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Research on Swachh 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 municipal social waste annually, creating huge environmental problems. Small number of initiatives of waste treatment, e.g., incineration, pyrolysis, bio-refining & biogas plants, composting, recycling and SLFs are available in the country. An inclusive improvement policy and paradigm shift is necessary for the sustainable Solid Waste Management (SWM). 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, 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.

Keywords: SBM, Sustainable SWM, Continual Improvement

1. INTRODUCTION

There is indeed a daunting need of effective waste management in India as 62 million tons of municipal solid waste (MSW) and 38 billion liters of sewage is generated annually only from urban India. The MSW increases @ 1- 1.33% annually and the maximum amount of municipal waste is left untreated. 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 the 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 announced 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.

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 .

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. 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 Swachh 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. ”.

2. RESEARCH METHODOLOGY

The nature of study of this project, is analytical study. In analytical study, one has to use facts or informations already available and analyze these to make critical evaluations of the material. Secondary data are those data which have already collected and stored. Secondary data may collected from

Research Design: Descriptive Research Design is used for the study ,and it is essentially ach. It aims to explain the characteristics of an individuals or group characteristics and to determines the frequency,with the same things occurs.

Data Collection: The data were collected through the annual report from sources that are secondary in nature such as internet, magazines, websites, books, and journals, social media.

Period of study: This study covers a period of 1 years, i.e., from 2019-20

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.

3. DATA 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.

Table 1: Percentage of households with toilets (national)

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

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 percent 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 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.

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/premises
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 anganwadis 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.

Funding:

The Abhiyaan has the plan to invest in cleanliness as well as built sanitation facilities. The proposed investment is of Rs 2 Lakh 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 be 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. The details of 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 through 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 10,000 to Rs 12,000. 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 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.

4. 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 are very hopeful because of its own vision. In the words 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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