Urban areas
across 6 Districts**

6,31,454

drinking water
within house



Availability of Garbage Bins



11,96,764 people in rural households across the 4 districts surveyed do not have garbage bins. 24,46,760 people in urban households across the 6 districts surveyed do not have garbage bins.

Most people revealed no awareness about composite waste management and reportedly threw their solid / liquid waste outside their houses.

**people across 4 Districts
in Rural areas**

11,96,764

Do not have
Garbage Bins

**People across 6 Districts
in Urban areas**

24,46,760

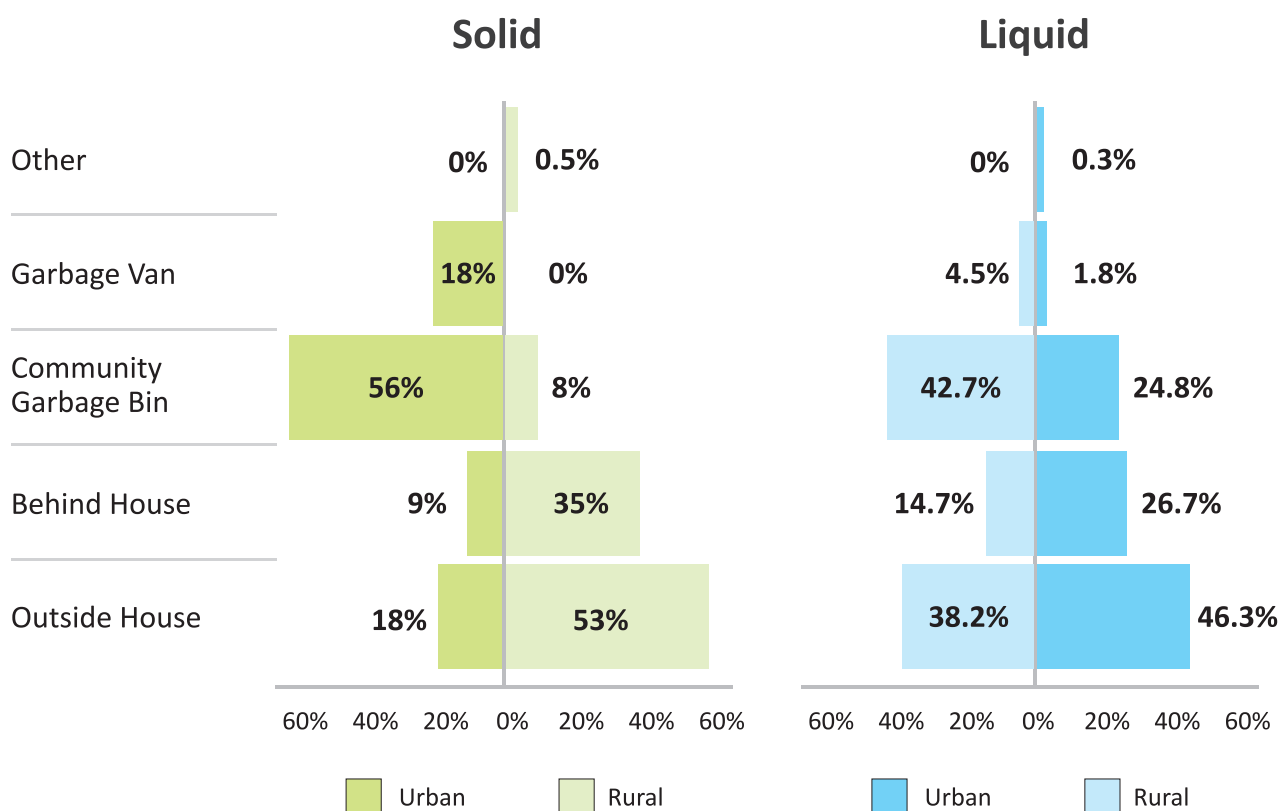
Do not have
Garbage Bins



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Waste Disposal across Target Districts



In urban areas, both solid and liquid waste are thrown in the Community Bin. But in Rural areas it is thrown outside the house. Only a small percentage of HH mentioned having a Collection Van in urban areas.

