Swachha Bharat Mission (SBM) –
A Paradigm Shift in Waste Management and Cleanliness in India

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Abstract

India generates nearly 62 million tons of MSW annually that creates huge problems in the environment. Small number of initiatives of waste treatment, e.g., incineration, pyrolysis, bio-refining & biogas plants, composting, recycling and SLFs are available in the country. For the sustainable Solid Waste Management (SWM), an inclusive improvement policy and paradigm shift is necessary. SBM (SBM), flagged off on October 2, 2014, is considered as a paradigm shift in Indian SWM movement. SBM is the country’s biggest-ever cleanliness drive costing over 10,600 million USD for 5 years in 4,041 towns in which SWM considered as one of the six components. One of the stated objectives of SBM is to ensure door-to-door garbage collection and proper disposal of municipal solid waste in all the 83,000 wards in urban areas by 2019. Swachh Bharat citizen communities were formed subsequently to generate awareness and citizen participation. Since then, over a period of 12 months, over 335,000 citizens have become part of the various Swachh Bharat citizen communities across more than 100 cities of India. The study reviews the present status and sustainability of the activities undertaken and proposes some improvement scopes in the schemes under the SB mission for effective SWM in India. The study will definitely help in revisiting the scheme periodically for continual improvement.

Introduction

There is indeed a daunting need of effective waste management in India as 62 million tons of municipal solid

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waste (MSW) and 38 billion liters of sewage is generated annually only from urban India [1]. The MSW increases @ 1- 1.33% annually and the maximum amount of municipal waste is left untreated [2]. The main reason for unclean city is unaware consumers in general and poor institutional initiatives. The cleanliness, living standards and amenities available to the citizens are major factors in present day habitation. India has a huge scope to improve the cleanliness, waste management as well as sanitation facilities to be made available to all economic sections of the society.

Census 2011 data says 32.7 % rural family has necessary access to sanitary facility. NSSO 2012 survey result shows that 40.60% of the rural household have access to toilets. UN reports that 68% of rural household has no access to toilets. 88% of the diseases in rural area are due to the lack of clean water, sanitation and improper Solid Waste Management. From over 1.2 crore toilets to be built annually prior to 2011-12, the figure has come down to below 50 lakhs per year in 2014. States have also carried out a Baseline Survey in 2012-13, from which it is clear that out of the 17.19 crore rural households in the country, about 11.11 crore households do not have latrines.

More than 20 million families who were given subsidy under the programme / financial incentive do not have functional toilets today. The government of India has announce to make the countrywide cleanliness drive ‘Swachh Bharat’ by 2019 as a tribute on the 150th birth anniversary of Mahatma Gandhi, by eliminating the unhealthy practice of Open Defecation and providing sanitation and SWM facilities to all. The SBM was flagged off on October 2, 2014, is considered as a paradigm shift in Indian SWM and cleanliness movement. Swachh Bharat Abhiyan (SBA) is a national campaign by the Government of India, covering 4041 statutory towns, to clean the streets, roads and infrastructure of the country[3][4][5]. The components of the SBM (SBM) are, i) Provision of household toilets, ii) Community toilets, iii) Public toilets. iv. Solid Waste Management, v) IEC and Public Awareness and, vi) Capacity Building and A&OE [6].

The SBM, consists of two sub-missions – the SBM (Gramin) (SBM-G), which will be implemented in rural areas, and the SBM (Urban), which will be implemented in urban areas. The main objectives of the SBM (Gramin) are, to bring about an improvement in the general quality of life in the rural areas, accelerate sanitation coverage in rural areas to achieve the vision of Swachh Bharat by 2019 with all villages, Panchayats in the country attaining Nirmal (clean) status, to motivate communities and Panchayati Raj Institutions promoting sustainable sanitation facilities through awareness creation and health education, to encourage cost effective and appropriate technologies for ecologically safe and sustainable sanitation, and to develop community managed environmental sanitation systems focusing on solid & liquid waste. The SBM (Gramin) aims at attaining a 100 per cent open defecation free India by 2019.

