





# **SWACHHATA SANDESH**

A monthly newsletter of the Ministry of Housing and Urban Affairs (MoHUA), Government of India



















The Swachh Bharat Mission (SBM) – a biggest ever cleanliness drive of the Government of India, underlining the importance of the Mission seeks to achieve the universal sanitation coverage. SBM-Urban demonstrate that a complex set of action can be delivered through the fundamental instruments of social change which includes behavioural change and public awareness about the health effects of poor sanitation and SWM. It is believed that the Mission can not be achieved without the people's participation (Jan Bhagidari). The participation of every segment of society is necessary to make the cleanliness Mission a big Success.

Realizing the importance of the people's participation, the Ministry of Housing and Urban Affairs (MoHUA), Government of India, initiated third round of Swachh Survekshan-2018 from 4th January 2018. The objective of the Survekshan is to encourage citizen participation and create awareness among all sections of society and foster a spirit of a healthy competition among towns and cities to improve their service delivery to the people. MoHUA also launched the 'Star Rating Protocol for Garbage Free Cities', conceptualized and developed under the Swachh Bharat Mission on January 20, 2018. The 7- star rating system is based on multiple cleanliness indicators for solid waste management, including source segregation, door-to-door waste collection, compliance by bulk waste generators scientific land filling etc. all subsumed under a single metric.

In Hyderabad, the Reskarmate Mission introduced Wi-Fi Dustbins to spread awareness about

segregation and promote its use. The Reskarmate is a public service initiative which seeks to rid cities from landfills, child labour involved in the collection and dumping process and unscientific treatment of waste. The user enters the code in the captive portal. If the codes match, the user gets access to the internet for the next 45 minutes. Moreover, the major hotels in Madurai in association with the Madurai City Corporation have recently launched a green initiative to recycle their waste and use the manure to cultivate vegetable which will be used in the hotels. The project consists of a high tech accelerated composting machine, with wet waste collected by the composting yard by using own vehicles on daily basis.

This newsletter brings news of such stories from different cities in India and showcases the progress of SBM, highlighting the champions and ambassadors of change. It also serves as a vehicle for promoting ground level practices and knowledge for those interested in making India clean and litter free.

The newsletter is available on the Mission website (http://swachhbharaturban.gov.in) and can be downloaded for further dissemination. The newsletter is an outcome of collective efforts made by states and cities. We thank them for their contribution and welcome suggestions for forthcomings issues.

**Editorial Team, Swachh Bharat Mission** 

#### **BEST PRACTICES**

# ULBS, INSTITUTIONS AND INDIVIDUALS DOING INSPIRING WORK

# I. FREE WI-FI HELPING TO SEGREGATE WASTE IN HYDERABAD

Nhanakya Basa and Mani ✓ Kanth, both born and raised in Hyderabad, were keen on their city not becoming like Delhi, with its massive landfills choking the environment in its outskirts, which they witnessed while they were students at the Jindal Global Law School in Sonepat. With this in mind, after completing their studies and returning to Hyderabad, which faced waste issues similar to Delhi, they together founded Rekarmate in October 2016. Rekarmate is a public service initiative which seeks to rid cities from landfills, child labour involved in the collection and dumping process and unscientific treatment of waste. As per the Solid Waste Management Rules 2016, all waste generators, whether households or establishments/institutions, segregate their waste into three categories - dry (plastic, paper, wood, metal), biodegradable and domestic hazardous (sanitary napkins, cleaning agents, diapers) before handing over their garbage

to collectors.

In an effort to spread awareness about segregation and promote its use, the Reskarmate Mission introduced Wi-Fi Dustbins. There are three stages here, as explained by Chanakya:

**Step 1:** To use the bin, you turn on the Wi-Fi on your phone and connect to 'Rekarmate-1'. Once a connection is established, a web browser pops out.

**Step 2:** Now, you identify the waste and drop it in the designated bin. For dry waste, you use the blue bin, and for wet waste, you use the green bin.