80% of the rural households across the 4 districts surveyed do not have garbage bins. Among the urban households across the 6 districts, 74.5% households do not have garbage bins. 52.7% of Rural households dispose their garbage outside their households and 55.5% urban households dispose off their garbage in community bins.

Only 22% of households in both the urban and rural areas segregate their waste at the household level. 63.2 rural and 59.2 urban respondents have not heard of Amitabh Bachchan's waste management advertisement.

Focus Group Thoughts on Swachh Bharat Mission

Discussions with the sample size of the focus group revealed that majority of the population across the target districts are aware of the Swachh Bharat Mission (SBM) – 72% in urban areas and 80% in the rural areas. More importantly, the focus groups give SBM the credit for toilet building and other sanitation activities and highlighted that there is engagement with representatives of SBM every 6 months.

Based on the focus group discussions, it is clear that faith leaders and Anganwadi Workers along with school teachers, & panchayat members are favoured when it comes to influencing the communities to improve hygiene, sanitation and therefore health. The groups also suggested that mass meetings, leaflets, posters/wall paintings and influence of religious leaders are the best ways of ensuring sustainable change in behavior on sanitation in their communities.

Although there is awareness among the representative sample respondents of SBM, the following data on hand washing & diseases such as diarrhoea demonstrates that there is clearly a lack of knowledge when it comes to best practices of sanitation and both personal & community hygiene.

Correct Hand Washing Practices - With Soap

Activities	Bhiwandi		Malegaon		Jalna		Parbhani		Buldhana		Nanded	
	U		U		R	U	R	U	R	U	R	U
Before Cooking	7		21		25.3	21	10	16	24	7	47	19
After using the toilet	41		75		62.7	72	40	64	65.3	34	28	43
Before eating / touching food	17		34		32.7	37	21.3	28	36.7	36	12.7	27
Before Praying	3		11		20.7	17	3.3	2	22.7	0	1.3	12
Before feeding an infant	2		11		27.3	22	12	4	22	0	6	6
After cleaning child's feces	14		27		28	32	27.3	18	24.7	3	12.7	19
After dusting / sweeping	7		26		24.7	44	22	26	22.7	12	12	22
After touching pets / their waste	4		18		28.7	19	12.7	4	32.7	5	6	0
After blowing nose / Coughing	14		10		24	13	1.3	1	21.3	0	0.7	0
After cleaning utensils	4		9		24	12	0.7	0	22.7	0	0	0

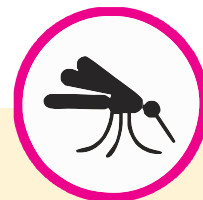


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Correct knowledge of Diarrhoea and Malaria

- Adult / Children in the household adopt the same practice of hand washing in both Rural and Urban areas
- Only **1.7% of Rural** and **0.5% of Urban households** have correct knowledge of Diarrhoea
- Only **4.5% of Rural** and **2% of Urban households** have correct knowledge of Malaria



The data on hand washing clearly reflects lack of awareness and importance of best practices of personal hygiene in ensuring healthier lives for the households and communities. The knowledge of malaria and diarrhea is poor across the rural and urban households in the 6 districts. Only 1.7% rural households and 0.5% urban households have correct knowledge of diarrhea. 4.5% rural and 2% urban households have correct knowledge of malaria. Therefore, without even going into specific numbers, the total population that has almost no knowledge of how these easily preventable yet fatal diseases occur and the measures to take against them runs into many lakhs in these 6 districts.

The lack of understanding, the co-relation between hygiene and sanitation practices and the diseases show that behavior change communication (BCC) tools & proactive interventions need to be deployed alongside a viable infra-structural ecosystem to ensure these districts reverse their performance in Swachh Survekshan and more importantly, improve the quality of life of the residents of those districts. This reversal will enable an improved economy with a healthier and more productive community.