Over 30 crore urbanalities will be assisted with the solid waste management practices. Swachh Bharat Mission (Urban) is proposed to be a three-tier management structure. At the centre, the National Advisory and Review Committee(NARC) will be headed by the Secretary(UD)and will have representatives of concerned monitoring outcomes. At the level of States/UTs, a High Powered Committee chaired by the Chief Secretary will prepare State proposals of ULBs and monitor outcomes and O&M arrangements. At the bottom, there will be District Level Review and Monitoring Committee. With the issuance of Swacch Bharat Mission guidelines, the Ministry of Urban Development would soon begin release of funds to States/ UTs.

The objective of the SBA are, a) the eliminate open defecation, (b) conversion of insanitary toilets to pour flush toilets, (c) eradication of manual scavenging, (d) 100%collection and scientific processing/disposal/reuse/recycle of municipal solid waste (MSW), (e) to bring about a behavioral change in people regarding healthy sanitation practices, (f) to generate awareness among the citizens about sanitation and its linkages with public health, (g) strengthening of urban local bodies to design, execute and operate systems and (h) to create enabling environment for private sector participation in capital expenditure, Operation and Maintenance expenditure (O&M).

Small number of initiatives of waste treatment, e.g., incineration, pyrolysis, bio-refining & biogas plants, composting, recycling and SLFs are available in the country. In SBM, no specific guidelines for SWM was released
which will depend on the specific requirements of the ULB or the concerned state to be applied for the fund with detail. SBM is a paradigm shift in cleanliness and SWM.

For the implementation of the SBM, the Prime Minister of India has given the message, “I appeal to everyone, particularly political and religious leadership, mayors, sarpanchs and captains of industry to plan and wholeheartedly engage in the task of cleaning your homes, work places, villages, cities and surroundings. I request your active support and participation in our collective quest to make a Swachh Bharat...”. The message from the Urban Development Minister was, “SBM is about much more than building toilets. It is more about changing the mindsets and acknowledging the right of others to a clean and healthy environment....”.

Literature Survey

Literatures are available in plenty where waste and sanitation management in India have been discussed. There is a need to prioritize the sanitation facilities in India as 50 infectious diseases in India are spread by water, majority being diarrhoeal diseases. It kills 5.8 million children younger than 5 years every year; most of the deaths caused by the ingestion of faeces [7]. Prasanta [8] talks about the various health issues which persists even if sanitation facility exists due to the gaps in the effectiveness of the rural sanitation program. Johannessen [9] studied the strategies to be adopted for the public and private partnerships (PPPs) to implement sanitation and hygiene. Taking into consideration that building toilets won’t solve the issue, Kathleen [10] investigated the political ecology factors influencing toilet adoption in rural India was identified in a multi-scalar political, economic, and environmental levels. For promoting public private partnerships, United States Agency for International Development (USAID) would help to develop creative messaging for behavior changes to increase demand for toilets and supply of sanitation products and services. According to USAID, performance indicators and city ranking systems would be introduced for incentivizing participation in SBM and promoting competition between cities. It plans to invest an amount of $2 million per year on these activities. To assess the current performance and activities going on in the SBA the set tables are to be benchmarked. The performance indicator is mentioned in the SBA guidebook whose regular study can monitor the regular performance of the same.

The central government has been implementing schemes to improve access to sanitation in rural areas from the 1st Five Year Plan (1951-56) onwards. There were a number of major schemes of the government of India dealing with rural sanitation and solid waste management. The Central Rural Sanitation Programme (1986) was one of the first schemes of the government of India which focused solely on rural sanitation (xxx). The programme sought to construct household toilets, construct sanitary complexes for women, establish sanitary marts, and ensure solid and liquid waste management. The Total Sanitation Campaign (1999) was launched with a greater focus on Information, Education and Communication (IEC) activities in order to make the creation of sanitation facilities demand driven rather than supply driven (xx). Key components of the Total Sanitation Campaign included: (i) financial assistance to rural families below the poverty line for the construction of household toilets, (ii) construction of community sanitary complexes, (iii) construction of toilets in government schools and aganwadis, (iv) funds for IEC activities, (v) assistance to rural sanitary marts, and (vi) solid and liquid waste management.

