

Swachh Bharat Mission

Public Lecture

2nd March, 2015 India International Centre, New Delhi



Introduction

Realizing Gandhi's dream of clean India has always been one of the most challenging concerns of the Indian government. Several programs had been launched in the past and reoriented. Even though these programs did show some impact on ground, the fact remains that we still grope with a huge magnitude of mismanaged waste coupled with unhygienic practices, both in urban and rural India.



Way back in 1986 CRSP (Central Rural Sanitation

Programme) was launched with the objective of improving the quality of life of rural people and also for providing privacy and dignity to women. The program was revamped in 1999 to include personal hygiene, home sanitation, safe water, garbage disposal and other issues, with a demand driven approach; and it was called Total Sanitation Campaign or TSC. Total Sanitation Campaign was again renamed as Nirmal Bharat Abhiyan (NBA) though the primary objectives remained same and the focus remained on rural areas. Swachch Bharat Mission is considered to be a step ahead of NBA, and comprises of two distinct components - rural component (which was earlier called Nirmal Bharat Abhiyan) and the urban component.

Swachh Bharat Mission was launched on 2nd October 2014 with Mahatma Gandhi's vision of Clean India. It endeavors to transform India into a totally sanitized country. Some of the significant objectives of the Mission comprise of: elimination of open defecation, scientific processing/disposal/reuse/recycle of Municipal Solid Waste, bring about a behavioural change in people regarding healthy sanitation practices, among others. The Mission will be implemented over a period of 5 years, and in urban areas will extend assistance to all 4041 statutory towns/cities as per 2011 census. Ministry of Urban Development will be the nodal agency for urban areas, while the Ministry of Drinking Water and Sanitation will be the nodal agency for rural areas.

Swachh Bharat Mission as it is officially called, was initiated with extreme euphoria; the Prime Minister himself at several occasions declared it to be one of the most important programs of the government, and all the interlinked government departments took pledges to support the mission in achieving its objectives. In this context, the purpose of the public lecture titled "Swachh Bharat Mission" organized by Toxics Link at India International Centre, New Delhi, was to examine and understanding the Mission's implementation issues and challenges and implications it will have on environment. The speakers were: Dr. Nirod B. Mazumdar, Waste Management Expert; Mr. Manoj Mishra, Executive Director of the PEACE Institute Charitable Trust, and Convenor and head of Yamuna Jiye Abhiyaan; and Mr. Rohit Kakkar, Deputy Advisor, Central Public Health and Environmental Engineering Organization, Ministry of Urban Development, Government of India. Mr Satish Sinha, Associate Director at Toxics Link, moderated the discussion.

Public Lecture Session

Mr. Satish Sinha while setting the agenda of the lecture reminded the audience that we as common people keep on attributing all sorts of reasons when we see waste in everyday life; on the roads, while traveling in trains and other places; but the fact remains how do we really clean up such waste, or what kind of impact do these waste create, and what happens to the ecosystem? Swachh Bharat Mission with political priority and significant budget allocations



coupled with wide publicity has created much hope among people at large. Amidst this high expectations about the Mission among common people, Toxics link's public lecture is an attempt to examine and dissect the Mission's goal, implementation challenges and complexities within it, and how we move forward in the next three four years. After introducing all the guest speakers, Mr Sinha invited Mr. Rohit Kakkar, who is currently the Deputy Advisor at the Ministry of Urban Development, Government of India, to inform the audience and share his opinion on Swachh Bharat Mission.

Rohit Kakkar: Deputy Advisor,

Central Public Health and Environmental Engineering Organization,

Ministry of Urban Development,

Government of India



Mr Rohit Kakkar began by reiterating the Prime Minister's commitment that within next five years the government will try to make the country neat and clean. He also reminded about the Minister of Urban Development Mr Venkaiah Naidu's speech that government is trying to make this Mission a "Jan Andolan" by creating awareness, developing swachh infrastructure and ensuring behavioral changes for hygienic practices. Mr Kakkar also clarified that there are two components of the Mission, urban and rural; the already existing Nirmal Bharat Abhiyan has been converted to the rural component, while the urban component is a new addition.

Following is a summary of what he spoke during the lecture:

- The urban part of mission has four sub categories: construction of individual toilets, construction of community toilets, solid waste management and behavioural change.
- As for construction of individual and community toilets, the current target is to construct 1.04 crore toilets for individual households, 2.52 lacs public toilets, and 2.56 lacs community toilet seats. The plan is also to improve conditions of the existing toilets.
- For the household toilets, the beneficiaries are individual urban households that are located at
 nalas, railway tracks, garbage dumps, and construction sites or people who do not have hygienic
 toilets. Centre Contribution is 4,000/- per Toilet while the State Contribution is at least 1,333/per Toilet.
- For the household/individual toilets, the center has developed an application form and circulated to the states and the concerned departments. Any individual can fill this form and after