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THE KEY CHALLENGES

Although there are some notable exceptions in some parameters, especially drinking water facilities, there is a pattern of convergence when it comes to the challenges faced by these communities with regards to hygiene, sanitation and public health.

There are various manifestations of the challenges faced by these communities, however, these manifestations can be classified into two broad key challenges that the dipstick survey (strategic audit) has revealed:



Lack of Knowledge and Awareness on Hygiene and Sanitation

The hand washing data, where vast majority of people do not wash their hands after cleaning children or toilet use among many others, along with the lack of garbage bins in all but few homes across the six districts highlight the lack of awareness & knowledge of hygiene and sanitation and their best practices.

Changing mindsets and generationally conditioned behavior and practices will have to be a priority for DBSI intervention to ensure sustainable transformation and improvement in quality of life.



Lack of Infrastructure & Viable Ecosystem

With a substantial minority lacking any toilet facilities, and a larger minority with toilets but lacking adequate waste management system, the sanitation infrastructure leaves much to be desired for. The health risks are exacerbated by the less than adequate and effective waste management systems for both solid and liquid waste among others.

These risks showcase the need for holistic interventions to address the infrastructural challenges including financial barriers & supply ecosystem to ensure sustainable and transformative improvement in hygiene and sanitation standards.



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STRATEGIC FRAMEWORK AND CORE STRATEGIES

In the next part the report lays out the key strategic framework & strategies that are being deployed by the DBSI programme to fast track the transformation of these poor performing districts into “clean” districts and therefore, contribute to the national Swachh Bharat Mission – the success of which is critical in delivering the global Sustainable Development Goals (SDG) by 2030.

As highlighted in the report earlier, the RB-Jagran partnership, harnessing the collective strength of the various DBSI strands alongside the expertise & experience of a wide group of stakeholders such as WHO, Unicef, K4D, Aga Khan Foundation, World Toilet College, Water.org, USAID and Global Interfaith Wash Alliance, has developed a strategic framework across cross cutting issues and specifically to address behavior change as well as infrastructural issues.

The Core Components of the Strategy

- **Not Just ODF but ODF ++**

Focusing on holistic improvement of health & hygiene not just ODF but improvements across waste management, personal & community hygiene;

- Developing effective cross sector partnerships at all levels from secretariats & board rooms to the block / village & ward level without duplication of effort;
- Evidence based policies using data to ensure effective targeting and resourcing to ensure optimal ROI; the data from Swachh Survekshan along with the detailed dipstick survey enabled DBSI to target specific interventions based on the local needs & aspirations.
- Effective usage and enriching existing knowledge bases such as the Swachh Sangraha and Hygiene Index would be imperative to avoid duplication of mistakes while adopting best practices;
- Putting community leaders & key influencers both at home & community at the heart of the strategy to ensure long term sustainable change;
- Adopting a multi-pronged strategy with different strands & core audiences to reaffirm & reiterate the key messages and transform behavior across communities;
- Impactful BCC tools will be a critical success factor in transforming these districts & adopting already successful tools on the ground might be the most effective and efficient strategy;
- Targeted early morning & evening micro-level intervention would deter and reduce the practice of open defecation at the time when it is most likely to occur;
- Investing in the future is key to sustainable Swachhta in these districts – and therefore focusing on imbibing the best practices among children to ensure societal transformation as have been the experiences in Singapore and South Korea among others;
- These target districts need an effective water strategy including waste water that incorporate simple solutions such as Duckweed and seek solutions that require less or no water;
- Ecologically sustainable local waste management solutions (SWM + LWM) with innovations such as community owned waste plants will be integral to improving health & hygiene;
- Identifying and deploying the right toilets with advanced technology with an EcoSan approach based on the needs of local community would be key to intervention success;
- Strengthening local supply network by developing local capacity to produce and supply high quality sustainable products, which in turn would boost local economy;
- And finally, local micro-finance such as initiatives through SHGs must be deployed on the ground to satisfy demand and act as bridge financing



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These strategies are mixed and matched based on a particular community's need and aspirations and not deployed as a one size fits all. In fact, the way strategies are delivered in one village might very well differ from those adopted in the next village – but the key criteria that drives the deployment and delivery aspects of the programme relate to what the community needs & what is the most effective and efficient way of delivering these along with the partnership that is required to do so. However, the principles of the core strategies are adhered to regardless.