The Total Sanitation Campaign was replaced by the Nirmal Bharat Abhiyan (NBA) (2012), which also focused on the previous elements ( X). One of the objectives of TSC is bringing about an improvement in the general quality of life in rural areas. This objective cannot be met if the general cleanliness of villages is not maintained properly. Panchayati Raj Institutions (PRIs) are required to put in place mechanisms for garbage collection and disposal and for preventing water logging. Upto 10% of the project cost can be utilized for meeting capital costs incurred under this component. The fund sharing pattern between the Centre, State and Panchayat /Community would be in the ratio of 60:20:20. Under this component activities like common compost pits, low cost drainage, soakage channels/pits, reuse of waste water, system for collection, segregation and disposal of household garbage etc were taken up. Successful models was further replicated dovetailing funds from other Rural Development programmes. NGO cooperation was also sought to develop / test / document / replicate such models. According to the Ministry of Drinking Water and Sanitation, the key shifts in NBA were: (i) a greater focus on coverage for the whole community instead of a focus on individual houses, (ii) the inclusion of certain households which were above the poverty line, and (iii) more funds for IEC activities, with 15% of funds at the district level earmarked for IEC.
The NBA was replaced by SBM (Gramin) (SBM-G) (2014) which is a sub-mission under SBM (SBM). SBM-G also includes the key components of the earlier sanitation schemes such as the funding for the construction of individual household toilets, construction of community sanitary complexes, waste management, and IEC. Over the next five years substantial investment will be made in cleanliness drive including the solid waste management for building facilities. Hence, there is a need for the research to better characterize the issues and challenges that may prevent the successful deployment of the schemes under the. This study therefore aims to provide a clearer picture on the implementation of this coveted mission and the issues and challenges for its success by addressing the following question:

1) Why SBA is necessary?
2) What should be the indicators to achieve success?
3) What is the implementation status and performance attained and attainable?
4) What are the issues and challenges for its success of SBM and how it can be made sustainable?

Answer to these questions will valuable information to be gathered which will direct future research and development efforts, and bridge the gap in reported in the primary data available in the literature. This study will also guide the review of the present action plans and taking actions for further improvement in strategies and implementation.

Methodology of Review

To study the various dimensional impacts of SBM, the initiatives taken were closely observed since the starting date of mission from the October, 2014. The related activities taking place as mentioned in newspaper, internet, Facebook, Whatsapp and other kind of social media were closely monitored to study the way of operation of the SBM. Some information were collected also from the primary sources. An Online RTI was filed in name of Ministry of Urban Development, India to find the status of implementation and the future plans of the SBA. Based upon the available data, the analysis has been made.

Discussion and Analysis

Data from the last three Census’ in Table 1, shows that while there has been some improvement in the number of households with toilets; this number remains low in the country, especially in rural areas.

| Year | Rural | Urban | Total |
|------|-------|-------|-------|
| 1991 | 9%    | 64%   | 24%   |
| 2001 | 22%   | 74%   | 36%   |
| 2011 | 31%   | 81%   | 47%   |

In addition, there is significant variation across states in terms of availability of household toilets in rural areas, as shown in Table 2. Table 2 also shows the change in percentage of rural households with toilets from 2001 to 2011. It is evident that the pace of this change has varied across states over the decade.

Why SBA is necessary?

World Bank reports, the annual economic loss to India’s GDP due to poor hygiene and sanitation stands at nearly 6.4 per cent in the year 2014. SBA is necessary in India due to social aspects as well as its effect on the economy and business. No doubt cleanliness is directly related to the health and hygiene but also directly affects the economics and GDP of the country. UN reports that 60% of Indian population defecates in the open which results in
Table 2: Percentage of rural households with toilets

| State               | 2001 (%) | 2011 (%) | % Change | State               | 2001 (%) | 2011 (%) | % Change |
|---------------------|----------|----------|----------|---------------------|----------|----------|----------|
| Andhra Pradesh      | 18       | 32       | 14       | Manipur             | 78       | 86       | 9        |
| Arunachal Pradesh   | 47       | 53       | 5        | Meghalaya           | 40       | 54       | 14       |
| Assam               | 60       | 60       | 0        | Mizoram             | 80       | 85       | 5        |
| Bihar               | 14       | 18       | 4        | Nagaland            | 65       | 69       | 5        |
| Chhattisgarh        | 5        | 15       | 9        | Odisha              | 8        | 14       | 6        |
| Goa                 | 48       | 71       | 23       | Punjab              | 41       | 70       | 30       |
| Gujarat             | 22       | 33       | 11       | Rajasthan           | 15       | 20       | 5        |
| Haryana             | 29       | 56       | 27       | Sikkim              | 59       | 84       | 25       |
| Himachal Pradesh    | 28       | 67       | 39       | Tamil Nadu          | 14       | 23       | 9        |
| Jammu and Kashmir   | 42       | 39       | -3       | Tripura             | 78       | 82       | 4        |
| Jharkhand           | 7        | 8        | 1        | Uttar Pradesh       | 19       | 22       | 3        |
| Karnataka           | 17       | 28       | 11       | Uttaranchand        | 32       | 54       | 23       |
| Kerala              | 81       | 93       | 12       | West Bengal         | 27       | 47       | 20       |
| Madhya Pradesh      | 9        | 13       | 4        | All India           | 22       | 31       | 9        |
| Maharashtra         | 18       | 38       | 20       |                     |          |          |          |