- verifications and assessing the viability, advance will be given to him/her for making the toilet. If the individual does not have the space then the Urban Local Body will club him with other households so that they are provided a community toilet.
- Community toilets are for people living in low cost settlements where space is less, while public
 toilets are for the tourists, travelers in the towns. There is also a provision for upgrading the
 dilapidated toilets.
- Mr Kakkar also said that the Center has prepared a financial model detailing the Center's, state's
 and the bidder's contribution and the revenue generated through users. He also said that in large
 urban areas many companies are interested in contributing for public and community toilets
 without user's contribution.
- A major chunk of government's expenditure (50% of the total budget allocated) will go to Solid
 Waste Management in urban areas. The government intends to create conditions in which most of
 our cities will have Waste to Compost, Waste to Energy or bio-methanation or other systems to
 handle waste.
- In the end Mr Kakkar pointed out the Planning Commission's recommendation that for smaller towns with population less than 50,000 composting/biomethanation will be suitable; while the bigger towns can have integrated waste to energy processing.

Mr Satish Sinha taking over from Mr Kakkar introduced the next speaker Dr Mazumdar who is an expert on waste management with over 30 years of experience in waste management, sanitation, renewable energy and financing on infrastructural projects.

Dr. Nirod B. Mazumdar,

Waste Management Expert

Dr. Mazumdar began his lecture by citing examples of previous urban sanitation projects. According to him the government has been putting a lot of effort and money for such sanitation projects in the past such as the National Urban Sanitation Policy, JNUURM, etc, and yet they have not been very successful. These policies and programs had similar objectives



as Swacch Bharat Mission and so the government needs to introspect and assess the previous projects to make the current initiative more successful.

Following is a summary of what he spoke during the lecture:

- According to him the urban areas are undergoing rapid transformation in several aspects and one
 of the significant one is population/population density which is increasing and which has put huge
 burden on the infrastructure of cities. He highlighted some of concerns that need to be taken care
 of due to the rise in population and other related developments.
 - a. Onsight and Offsite human waste disposal Drainage (both underground and surface drainage)
 - b. Municipal Solid waste
 - c. Construction and Demolition waste
 - d. Green Buildings, green cities and green infrastructure

- f. Bio-medical waste
- g. E-waste
- h. Disposal of Carcasses
- i. Animal waste disposal
- j. Hazardous waste for automobile and garages, workshops and industries, because often small hazardous material they contaminate the municipal solid waste.
- According to him other important areas to be taken care of are: long term interactive planning with the stake holders, planning capability building through sustained training, selection of appropriate technology (only proven technology should be chosen), MIS based proper monitoring and operation through proper SOP (Standard Operating Procedure), digitization and e-governance, advocacy and awareness among all stakeholders through information, education and communication. Among all these the most important according to him is –capacity building specifically building planning capacity.
- He said that the Municipal Solid Waste is a state subject and has been mandated to the ULBs. The biggest boost to the ULBs (Urban Local Bodies) came in the form of 74 amendments Act. Unfortunately, even after so many years the ULBs have not been able to take advantage of that.
- The next significant aspect is whether waste management should be centralized or decentralized. It all depends on who is going to run it, and where the project needs to be implemented. In decentralized projects the advantage is that one does not have to carry the waste, the place is very near where waste is disposed. It all depends upon the city, the citizens and the administrator whether the centralized systems should be put on place or the decentralized system or a combination of both.
- Another important issue is segregation of municipal solid waste at source. If segregation at source
 happens, the task of managing waste becomes much easier. According to Dr. Mazumdar creating
 awareness among the common people for segregation is not enough; the ULBs also need to take
 the segregated waste to separate destinations for recycling. He further added that there is a period
 in which the segregation practices transforms from 50% segregation into complete segregation,
 and the project designers need to keep this in mind.
- Another important issue is the cost of managing waste. According to Dr Mazumdar, the ULBs need to have a very realistic assessment of the cost involved as many bidders promise to do it without any cost or even generate revenue, but most of the times they are not able to fulfill it.
 Cost assessment will help in examining the bids and look at their feasibility.



- Another significant issue according to Dr.
 Mazumdar is pre-sorting/pre-processing. According to him if mixed municipal solid waste is collected then ULBs should ensure the processing is done after presorting otherwise it will not work.
- Another important issue is how much of process rejects/residues are formed; in mixed municipal solid waste one gets around 30-35% of rejects. Referring to CDM he said that