As the challenges faced by these six districts are fairly similar, with some notable exceptions especially in the “Drinking Water Facilities” category, the strategies deployed are similar in nature.

Call for Action

The analysis of the cumulative data as well as the individual district data demonstrate that there is a clear need for sustained and impactful Behaviour Change Campaign which is owned by the community across generations. **Using proven impactful tools such as Nukkad Nataks, Wall Posters to Community meetings led by community change leaders including but not limited to Panchayati Raj members & faith leaders.**

The BCC campaign aims to **empower the community with knowledge and awareness and create the demand for better sanitation and hygiene infrastructure in the community & households as well as personal hygiene.** The programme needs to incorporate targeted interventions at the time of open defecation in the early mornings and evenings when people are more likely to do so.

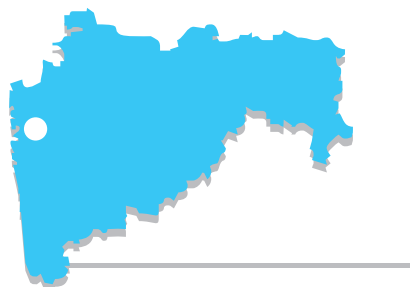
Supporting the behavioral change campaign will be an **enabling ecosystem that focuses on creating and supporting a sustainable infrastructure that not only helps communities improve hygiene, sanitation and health standards, but also drive economic activity.**

This RB-Jagran initiative is being delivered in partnership with the state government leadership as well as District and Municipal / Panchayat administrations alongside various NGOs and other expert stakeholders including in financing. Ensuring there is a bridge financing option through loans from self help groups and others would be a key part of the enabling ecosystem.



A map of Maharashtra, India, with a blue outline. Six white dots are placed on the map to indicate specific locations. Dashed lines connect these dots to labels on the right side of the image. The labels are arranged in two columns. The first column contains 'BHIWANDI', 'BULDHANA', and 'JALNA'. The second column contains 'PARBHANI', 'MALEGAON', and 'NANDED'. A horizontal line is drawn across the bottom of the map area.

BHIWANDI



Population

2,93,294

Swachh Survekshan
Survey 2017 Ranking

392

CRITERIA	SCORE	STATE HIGHEST
ODF/ TOILET USAGE	20/300	260/300 (Pune)
SOLID WASTE PROCESSING AND DISPOSAL	0/200	180/200 (Pimpri-Chinchwad)
SOLID WASTE COLLECTION AND TRANSPORTATION	138/400	360/400 (Greater Mumbai)

The Dipstick Survey shows:



ODF: City is not ODF.



Toilet: 70% of households do not have toilets and as most residents are tenants – they do not feel the necessity to build toilets at home. Although most households use community toilets they are unclean and therefore risk hazards.



Drinking Water Facilities: Close to 80% of households reported having access to clean drinking water and out of those 68% revealed that they drinking water connections at home.



Hand Washing Practices: While all the six districts have fared badly in the hand-washing criteria – Bhiwandi 's performance is especially poor where less than 50% of residents (44%) wash hands after using toilets and this gets progressively worse across the various situations.



Waste Management: Bhiwandi scored 0 in solid waste processing in Swachh Survekshan. Less than 5% of households have any garbage disposal bins at home and close to 50% of households throw solid waste outside their home and 68% of households do the same for liquid waste.



Drainage Facilities: Bhiwandi has no drainage and therefore stagnant water and malaria are a real concern for residents and lack of any sewerage connections exacerbate the problem.