**Step 3:** Once you drop the waste in the bin, a four-digit code is displayed on the LED screen. You enter the four-digit code on the web browser on your phone and sign in/sign up to get uninterrupted access to the internet for the next 45 minutes.

There are two sensors inside each bin. When someone dumps waste inside the bin, the sensors track that movement and generate a code on the screen. The user enters this code in the captive portal. If the codes match, the user gets access to the internet for the next 45 minutes.

The name Rekarmate stems from the principle of doing good work and being rewarded for it, i.e. segregating waste and getting access to free Wi-Fi.

Since the project is in its pilot stage, there are logistical issues that the founders have to resolve. For the time being, the entire process depends on a certain degree of trust since the sensors cannot detect whether the user is dumping dry/wet waste in the correct dustbin. The testing phase is currently in operation out of one set of dustbins in the Golnaka area of Amberpet, a suburb adjacent to the famous Osmania University. The initiative has been recognised and endorsed by the Greater Hyderabad Municipal Corporation.

Source - The Better India website



# II. HOTELS IN MADURAI WILL COMPOST WET WASTE AND GROW ORGANIC VEGETABLES FOR SELF-USE

ajor hotels in Madurai, in association with the Madurai City Corporation, have recently launched a green initiative to recycle their waste and use the manure to cultivate vegetables, which will be used in the hotels. 30 of the hotels in the city are ready to implement these ideas, with a 2.5acre compost and recycling yard set up on the outskirts of the city on the Madurai-Melur highway. The project cost Rs. 55 lakh, and has been set up on land belonging to the Corporation. It consists of a high tech accelerated composting machine, with wet waste collected by the composting yard by using own vehicles on daily basis. The hotels pay Rs. 6,000 per day for this waste management service, and receive organic vegetables in return.

Source - The Better India website

# THE MONTH THAT WAS...

February 2018



#### **REVIEW OF SBM (URBAN) IN ASSAM**

review meeting for **SBM** (Urban) was held between State Mission Director for Assam Shri Ajay Tewari, Principal Secretary, Urban Development, Government of Assam, and National Mission Director at Guwahati on February 22, 2018. It was discussed that the state has revised its target to achieve Open Defecation Free (ODF) status from March 2018 to June 30, 2018. Additionally, households are since many covered under Pradhan Mantri Awas Yojana (PMAY), and the state may construct Community Toilets for those beneficiaries.

the target for household toilets would be decreased and that for community and public toilets would be increased. The State may also consider getting new beneficiaries replacing those beneficiaries who are covered under PMAY without revising the target. Other points under discussion were the status of releases under the solid waste management, capacity building and Information, Education and Communication (IEC) components. The state further committed that it

• Achieve 100% Door to Door

- Collection of waste by June 30, 2018
- Achieve 90% of source segregation of waste in all the ULBs by June 30, 2018
- All the bulk waste generators in the State will be identified and will be notified for processing
- User fee collection in all the ULBs will be notified and state will start collecting user fee by June 30, 2018
- State will ensure processing of 100% of wet waste into compost through decentralized composting.

# SPECIAL OUTREACH PROGRAMS FOR SBM AND SWACHH SURVEKSHAN BY DEPARTMENT OF FIELD PUBLICITY AND SONG AND DRAMA DIVISION

The Department of Field Publicity, in coordination with the Song and Drama Division, has been running an integrated campaign on 'Swachh Bharat Abhiyaan-Swachh Survekshan 2018' with the objective of intensifying the focus on cleanliness and sanitation, generate awareness and create ownership among people on the Swachh Bharat Mission and Swachh Survekshan 2018 in particular.

The Special Outreach Programs (SOPs) have been rolled out from the 19th of February and are scheduled to run till March 20, 2018.

Till now, a total of 83 SOPs have been conducted (this includes prepublicity events in the respective locations) and 92 more SOPs (including pre-publicity activities and events) are scheduled to take place. In addition to this, more SOPs may be conducted.