Spread of water-borne diseases and results in poor economy. Bad hygiene affects productivity by health ailments which pressurize the economy by an increased burden on taxpayers to fund health initiatives. A flow chart of the SBM system is shown in figure 1.

SBA can be used as a tool for making the economy sustainable and used to contribute to GDP growth. It can be used for reducing healthcare costs along with generating source of employment. SBA can generate higher consumer aspiration quotient by the promotion of self-hygiene and sanitation. A huge percentage of girls in rural India quit school after they reach puberty as there are no proper toilets in schools.

SBA, if taken up properly can lead to a very huge amount of energy source if the waste is cleaned up and stored in the proper way and sent to requisite energy sources.

**Possible activities to be undertaken while observing “Swachha Bharat Saptah”**

The guidelines for observing “Swachha Bharat Saptah” or “Clean India Oath” stated the following activities those may be undertaken during the oath.

1. Building awareness in public at large about the cleanliness of houses/precises.
2. Display of message of cleanliness through sign boards at public places/markets.
3. Organizing “Prabhat Pheries” in various society/mohallas to create awareness.
4. Repair, maintenance, cleaning & sanitization of Public/Community toilets.
5. Cleaning of Bus stands/Roads/Streets/Parks/Markets/Public Places/ Pavement Areas/ backyards/ front yards/areas surrounding the Railway Stations
6. River/Talab side waste cleaning
7. Cleaning of Toilets in Government buildings/Hospitals/Schools
8. Removal of Debris and garbage heaps in public places.
9. Cleaning of Government Buildings including removal of excess furniture/records/lying in corridors
10. Pledge taking not to litter on road but carry and put at waste collection point and not to spit indiscriminately
11. Educating School children about the importance of sanitation, through distribution of educating material.
12. Organizing Mohalla Sabha where address in this respect may be delivered by a well known person.

The indicators to achieve success in SBA

The SBA in the sanitary activities proposes to set up individual household Latrines, construction of household sanitary complexes, solid and liquid waste management projects, information, education and communication,
capacity building and monitoring and evaluation of the facilities being set up. The government plans to set up the online tracking and monitoring system for the waste management and sewage monitoring system. There is also proposal for the online real time maintenance system of the toilets which would be constructed. There is an appeal for the upload of pictures to MyGov Portal where the cleanliness have been done by the initiatives citizens of the country.

The SBA has close monitoring scheduled for component wise action. Timeline monitoring for the preparation of state sanitation strategy also exists. Alike USAID the various performance indicators and city ranking systems need to be established such that performance can occur on competitive monitored basis. The 20% of the total allocation for each State, shall kept with the Mission Directorate as Performance Grant. This will be released as per the criteria mentioned below for rewarding the performing States. The release of performance grant shall be based on a Performance Matrix and Third Party (IRMA) evaluation mechanism on the following outcomes:

1) Elimination of Open Defecation. 2) Conversion of Insanitary Latrines into Pour Flush Toilets. 3) Eradication of Manual Scavenging. 4) Prevention of Pollution of Water Sources. 5) Ensuring Cleanliness and Hygiene in Public Places. 6) Awareness Creation. 7) Capacity Building.

**Implementation status and performance attainable**

The Union Urban Development Ministry is putting together a management information systems (MIS) that will enable the Prime Minister’s Office to monitor various activities under the SBM. An user-friendly MIS would enable 24x7 monitoring of the mission’s progress. As per plan, all States and 4,041 urban habitations covered under the mission would regularly upload information on the progress of work regarding construction of household, public and community toilets along with solid waste management and awareness generation activities. To empower urban local bodies (ULBs), the Ministry will enable online submission of proposals and approvals of various projects under the mission. Electronic submission of utilisation certificates and release of funds for speedy implementation of works will also be started. The Ministry will finalise guidelines for the implementation of the Rs. 67,000-crore mission in urban areas under which over one crore household toilets, besides over five lakh public and community toilet seats will be constructed by 2019. Solid waste management facilities will also be put in place to benefit over 30 crore urban people.