Call for Action

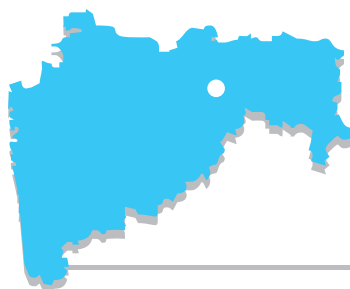
- Sustained multi-pronged behavior change campaigns including direct intervention to stop OD to make citizens proactive change catalysts to improve hygiene and sanitation;
- Focused mission mode approach to transform drainage infrastructure to minimize stagnant water and reduce health risks from water borne diseases.
- Building technologically advanced toilets that use less or no water yet effectively manages the waste
- Work on a mission mode in effective partnership between the RB-Jagran team and government and various partners to transform the hygiene and sanitation standards of this community and improve quality of life.



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BULDHANA



Population

25,86,258

The Dipstick Survey shows:



ODF: District is not ODF. No awareness of risk of open defecation or easily preventable but potentially fatal diseases such as diarrhea and malaria.



Toilet: 45% of population or almost 1.2 million people do not have toilets at home. Lack of clean community toilets is an added factor for open defecation in the district. Although the 55% of those who have toilet at home have 100% toilet usage



Drinking Water Facilities: 82% of the urban households and 66% of the rural households surveyed reported access to drinking water. Out of these 76% urban households and 37% rural households had access with the house



Hand Washing Practices: The rural population at Buldhana demonstrate far better at hand-washing at the right moments than their urban counterparts but still lack awareness of the risks of not washing hands at the right moments. Only 65% of population in rural areas washes hands after going to toilet.



Waste Management: While 26% of households report not having any garbage bins at home; 81% of rural households throw solid waste outside their home while 65% do so for liquid waste. However the number drops significantly to 1% and 3% respectively in urban households.

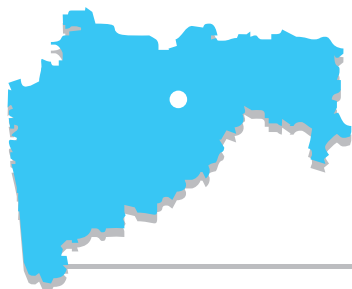


Drainage Facilities: Rural households continue to fare better even in this criteria. While only 30% of rural households did not have any drainage facilities, 52% of urban households lacked drainage facilities.

Call for Action

- Sustained multi-pronged behavior change campaigns including direct intervention to stop OD; and improve personal hygiene to make citizens proactive change catalysts to improve hygiene, sanitation and public health;
- Focused mission mode approach to transform drainage infrastructure to minimize stagnant water and reduce health risks from water borne diseases especially in urban areas
- Building technologically advanced toilets that use less or no water yet effectively manages the waste and reduce open defecation rate to a “zero”
- Work on a mission mode and sustain the efforts of the DBSI programme to ensure the district can be successfully transformed

JALNA



CRITERIA	SCORE	STATE HIGHEST
ODF/ TOILET USAGE	10/300	260/300 (Pune)
SOLID WASTE PROCESSING AND DISPOSAL	59/200	180/200 (Pimpri Chinchwad)
SOLID WASTE COLLECTION AND TRANSPORTATION	67/400	360/400 (Greater Mumbai)

The Dipstick Survey shows:



ODF: District is not ODF



Toilet: 25.5% of population or 72,280 people without toilets at home. Among those with toilets, over 60% in rural areas and over 4 out of 10 in urban areas have toilets with inadequate waste management facilities



Drinking Water Facilities: Almost 100% coverage across rural & urban areas. However only 37% of rural households have drinking water facilities at home however it is compensated through community facilities



Hand Washing Practices: Very poor. While urban residents are comparably better the vast majority of the populace across district lack awareness of risks and knowledge of best practices.