- now whatever plants that are being set up (100 tonnes and above) should have a combination of composting and RDF or a combination of bio-methanation and RDF, to minimize the rejects.
- According to him another important thing is to look into the marketing scenario of compost. If compost is made from the pure segregated waste which requires a complete different chain, it is workable and marketable. But from a mixed municipal waste that has a yield of less than 15% it is difficult to market as it increases the cost for the end user. The planners of waste management should look into this issue.
- Besides the above, Dr. Mazumdar also pointed out that construction and demolition debris is not being properly utilized in our country.
- In the end Dr. Mazumdar highlighted some measures that need to be undertaken to prepare a roadmap for five years on waste management, they are: Implementation of 7^{4th} amendment Act, maintenance of a knowledge and data bank, (each state may have a knowledge bank and the ULBs may draw the resources from there), and the rules/regulations need to be in more detail. Besides, he also highlighted issues that need to be taken up for municipal reforms, some of them are:
 - a. E-governance
 - b. Institutional capacity building for planning & execution
 - c. Allow technology or system which has track record of five years of commercial operation anywhere in the world
 - d. Land use plan
 - e. Techno-economic issues should be planned
 - f. Full planning for segregation
 - g. Public participation
 - h. Centralized or decentralized system
 - i. Life cycle approach, policy for remediation of dumpsites, etc.

After Dr. Mazumdar, the next speaker was Mr. Manoj Mishra who is Executive Director of the PEACE Institute Charitable Trust, and Convenor and head of Yamuna Jiye Abhiyaan;

Mr. Manoj Mishra

Executive Director, PEACE Institute Charitable Trust Convenor and Head, Yamuna Jiye Abhiyaan

Mr. Mishra began by highlighting the larger purpose of Swachh Bharat Mission and said that it's really important to know the larger purpose of Swachh Bharat for the common people to associate with it; otherwise it will be simply another sanitation program with an attractive name launched



only for government publicity. According to him the goal of this program should be improving health of the common people and build a healthy city.

Following is a summary of what he spoke during the lecture:

- According to him in order to achieve a healthy city one needs clean air, water and healthy food. If
 the government cannot provide clean air, water and food then there is no meaning of Swachh
 Bharat.
- Swachh Bharat Mission is dislocated; it should be neither with the Ministry of Urban Development nor with The Ministry of Drinking Water and Sanitation, rather it should be with health ministry. A healthy city is where there are no hospitals and that should be the objective of the health ministry, and this can be achieved through sanitation and cleanliness programs.
- He pointed out that currently the Mission is focusing upon construction of toilets, and amount provided for the construction is too less to be properly used by the beneficiaries.
- Sharing his experiences on Yamuna he said that in 2010 municipal solid waste and construction and demolition waste were being dumped in the river. Praising the role of National Green Tribunal (NGT) he said that when they appealed to NGT about waste dumping, it immediately ordered cleaning of the dumped waste and about 20,000 truck-loads of waste were taken out from the river. However, 50% of the waste is still lying there which is a matter of concern. Relating this incident with the cleanliness of the city he further said that if we treat our rivers with such indifference, how can we do justice to cleaning of cities?
- Mr Mishra highlighted that a city produces three kinds of waste water; one is sewage, the other is waste water from industries, hospitals and institutions, and third is storm water. All these three kinds of water have a separate origin and they should have separate destination. Only the storm water should go to Yamuna, however currently we put all the kinds of waste water into the river. Sewage should flow only through municipal closed sewage pipes to the nearest sewage treatment plant and it is best for agriculture. Industrial/large institutions waste water should adopt a closed loop system. Referring to a related judgment by NGT in January 2015 named "Maili se Nirmal Yamuna" he further said that the waste managers have to adopt and work on this judgment to make Swachh Bharat Mission a success.

After the lecture by Mr Mishra, Q&A session ensued in which participants were requested to ask questions, while the speakers replied them back.

Questions/ Answers

Q: There are four main components of Swachh Bharat Mission as we were informed in the lecture, one of them being behavioral changes. Can the speakers provide detail description on this component? The second question is there is no component on "communication" in the Mission. How is the government planning to take the message of Swachh Bharat to the poorest of the poor?

A: We spoke only about 3 components, the 4th component comprises of capacity building and IEC. There are serious efforts being made by the prime minister himself through his website. Moreover, from our visits to other regions of India, we do feel that people are aware about Swachh Bharat. For public awareness we have transferred funds to urban local bodies; even to the small urban bodies with population of 5000 people.

Q: We feel that in spite of such sanitation programs in the past not much has happened on ground. How do you assure that Swachh Bharat will be able to bring change?

A: To make the Mission a success please post your specific grievances/apprehensions on the government portal assigned for this. We are implementing the Mission within a quick time frame and we would request you to write suggestions about your area and keep applying pressure for implementation.

Q: Our company has adopted "Jantar Mantar" to provide voluntary services for Swachh Bharat Mission. Every weekend some of our company's staffs are asked to clean up waste at "Jantar Mantar" as a part of the Mission. Whenever my turn comes I feel a compulsion on my behalf to spoil my Saturdays and clean the waste at public places. How can you bring attitudinal changes among staffs like us to clean waste someone else has generated?

A: It is a welcome move by your company but primarily it is municipality's duty to clean up waste at public places.

After the Q&A session, Mr. Satish Sinha thanked everyone for participating and sharing their views, and concluded the public lecture.