Prior to the conducting of the SOPs, the regional DFP offices have also conducted an internal



workshop in order to build the capacities of their officials and staff members for successful implementation of the programs at the ground level. The programs have been specifically planned keeping the local context and challenges in mind and a wide range of activities such as folk music, film shows, rallies, etc have been organized involving students, Resident Welfare

Association (RWA) representatives, community members and other stakeholders. SOPs have also seen representation and participation from the Urban Local Bodies.

The events have been covered through local media with updates on the same being disseminated by regional DFP offices and SBM Urban through social media platforms.







#### KEY NOTE ADDRESS BY NATIONAL MISSION DIRECTOR AT INDIAN INSTITUTE OF TECHNOLOGY (IIT) GUWAHATI RECYCLE WORKSHOP

IT Guwahati introduced Recycle in 2012 as an initiative of Waste Management Research Group (WMRG). In 2016, it rose to the level of an international conference. After the immense success of the 1st international conference, Recycle 2018 was organised as platform to draw the attention of national and international researchers, scientists and academicians to discuss and learn about latest innovative ideas and technology for waste management. The specific focus of Recycle 2018 is on separation at source, biological treatment of organic waste, bio- waste utilization, sludge and leachate management, reduce, reuse and recycling (3-Rs). National Mission Director and Joint Secretary, Shri



V K Jindal delivered the keynote address at the workshop with focus on how the above topics are addressed under Swachh Bharat Mission (Urban).

# OBSERVER VISITS DURING SWACHH SURVEKSHAN 2018 ASSESSMENTS

oHUA is deputing Ministry officials and SBM PMU members to visit selected cities as assessment observers. These visits take place each week, and will go on till 10th March (the closure of the survey). Observers evaluate that assessments are being carried out impartially and as per the prescribed guidelines in Swachh Survekshan protocol, while obtaining insights on the city's view of the survey. The observers' visits will also carry the message of Swachh Bharat in the context of progress

by the city, as well as an understanding implementation challenges being faced. Observers may also allow the visits to serve as field observations, particularly the in case of innovations and best practices. Additional Mission Director Shri Naveen Kumar Agarwal visited

Puducherry as Observer on 22nd and 23rd February 2018.



# UPDATE ON PUBLIC TOILET LOCATING FACILITY ON GOOGLE MAPS



The facility allows the user to locate, rate and review public toilets on Google Maps application. User can search "Swachh Public Toilet" toilets on their smart phone and locate the nearest toilet. This has already been implemented in 100+ Cities.

MoHUA has been asking for additional data from Cities on CT PT like Toilet ID, Supervisor name, contact details etc. which needs to be filled by ULB (template attached). We are also creating a dashboard for all cities in consultation with Google so that they can monitor the current status of their toilets which can be handed over to cities once their exercise is complete and data is uploaded and verified.

Cities may issue WO to QCI to upload their CT/PT on Google Maps

and they will support in mapping all the toilets in Community, Public places, Malls, Petrol Pump, Railway Station, Bus Stand, Hospitals etc on Google Maps.

In case of any queries: (E) - sbm.toiletmapping@qcin.org and (M): +91 8858435205 / +91 9041745741 / +91 7895219120.

#### **UPDATE ON SWACHHATA APP**

The Swachhata App was developed to allow citizens to register complaints with respect to cleanliness and sanitation in their cities and have these resolved by the local authorities. The registered complaint (with the picture of the issue taken by the user as well as its location) appears on the engineer version of the app, is assigned to the appropriate staff and once resolved, an alert is sent to the citizen's phone alongwith a picture of the spot after resolution.

As on 7th March, 75.29 lakh citizens were registered on the app, 1.23 crore complaints had been registered, and 1.17 crore complaints of these had been resolved. The app has a resolution rate of 99%.

During the on-going Swachh Survekshan 2018, the app is also serving as one of the platforms for citizens to provide feedback on their city's cleanliness, which will contribute to their city's score in the survey.