The awareness of preventable diseases such as diarrhea was limited to 4% of households in rural areas and 5% in the urban areas



Waste Management: Very poor across solid & liquid waste management. More than 8 out of 10 households do not have a garbage bin and 91% of households throw their solid waste outside while 68% do so for liquid waste in rural areas while urban areas don't fare much better



Drainage Facilities: Lack of adequate drainage facilities results in stagnant water – the source of easily preventable yet fatal diseases such as diarrhea among others. The rural population has a total of 0% sewerage connection and only 14% of urban households can claim to one; while 33% of the rural population have no drainage at all while their urban counterparts are just a little better at 29%

Areas to Focus on Delivery Strategy:

Behavioral change is key and the DBSI programme is investing significant resources to ensure the communities are empowered with knowledge and awareness and become proactive change catalysts to deliver a truly clean “Jalna”.

As evident from the above, there are serious infrastructural as well as mindset issues that affect the overall cleanliness of Jalna.

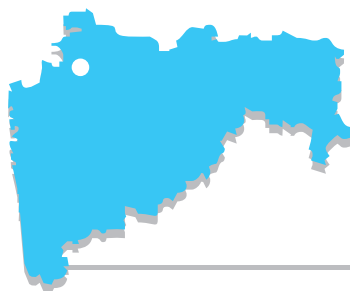
DBSI has formed effective partnerships with government at all levels and other experts as well as the third sector to ensure Jalna has the adequate infrastructure to achieve ODF++ status.



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MALEGAON



Population

4,71,312

Swachh Survekshan
Survey 2017 Ranking

239

CRITERIA	SCORE	STATE HIGHEST
ODF/ TOILET USAGE	20/300	260/300 (Pune)
SOLID WASTE PROCESSING AND DISPOSAL	54/200	180/200 (Pimpri Chinchwad) -
SOLID WASTE COLLECTION AND TRANSPORTATION	232/400	360/400 (Greater Mumbai)

The Dipstick Survey shows:



ODF: City is not ODF.



Toilet: 33% of households or around 39,000 households do not have toilets at home. There are community toilets but the city needs more of them. However, those who do have toilets in their households report a 100% usage rate across rural and urban households



Drinking Water Facilities: 50% of households have direct drinking water connections at their homes however over 91% of households have adequate access to drinking water and most respondents in the dipstick survey were satisfied with the provision of clean drinking water in the city



Hand Washing Practices: Three quarters of residents wash hands after using the toilet however, the lack of awareness is evident as significantly fewer people (less than 30%) wash hands after cleaning child's feces and only 10% wash hands after coughing or blowing their nose



Waste Management: Majority of households segregate waste in their own homes and do not dump liquid or solid waste outside. However, significant minority of households (over 25% in each case) does the opposite

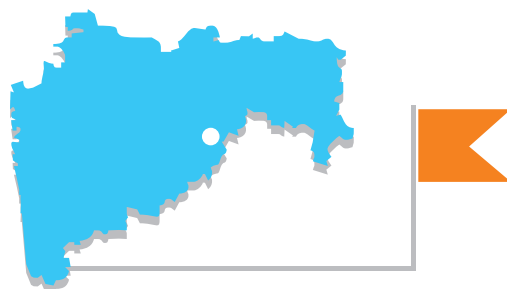


Drainage Facilities: Malegaon has poor sewerage connections and only 17% HHs have access to those. 35% HHs have no access to drainage at all

Call for Action

- Sustained multi-pronged behavior change campaigns specifically to ensure best practices of hygiene and sanitation such as handwashing and awareness of the risks and how diseases such as diarrhea and malaria can be prevented
- Focused mission mode approach to transform drainage facilities as inadequate drainage facilities risk stagnation of water and thus waterborne diseases.
- Aim to achieve not only ODF but ODF ++ for the district
- Invest in the Future