The key components of the implementation of SBM-G will include: (i) start up activities including preparation of state plans, (ii) IEC activities, (iii) capacity building of functionaries, (iv) construction of household toilets, (v) construction of community sanitary complexes, (vi) a revolving fund at the district level to assist Self Help Groups and others in providing cheap finance to their members (vii) funds for rural sanitary marts, where materials for the construction of toilets, etc., may be purchased, and (viii) funds for solid and liquid waste management.

Under SBM-G, construction of toilets in government schools and aganwadis will be done by the Ministry of Human Resource Development and Ministry of Women and Child Development, respectively. Previously, the Ministry of Drinking Water and Sanitation was responsible for this.

**Swachh Bharat Pledge**

The campaign is set to benefit the 1.2 billion people to make Indian cities clean and make India cleaner by 2019. Citizens are inspired in case they see garbage at a place they are asked to take pictures of the garbage lying in the place, then to take picture of the place after garbage has been cleaned up and then to upload the picture to the MyGov Portal. The SBA is being taken up by the youngsters, NGOs and local authorities.

The SBA has a booklet released named “Swachh Bharat Swachh Vidyalaya” to focus on cleanliness and orderly clean drinking water spaces, toilets, classrooms in the country. In school children are given knowledge on awareness on keeping clean, maintaining hygiene and washing hands before eating food.
The Swachh Bharat Pledge was developed and was circulated to the citizen. Mahatma Gandhi is considered as the father on the nation in India. The pledge says, “Mahatma Gandhi dreamt of an India which was not only free but also clean and developed. Mahatma Gandhi secured freedom for Mother India. Now it is our duty to serve Mother India by keeping the country neat and clean. I take this pledge that I will remain committed towards cleanliness and devote time for this. I will devote 100 hours per year that is two hours per week to voluntary work for cleanliness. I will neither litter nor let others litter. I will initiate the quest for cleanliness with myself, my family, my locality, my village and my work place. I believe that the countries of the world that appear clean are so because their citizens don’t indulge in littering nor do they allow it to happen. With this firm belief, I will propagate the message of SBM in villages and towns. I will encourage 100 other persons to take this pledge which I am taking today. I will endeavour to make them devote their 100 hours for cleanliness. I am confident that every step I take towards cleanliness will help in making my country clean.”

Plan for Developing Entrepreneurs

According to the reports of the Economic Times, at present the monetary supports are made available by the donations including philanthropic donations and CSR funds to finance the sanitation activities. There is also a proposal from DoT to levy the fees on annual charges which will be sent as donation to the Swachh Bharat Abhiyaan.

The gap in financing in components for household toilets, community toilets, public toilets and solid waste management projects to the tune of Rs 42,512 crore would be met by the beneficiary contribution, private funding, funds with private companies under Corporate Social Responsibility(CSR) and the Swachh Bharat Kosh of the Ministry of Finance.[18]

Banks are requested to create 1 Lakh entrepreneurs within a year to make The SBA sustainable. The Swachheta entrepreneurs scope is Solid Waste Management and Waste Water Treatment. Bank ICICI has adopted Gujrat’s Sabarkantha district for “Digital Village” which has called hostel which in turn improves income and cleanliness in the village. Coming into action even 700 railways stations have been identified which are taken up by the officers dealing with transporters to take care of the cleanliness of the whole premises. The SBA seeks to bring in Public-Private-Partnership(PPP) for building toilets in public places.

Funding

The Abhiyaan has the plan to invest in cleanliness as well as built sanitation facilities. The proposed Investment is of Rs 2Lakh crore in 5 years span to clean India by October 2019. Urban Ministry allocates Rs 62,000 crore for cleaning cities, towns and the Ministry of Drinking Water and Sanitation will spend Rs 1,34,000 crores for the SBA. The government proposes to spend Rs 1.34 lakh crore to construct toilets(11.11 crore toilets in rural areas ) and about Rs 62,000 crores will spent in 4041 cities.2.47 lakh panchayat will be given 20 Lakh for next 5 years to keep village clean.