## Global Swachh Perspectives:

### LAST MINUTE MARKET -REDUCING FOOD WASTE

#### Contributed by Chintan Environmental Research and Action Group

produce food in surplus of

It is known that there is a global food crisis. Roughly one third of the food produced in the world for human consumption every year approximately 1.3 billion tonnes gets lost or wasted. This amount could feed 3 billion people - nearly half the world's population. In developing countries, almost half of the food produced is lost post-harvest and at processing stages, whereas in industrialized

countries, this is lost at retail

economies of Europe that

and consumer levels. Thriving

requirements waste a huge quantity of food. According to a Guardian report released this week, roughly 50 percent of all produce in the United States is thrown away—some 60 million tons (or \$160 billion) worth of produce annually, an amount constituting "one third of all foodstuffs." The latter phenomenon of wastage at retail and consumer levels happens in this age of supermarket indiscrimination where a lot of fruits and vegetables are discarded because they do not "look good" enough for the consumer.

Biodegradable (usually food) waste, makes up 48 to 50 per cent of a household's total waste. A city's waste may also be categorized along similar

proportions. Therefore, when wastage is not managed as well as when waste is not segregated properly, this wasted food becomes one of the major causes of pollution in landfills (where it is discarded due to non-segregation and processing). When food decomposes in landfills and dumpsites, it produces toxic

which leads to global warming and climate change. Toxic leachates from landfills filled with food waste also pollute the groundwater and the soil. The odour attracts flies and landfills are also home to vectors of diseases like rats etc. This colossal waste of food by both developed and developing countries has led to major loss in resources like water, land, labour, capital and energy, in the bargain also leading to spike in global warming and climate change due to enhanced greenhouse gas productions.

It is here that projects like Last Minute Market (LMM) become important and vital to the economy. This project links food surplus (supply) with food deficit (demand) by connecting retailers, processing industries etc. with non-profits and communities which have a requirement for food. This saves costs of transportation and disposal of waste to landfills for the producer and retailer and also helps communities with their food requirements. This project has huge environmental, economic and social benefits since it benefits various stakeholders and the environment. This project which originated in Bologna, Italy is a spin-off from the University of Bologna and it evolved from



a research project initiated by Professor Andrea Segrè - now Dean of the Faculty of Agriculture. The idea behind the project resulted from analyses of the problem of food availability and its distribution. It has been running since 1998.

It is currently active in over 40 Italian towns and has even been adopted by Argentina and Brazil. LMM offers its services to enterprises and institutions to prevent and reduce waste production at its origin. It also develops innovative services for the recovery and reuse of unsold goods. Under the Italian antiwaste law introduced in 2008, it also allows for the recovery of nonfood items.

LMM has 6 different and interrelated areas of activities:

- Food unsold food which is still edible
- Harvest vegetables not harvested which would be rejected by retailers due to cosmetic reasons or weather damage
- Seeds seeds that do not conform with market standards
- Catering products not served by public and private catering
- Books unsold books that

would otherwise be destroyed

 Pharmacy - unsold pharmaceuticals which can be used to meet the health needs of socially disadvantaged people

Outcomes of the Project In 2008, from supermarkets alone, nearly 170 tonnes of good edible food was recovered, with a value of €646,000. According to the report by Professor Segrè "if LMM Food were to be adopted nationwide in Italy by supermarkets, small shops and cash-and-carry shops, €928,157,600 would be the monetary value of recuperated products. Furthermore, these products could provide 3 meals a day to 636,000 people - in total 580,402,025 meals a year." It is also important to underline that - by not sending these products to the landfill - 291,393 tonnes of carbon dioxide emissions could be spared.