NANDED



Population

5,50,439

Swachh Survekshan
Survey 2017 Ranking

192

CRITERIA	SCORE	STATE HIGHEST
ODF/ TOILET USAGE	130/300	260/300 (Pune)
SOLID WASTE PROCESSING AND DISPOSAL	48/200	180/200 (Pimpri Chinchwad)
SOLID WASTE COLLECTION AND TRANSPORTATION	326/400	360/400 (Greater Mumbai)

The Dipstick Survey shows:



ODF: District is not ODF



Toilet: 37% of rural households and 29% of urban households do not have any toilets. There are community toilets but the city needs more of them. However, those who do have toilets in their households report a 100% usage rate across rural and urban households



Drinking Water Facilities: According to the Dipstick survey, most residents were not pleased with the drinking water facilities in the district and those who can afford it buy drinking water privately. Although 81% of urban households do have access to clean drinking water this number drops drastically to 45% when it comes to rural households



Hand Washing Practices: In Nanded, urban households have a better track record of hand-washing at critical moments than their rural counterparts yet only 43% of people in urban households wash their hands after going to toilet



Waste Management: As the Swachh Survekshan Survey 2017 reveals, Nanded scores extremely low in terms of solid waste processing and disposal. Most households across the urban rural divide dump their solid and liquid waste outside their home but not in garbage bins



Drainage Facilities: 99% of the rural population and 84% of the urban population does not have access to drainage

Call for Action

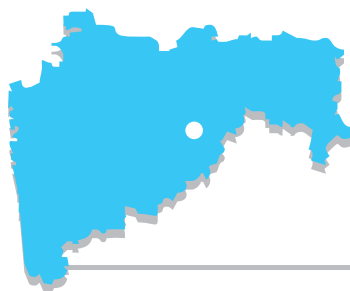
- Sustained multi-pronged behavior change campaigns specifically to ensure best practices of hygiene and sanitation such as handwashing and awareness of the risks and how diseases such as diarrhea and malaria can be prevented
- Focused mission mode approach to transform infrastructure for toilet as well as waste management and drainage to ensure a conducive environment to transform the district into ODF ++
- Invest in the Future



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PARBHANI



Population

3,07,170

Swachh Survekshan
Survey 2017 Ranking

229

CRITERIA	SCORE	STATE HIGHEST
ODF/ TOILET USAGE	10/300	260/300 (Pune)
SOLID WASTE PROCESSING AND DISPOSAL	40/200	180/200 (Pimpri - Chinchwad)
SOLID WASTE COLLECTION AND TRANSPORTATION	228/400	360/400 (Greater Mumbai)

The Dipstick Survey shows:



ODF: City is not ODF.



Toilet: 31.4% of population or approx. 97,000 people without toilets at home. Among those with toilets, over 75% in rural areas and over 26% in urban areas have toilets with inadequate waste management facilities. A lack of community toilets also exacerbates more open defecation



Drinking Water Facilities: Only 19% of households or roughly 29,000 people in urban areas and 12% households or roughly 18,430 people across the district do not have adequate or easily available drinking water



Hand Washing Practices: Very poor across both rural and urban population. The best performance is after own toilet usage in both sets and that too caps at 64% for urban and 40% for rural populace. Less than one out of 3 among the rural populace wash hands and less than one out 5 among urban population wash hands after cleaning child's feces



Waste Management: Very poor across solid & liquid waste management. 88% and 77% of households in rural areas dump there solid and liquid waste outside while 19% and 61% do so respectively among urban households



Drainage Facilities: On average 9 out of 10 households in rural areas have no drainage facilities while the same is true of 92% households in urban areas have no drainage at all. There is negligible sewerage connection across the district

Call for Action

- Sustained multi-pronged behavior change campaigns including direct intervention to stop OD to make citizens proactive change catalysts to improve hygiene and sanitation;
- Focused mission mode approach to transform toilet and drainage infrastructure with micro-finance initiatives to facilitate infrastructure building;
- Effective Waste Management strategy to segregate, manage and recycle waste
- Invest in the Future



31

IMPACT 1

Saving lives of Children

According to various research & government statistics, 1.2 million children died of diarrhea in India in 2014 alone. Based on the population demographics, Maharashtra would have lost the lives of 120,000 children due to an easily preventable disease.