Funding for SBM-G will be through budgetary allocations of the central and state governments, the Swachh Bharat Kosh, and multilateral agencies. The Swachh Bharat Kosh has been established to collect funds from non-governmental sources. Table 3, below, details the fund sharing pattern for SBM-G between the central and state government, as provided for in the SBM-G guidelines.

One of the changes from NBA, in terms of funding, is that funds for IEC will be up to 8% of the total outlay under SBM-G, as opposed to up to 15% (calculated at the district level) under NBA. Secondly, the amount provided for the construction of household toilets has increased from Rs 10,000 to Rs 12,000. Thirdly, while earlier funding for household toilets was partly through NBA and partly though the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), the provision for MGNREGS funding has been done away with under SBM-G. This implies that the central government’s share will be met entirely through SBM-G.
Government has hence planned to enhance the total assistance for rural household toilet from Rs 10000 to Rs 12000. The funding pattern between the Central Government and the State Government/ULB is 75%:25%. The gap in financing in components for household toilets, community toilets, public toilets and solid waste management projects to the tune of Rs 42,512 crore could be met by the beneficiary contribution, private funding, funds with private companies under Corporate Social Responsibility(CSR) and the Swachh Bharat Kosh of the Ministry of Finance. Levy of user charges, finding innovative streams of resource generation including of leveraging of land by ULBs could be used for augmentation of resources/implementation of projects. The Viability Gap Funding in the projects on Public-Private Partnership mode shall be in conformity with the guidelines of the Department of Economic Affairs, Government of India[6].

Several state government has been taking advantage of the SBM. Andhra Pradesh, one of the premier states in effective SWM, is hoping for a massive assistance of Rs 2,000 crore from the Centre to transform 86 municipalities.
in the state. The proposal seeks assistance to take up the SBM (SBM) in 86 out of 110 municipalities in AP. The scheme is meant to end open defecation, take up solid waste management and create an environment for private participation and awareness among citizens regarding sanitation. The scheme is seen as the precursor to ‘Smart Andhra Pradesh’ project. (http://swachhbharatdrive.blogspot.in/2015/01/andhra-pradesh-plans-to-launch-swachh.html). Nationwide Monitoring of use of Toilets has been launched from January, 2015. A nationwide “realtime monitoring” system of toilets constructed under Swachh Bharat Abhiyan will be launched soon.

Public Awareness & IEC Activities:

12% of the overall allocation for the State under this Mission will be earmarked for States and ULBs for undertaking massive public awareness on sanitation. 3% of the overall programme allocation would be utilized by the Ministry for drawing a national media campaign and developing standard campaign tools for effective awareness and communication on sanitation.

Twenty point activities for cleanliness on People’s awareness drive is one of the very strong pillars of the implementation initiative in India for the success of the Swachh Bharat Abhiyaan. The key features of the awareness drive has bee presented in the table. X.

Table 4: People’s awareness drive - 20 points illustrative list of activities for cleanliness