What India can learn from LMM In India a lot of retailers and outlets that sell vegetables and fruits waste a massive amount of food although a significant proportion of the food is still in a consumable condition. The food waste in

edible condition can be given to those in need, while the inedible food waste can be composted and sold to agriculturists. The following solutions are proposed to sustainably deal with the food waste:

- Food retailers can install two containers outside the shop to separate the food in consumable condition from the inedible food.
- The container with the edible food can be kept in the front of the shop with widely publicized hours during which people can be allowed to take the food for free. This can also be distributed through food banks.
- The container with the inedible waste can be composted and sold further to agriculturists or sold at the outlets itself for further revenue generation.

The principles of reduce, reuse and recycle (the 3Rs) have been in practice in India for centuries, however, with increasing disposable incomes and consumerism, habits have changed and more waste is being generated. Methods must be found to not only manage the waste, but reduce it to the extent possible. LMM is one such method, which if implemented by customising to the Indian context, will greatly benefit various stakeholders.

#### Reference

- https://www.lastminutemarket.it/
- Department of Agricultural Economics and Engineering of the Faculty of Agriculture (Bologna)
- http://www.unibo.it/en/research/ projects-and-initiatives/spin-off/ last-minute-market-s-r-l-1



#### **Directives/Communication** from the Ministry regarding SBM (Urban)

The communications given below are accessible at the SBM (Urban) portal.

#### **Initiating Garbage Free Protocol**

Hon'ble Minister of State (IC) Shri Hardeep Singh Puri formally launched the "Star Rating Protocol for Garbage Free Cities", conceptualized and developed under the Swachh Bharat Mission, on January 20, 2018. The star rating will rate cities on a 7-star rating system based on multiple cleanliness indicators for solid waste management, including source segregation, door-to-door collection, compliance by bulk waste generators, daily sweeping, scientific processing of waste, scientific land filling, and dumpsite remediation, etc. all subsumed under a single metric. While cities may self-declare themselves as 1-star, 2-star or 4-star, MoHUA will carry out an additional verification through an independent third party to certify cities as 3-star, 5-star or 7-star. Cities would need to get recertified each year in order to retain their star-status. All state Mission Directors have been requested to direct all their ULBs to begin rating themselves and declaring themselves as garbage-free along various star ratings.

A 2-page flyer and a protocol booklet, detailing out conditions that need to be fulfilled for achieving each star rating and the procedures to be followed for certification have been prepared and are available on the SBM website for reference. Further, to enable cities to initiate the star rating exercise, MoHUA is planning to conduct a series of workshops to sensitize ULBs and build their capacities to achieve garbage-free status.

#### Stories of Women in Swachhata for International Women's Day (March 8, 2018)

International Women's Day is celebrated globally on March 8 every year, in recognition of the social, economic, cultural and political achievements of women. The Swachh Bharat Mission (Urban) recognizes the critical role of women in influencing their families, communities and society for positive change or transformation. In view of this, the Ministry is collecting inspiring stories of people who have contributed to the empowerment and progress of women through SBM (Urban), including women who have done exemplary work in sanitation and/or solid waste management, and men who have conceptualized and implemented innovative initiatives for improving the situation for women. All states and cities have been requested to share details of any such persons, as per defined criteria (available in Annexes). Selected examples shall be featured in the SBM newsletter 'Swachhata Sandesh', be disseminated through Press Information Bureau and social media platforms of SBM (Urban) as well as published in booklet format. Stories may be mailed to sbmurban.moud@gmail.com