Research published by WHO demonstrate that there are measurable co-relation between incidence of diarrhea and quality of sanitation.

- **No sanitation to Improved sanitation – 16% reduction in diarrhea**
- **When proper waste management system is implemented – 63% reduction in diarrhea**

Considering that the six target districts in Maharashtra are some of the worst performing districts in the state, it is safe to assume that a large minority if not the majority of the deaths of children would have occurred there. However for the purposes of this study, we are assuming a conservative estimate of 50% occurrence or around 60,000 children were lost to diarrhea.

With a proactive approach based on deployment of integrated reiterative solutions that focus on various hygiene and sanitation aspects, the aim is to achieve ODF ++ status for these districts, the 63% reduction rate and more importantly, reduce fatalities among children if not eliminate it completely.

The DBSI intervention could not only potentially save the lives of thousands of children but eradicate child mortality from easily preventable diarrhea and other water borne diseases.



SAVING
LIVES
OF
CHILDREN



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IMPACT 2

Economic Impact of Reduction of Diarrhea

In 2014, it was estimated that 300 million children and 700 million adults (almost in excess of 75% of India's population) had incidents of diarrhea or almost in excess of 75% of India's population.

However, for the purpose of this exercise we are assuming a conservative estimate of 50% occurrence and that adult & children population are split in halves (50 : 50).

The total population across the target area is 3,810, 126

Adult population = 1,905,108

Adult population affected by diarrhea = 952,554

Assuming each adult affected by diarrhea loses 2 working days with the total economic cost of \$7.5 per day – the total economic loss per incidence = 15 USD per affected adult.

Therefore total cost to the economy in one year = $952,554 \times 15 \text{ USD} = 14, 288,310 \text{ USD}$

WHO estimates 63% reduction in diarrhea incidences if there is a whole cycle of high standards of sanitation including waste management – again for the purposes of this study, the estimate is held at 50% following the DBSI intervention.

Number of adult diarrhea cases after intervention = 4,76,277

The economic cost = $476,277 \times 15 \text{ USD} = 7,144, 155 \text{ USD}$

Therefore the DBSI intervention in these Six districts could add over 7 million USD to the economy and make citizens more productive.



**THE
ECONOMIC
IMPACT**

IMPACT 3

Potential Economic Activity of Building Toilets

The state of the hygiene, sanitation and public health in these districts have bared the necessity of focusing on all aspects of WASH infrastructure including drainage & effective waste management systems for both solid & liquid waste, across the six underperforming districts in Maharashtra.

However, for the purpose of this exercise, we would focus just on building EcoSan toilets. The average cost of building an EcoSan toilet = 1200 USD.

Total number of households without toilets across six districts = 476,276 (approx.)

Assuming only 35% of households have toilets in the next 2 years = 166,697 (approx.)

Total direct economic activity of building toilets:

166,697 X 1200 USD = 200 Million USD (approx.).

Assuming a conservative multiplier of 3 – the total economic activity from building toilets:

200 Million USD X 3 = 600 Million USD (approx.)

As highlighted above, in order to transform these six districts into “clean” districts, significant resources would have to be devoted to developing a sustainable infrastructure that can be managed and maintained with an efficient & skilled local supply network.

Aside from the potential immediate economic impact, the most significant benefit that the intervention would bring is improving the quality of life of residents. This is especially important for children as this would ensure reduced occurrence of stunting and enable them to lead full & productive lives – which in turn would contribute to India’s economic growth in the long term.

Like all previous DBSI interventions, the targeted districts will accrue benefits not only in hygiene and sanitation alone but significantly improve public health with an empowered citizenry having a better quality of life with enhanced economic prospects.

Hence, senior stakeholders across sectors, including Prime Minister Modi, recognize Dettol Banega Swachh India as a “force for good” in delivering a New and Clean India.



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