| Sl. No. | Activities | Action Required | Agencies Involved | Remarks |
|---------|------------|-----------------|-------------------|---------|
| 1       | Dedication of Public Toilets at important Places for Public by Hon’ble Chief Minister/ Central Ministers/MP/Mayor. | State Govt./Local Body to identify and ensure readiness of toilets for inauguration. | Water and Sanitation Board / Department, PHED. | ULB to liaison with CM Secretariat for inauguration function. |
| 2       | Flagging off “Swachha Bharat” Marathon/walkathan by Hon’ble Chief Minister/ Central Ministers/ MP/ Mayor from important Place. | State Govt./ULB to identify the location and route and volunteers/ NGOs to organize Marathon. | State Govt. / Local Body. | ULB to liaison with CM Secretariat for the event. |
| 3       | Building Awareness in public at large about the cleanliness of houses/ premises. • Organizing ‘Prabhat Pherie’ in various society/mohallas to create awareness. • Household Sanitation: 7-8 am. • Locality Sanitation: 8-9 am. • Mohalla Sanitation and other sanitation related activities : 9-11 am. | • MP / MLA / Mayor / Councillors to lead the ‘Prabhat Pherie’. • Print & Electronic media. • Recorded voice appeal from dignitaries and public figure like CM, Mayors and Celebrities etc. through mobile phones. / SMS. • Broadcasting through radio. • Social Network. | • State/ULB. • NGO/CBO/RWA. • Ward level representatives. • Senior Citizens including retired Govt. Servants. • Individuals. | Guidelines on organising SWACHH BHARAT SAPTAH issued to all the States along with UDM letter. Letters issued to all Chief Secretaries. |
| 4       | Pledge taking not to litter on road and to deposit only at designated waste collection point and not to spit in public places: 12.00 A.M. | Administering public pledge on the birthday anniversary of Mahatma Gandhi, at the public gathering and during assemblies in schools/ colleges. | Assembly of public by MP/MLA/Mayor/ Councillors. • Concerned Dept. • School authorities. Open public invitation to all citizens to participate in the public pledge taking on 2nd Oct, 2014 shall be organised by concerned ULB / Departments. ULB to facilitate the action in coordination with NGO/CBO/ RWAs. |
| 5       | Display of message of cleanliness through sign boards at public places / markets. | • Issuing pamphlets. • Hoardings / posters/ stickers. | • ULB. • NGO/CBO/RWA. | • Guidelines on organising SWACHH BHARAT SAPTAH issued to all the States along with UDM letter. Letters issued to all Chief Secretaries. |
| Sl. No. | Activities | Action Required | Agencies Involved | Remarks |
|--------|------------|-----------------|-------------------|---------|
| 6      | Repair, maintenance, cleaning & sanitizing of Public / Community toilets. | • Motivating sanitary workers / Volunteers.  
• Repair and Maintain damaged toilets.  
• Providing water and sanitizing of toilets.  
• Monitoring of functioning of toilets. | ULB.  
Community.  
Garnering volunteering efforts.  
Sanitary Workers.  
Students, Volunteers. | ULB to develop a standard operating procedure and schedule for cleaning. |
| 7      | Create awareness on usage of Toilets to eliminate open defecation. | • Print & Electronic media.  
• Recorded voice appeal from dignitaries and public figure like CM, Mayors and film stars etc. through mobile phones.  
• Broadcasting through radio.  
• Issuing pamphlets.  
• Hoardings / posters/ stickers. | State/ULB.  
NGO/CBO/RWA.  
Ward level representatives.  
Senior Citizens including retired Govt. Servants.  
Individuals | ULB to identify the localities of open defecation prevalence under their jurisdiction for initiating awareness drive. |
| 8      | Cleaning of Public / common areas of the City and Locality. | • Cleaning of Bus stands / Roads / Streets / Parks / Markets / Public Places / Pavement Areas / backyards/ front yards / areas surrounding the Railway Stations.  
• Motivating sanitary workers /Volunteers.  
• Issuing notices to Government.  
• Issuing notices to Schools / Volunteers.  
• Motivating sanitary workers /Volunteers. | MP / MLA / Mayor / Councillors/ NGO / CBO / RWA / Senior Citizens including retired Govt. Servants.  
Students / Volunteers. | ULB shall ensure safety gloves and cleaning equipment’s for all involved. |
| 9      | Cleaning of Statues of National leaders. | Identify statues of National leaders in various localities. | Public representatives.  
NSS / NCC volunteers.  
Students volunteer organizations. | ULB shall ensure safety gloves and cleaning equipment’s. |
| 10     | River / Talab side waste cleaning. | • Cleaning of Riverside / Talab side surrounding.  
• Motivating sanitary workers /Volunteers. | MP / MLA / Mayor / Councillors / NGO / CBO / RWA / Senior Citizens including retired Govt. Servants.  
Students / Volunteers. | ULB shall ensure safety gloves and cleaning equipment’s for all involved. |
| 11     | Removal of Debris and garbage heaps in public places. | • Removal of debris and garbage heaps in public places, Roads and Streets.  
• Motivating sanitary workers /Volunteers. | MP / MLA / Mayor / Councillors / NGO / CBO / RWA / Senior Citizens including retired Govt. Servants.  
Students / Volunteers. | ULB shall ensure safety gloves and cleaning equipment’s for all involved. |
| 12     | Cleaning of Toilets in Government buildings / Hospitals / Schools. | • Issuing notices to Government, buildings/Hospitals/Schools by ULB for cleaning.  
• Monitoring by Sanitation / Health Department of ULB. | Students / Volunteers.  
Concerned Department.  
Hospital authorities.  
School authorities. | ULB to develop a standard operating procedure and schedule for cleaning. |
| 13     | Cleaning of Government Buildings including removal of excess furniture /records / lying in corridors. | Issuing notices to Government Departments. | Concerned Department. | Concerned departments to monitor the action taken. |
| 14     | Educating School children about the importance of sanitation, through distribution of educating material. | Issuing notices to schools to organize awareness programs through educational videos, lectures, skits/dramas. | Education Department / School Administration / ULB. | Schools may organise special events focusing on sanitation through educational videos, lectures, skits / dramas. Due publicity may be given for wider participation, that would serve as a tool of awareness generation. |
| 15     | Sanitation Marathon / Sanitation Walkathon. | ULB may organize Quarter / Half Marathon / Walkathon to raise awareness on sanitation. | ULB / NGO / other public service organizations and general public. | ULB / NGO / other public service organizations and general public. |
| 16     | School Children: Sanitation Painting Competition. | To catch them young on the aspects of sanitation, involving children as change agents, by making wider participation of all schools. | Education Department / School Administration / ULB. | NGO & volunteers may be involved to bring in more participants. |
| Sl. No. | Activities | Action Required | Agencies Involved | Remarks |
|--------|------------|-----------------|-------------------|---------|
| 17     | 100 Hours volunteer service to sanitation by each citizen in a year. | Motivation by leaders to the general public to exhort them to devote time for a public cause. | MP / MLA / Mayor / Councillors / NGO / CBO / RWA / Senior Citizens including retired Govt.Servants./Students/Volunteers. | Instilling civic sense towards sanitation as public duty in all citizens. |
| 18     | Creating/ Establishing SHG for maintenance of Public / Community Toilets. | SHGs to be formed / organised and necessary training may be given for upkeep of toilets. | ULB / CBO and RWAs. | Training on safe and hygienic cleaning practices to be ensured. |
| 19     | Engagement of Swachhata Doot in each Ward to work as ear & eye for ULBs. | Identification of Volunteers to work as Swachhata Doot in each Ward. | ULB. | ULBs shall take assistance from RWA/NGOs to identify volunteers. |
| 20     | Kites Flying Celebration with Message on Kite “Swachh Bharat Mera Sapna”. | ULBs/CBOs/NGOs/RWA s/Any local Organization to make available such kites to Children. | ULBs / CBOs / NGOs / RWAs/Any local Local / Organization. | ULB to identify a suitable date and duly publicise for celebration. |