#### Action Plans for Solid Waste Management by all States

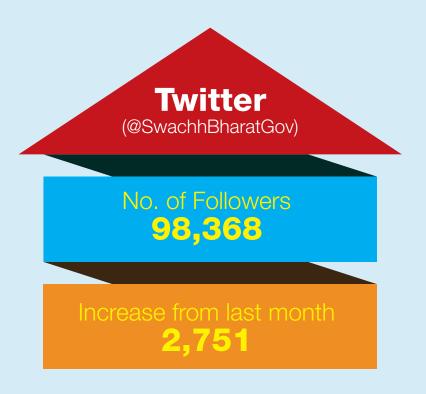
With the Swachh Bharat Mission - Urban in its fourth year of implementation and on track to achieve ODF targets, with urban areas of 12 states/UTs already ODF, the focus now needs to be on concentrated efforts on improving solid waste management, which is still a challenge in many cities. States are being requested to focus on on-ground interventions such as encouraging source segregation, on-site processing of wet waste by bulk waste generators, decentralized composting, etc. such initiatives involve minimal infrastructural investments and thereby very little financial outlay by ULBs, while taking care of 80 percent of a city's municipal solid waste (MSW). It is suggested that levying user fees as well as revenue received from sale of compost, gas/fuel and recyclables would help ULBs to generate sufficient revenue required for the above measures. Further, for collection and transportation of segregated waste, cities may consider cost-effective options such as formalizing rag pickers into the SWM chain, involving SHG groups in this activity or outsourcing to private entities.

States have been requested to share detailed month-wise action plans for the state as well as each of their cities with more than 1 lakh population, for achieving the end objective of attaining 100 per cent scientific management of MSW by October 2, 2019. The required components of the plan include:

- Behaviour change of citizens to ensure 100 per cent segregation of wet and dry waste (including domestic hazardous waste separately packaged, marked and disposed) of every ward of each city
- Ensuring segregated waste is collected, transported and treated / processed and disposed of in segregated manner, without mixing at any stage
- C&D waste is collected, transported and processed separately
- Mandating all bulk waste generators to process their bio-degradable waste on site (encouraging both composting and bio-methanation)
- Setting up material recovery facilities for additional segregation, recycling and sale, and processing of MSW
- Decentralised composting options to handle mandi waste, horticulture waste etc. following a ward-level / city-level cluster approach, if required, based on volume of waste and population
- Notification and enforcement of user charges and spot fines
- Enforcing plastic ban in accordance with Plastic Waste Management Rules 2016
- Status of existing Waste to Compost and Waste to Energy plants / bio-methanation / RDF and proposal for making the non-functional plants operational including enhancing capacity utilization
- Status of new WtC and WtE/bio-methanation/RDF plants to be setup (which will be operational within next one year)
- Preparatory plans for rolling out Garbage-Free Star Rating of cities

### **SOCIAL BHARAT**

#### **Swachh Bharat Mission on Twitter**





#### **Swachh Bharat Mission on Facebook**





## **OTHER SWACHH UPDATES**

#### **ODF TRACKER**



#### **SWACHHATA APP**



#### ODF Status as on 28th February 2018

ODF Status as on 28th February 2018				
States/UTs	Total ULBs	Declared ODF (requests received by QCI)	Certified ODF	% Certified ODF
Andaman and Nicobar	1	1	0	0
Andhra Pradesh	110	110	110	100
Arunachal Pradesh	25	9	2	8
Assam	98	13	4	4
Bihar	141	1	1	1
Chandigarh	1	1	1	100
Chhattisgarh	168	168	168	100
Dadra & Nagar Haveli	1	1	1	100
Daman & Diu	2	2	2	100
Goa	14	0	0	0
Gujarat	171	171	171	100
Haryana	81	82	82	101
Himachal Pradesh	61	12	7	11
Jammu and Kashmir	82	4	4	5
Jharkhand	42	41	39	93
Karnataka	277	87	77	28
Kerala	94	66	24	26
Madhya Pradesh	383	382	382	100
Maharashtra	392	392	313	80
Manipur	27	19	16	59
Meghalaya	11	1	1	9
Mizoram	23	23	19	83
Nagaland	19	0	0	0
Delhi	5	5	2	40
Odisha	113	0	0	0
Puducherry	6	1	1	17
Punjab	170	42	10	6
Rajasthan	193	105	82	42
Sikkim	7	7	6	86
Tamil Nadu	666	389	190	29
Telangana	74	71	57	77
Tripura	16	0	0	0
Uttar Pradesh	667	31	21	3
Uttarakhand	103	100	45	44
West Bengal	143	3	3	2