The different technology options for sanitation are Twin-pit latrines, Leach Pits, Septic Tank System with soak pit, Bio-digester toilets (Anaerobic – developed by DRDO) and Aerobic BioTank. The technical features for OSS under SBM are: Twin Pit Latrine, Septic Tank, Bio-digester Toilet, Aerobic Bio Tank/ Bio Toilets (Patented by a private operator and approved by Department of Science and Technology). There are parameters for determining the existing urban sanitation situation and Component-wise action plan for SBM (SBM) – Urban.

**What are the loopholes?**

The loopholes identified is the lack on the emphasis on the post process of waste collected from the clean up. The accurate supply chain and awareness on handling the waste after cleaning needs to be defined. Some defined examples and awareness needs to be spread on what should be the steps taken for the waste collected from cleaning of the places. The other vital area is the sanitation issue where main emphasis is on the building of the sanitation facilities but the maintenance is needed in terms of the sewage, and technical experience. Simply constructing toilets without appropriate technical support on sewage handling guidelines can lead to the increase in hygiene problems. A better and well taken emphasis on setting up waste to energy initiatives should be up taken.

From all sewage and MSW in India (taking the conservative estimate from MNRE) a total of close to 1700 MW of power can be generated of which only about 24 MW have been exploited, according to MNRE. Thus, less than 1.5% of the total potential has been achieved. There is a scope of development of the sewage treatment facility and generate electricity from them as a support mechanism.

**Conclusion:**

The sanitation and SWM are the two basic pillars of SBM. The success of the mission will depend on the implementation of the laid down procedures, regular monitoring and based on the monitoring results the actions taken. The citizens of India is very hopeful because of its own vision. In the word of the present Prime Minister, “I have a vision of a Modern India. I have embarked on a huge mission to convert that vision into reality. My mantra is Development – …… ”.

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