



Enabling Systems for Improved Municipal Solid Waste Management in Cities: Making Way for a Clean and Healthy India

BACKGROUND

Urban areas in India are increasing both in numbers and in habitants. While urban population increased from 11.4% (1901 census) to 30% (2011 census); it is projected to increase further to nearly fifty per cent of India in the coming decades. Over the last century the total number of statutory or recognised urban areas has doubled, the current figure being 4041 (2011) and is continuously on the rise. These increasing numbers pose challenges not only for urban development but also for the provision of basic services.

Keeping in mind the improvement needed in the sanitation situation in India (including municipal solid waste management), the Ministry of Urban Development (MoUD), Government of India, launched the National Urban Sanitation Policy (NUSP), with the vision that “All

Indian cities and towns become totally sanitized, healthy and liveable and ensure and sustain good public health and environmental outcomes for all their citizens with a special focus on hygienic and affordable sanitation facilities for the urban poor and women’.

The launch of Swachh Bharat Mission (Urban) in October 2014, by MoUD also prioritised the sanitation sector and brought the focus of the nation on provision of toilets and proper management of Municipal Solid Waste (MSW) in all 4,041 statutory towns and cities in the country. The ministry also launched the Smart Cities Mission and Atal Mission for Rejuvenation and Urban Transformation (AMRUT) Mission targeted at improved urban development.

CONTEXT

The management of Municipal Solid Waste (MSW) in urban areas has emerged as a severe problem not only because of environmental and aesthetic concerns but also because of the large quantities generated every day. The Central Pollution Control Board (CPCB) has estimated total generation of municipal solid waste in India as 143,449 metric tonnes per day (2014-15) from a total urban population of 377 million (census 2011) living in 4,041 cities and towns in the country. Over the span of last 16 years following the publication of the first Municipal Solid Waste (Management and Handling) Rules in 2000, the management of waste within the cities with respect to collection and transportation has progressed reasonably. Many cities have managed to achieve varying success in segregation at source, door to door collection, monitoring the transportation of waste to the processing and disposal sites using online monitoring tracking systems, etc.

It is estimated that 82% of waste is collected in urban areas and of this only 23% is treated and 59% is disposed, causing severe pressures on limited land resources and environmental issues. Even though, the legal system in India promotes reduce, reuse, recycling over waste to energy and landfilling, the reality is different and the situation on the ground warrants urgent steps for bridging the deficiencies in system.

Several initiatives have been taken at the national and state level for facilitating improvements on the ground but the reality is different and results are only partially achieved. A few reasons for this inability to achieve sustainable solid waste management can be attributed to the lack of technical expertise and weak financial and institutional capacities of urban local bodies including shortage of trained manpower.

To facilitate the Urban Local Bodies (ULBs) in managing the municipal solid waste management situation and establish sustainable systems, the Ministry of Environment Forests and Climate Change (MoEF&CC) revised the MSW (M& H) Rules 2000 and launched the new rules as Solid Waste Management Rules, 2016. The revised rules are envisaged to help overcome the gaps of the past 16 years and result in minimum waste going to the landfill.

Based on the initiatives of the Government of India, the Government of Germany through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has been working in the urban environment sector with a focus on MSW, since 2009 under various GIZ programmes. The project fosters technical cooperation under the Indo-German Environment Partnership (IGEP) programme, has been continued under the



SNUSP-II project with the aim of furthering the GIZ engagement in municipal solid waste management. Some of the learnings and approaches from the projects will be applied at state, city and national level for large up-scaling.

Objective of SNUSP II

The objective of the project is that 'Indian states and their cities take effective measures to avoid pollution caused by wastewater and municipal solid waste', the GIZ 'Support to National Urban Sanitation Policy (SNUSP) – II project provides technical support for improvements in sanitation with a focus on wastewater and municipal solid waste management at the national level and in selected Indian states and cities.

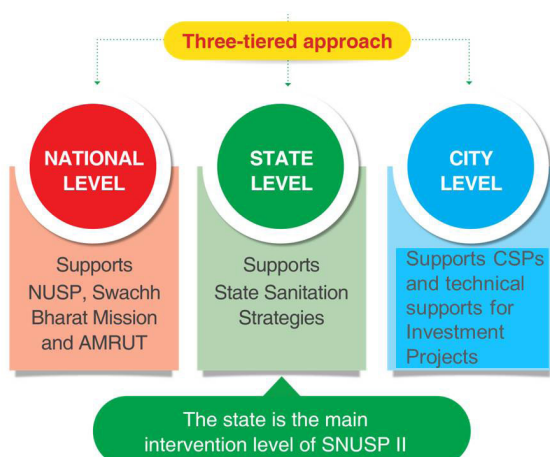
APPROACH

Under the SNUSP-II, the project now includes the subject of municipal solid waste at national level and also in the selected states in addition to wastewater initiatives.

The project follows the three-tier approach making local solutions replicable, enables them to have a broad impact and promotes the vertical exchange of knowledge.

However for the subject of municipal solid waste management, the engagement is stronger at the national level, as the project has been integrated in SNUSP-II at a late stage. The lead for execution at the state and city level is mostly taken by the states with selected interventions at the city level.

This process is supported by GIZ through the establishment of cells at national and state levels in order to coordinate and upscale on-going activities. For implementation, further assistance is provided through teams of international and national municipal solid waste management experts. Technical supports including training and capacity building for all relevant stakeholders are important aspects of the project implementation.



ACTIVITIES

Support for Solid Waste Management has been envisaged at all the three tiers of the SNUSP II project. Following activities and interventions have either been undertaken or are foreseen at the national, state and city-level:

National Level:

- Supported MoUD and Central Public Health and Environmental Engineering Organisation (CPHEEO) in the revision of the national level technical guidelines for Municipal Solid Waste Management namely the MSWM Manual under the aegis of an Expert Committee
- Dissemination of the MSWM manual through trainings, training of trainers and e-modules based on the manual & SWM Rules, 2016.
- Support in creating mechanisms like guidelines/ advisories for proper implementation of the SWM Rules, 2016
- Preparation of model templates for tender documents
- Documentation of good practices in waste management.
- Support to national training institutes in conceptualising and implementing necessary capacity development measures for state and city level officers and elected representatives.

State Level:

- Support to the state government in preparing State Policy and/ Strategy for MSW Management in Maharashtra, Uttarakhand and Kerala.
- Preparation of model templates for Detailed Project Report (DPR) preparation, baseline data collection, etc. including technical trainings on the subject for staff at state and city level.
- Trainings and Training of Trainers based on the manual developed for the stakeholders (ULBs, elected representatives, regional training institutes, state officers)

City Level:

- DPR preparation and implementation support to selected cities for municipal solid waste.
- Preparation and implementation of MSW plans in selected towns

EXPECTED ACHIEVEMENTS

- The dissemination of the national MSW Manual and the revised SWM Rules, 2016, related advisories, guidelines and trainings should all help bridge the knowledge gap and guide states and cities into planning for and implementing integrated municipal solid waste management in their jurisdiction.
- State municipal solid waste management policies and strategies should provide the much needed direction to states for taking adequate measures to promote integrated municipal solid waste management within the states.
- Quality criteria for Detailed Project Report preparation, model tender documents and related technical support to states and selected cities should improve the quality of projects prepared and implemented.
- Technical support to selected cities in DPR implementation will also help improve management of municipal solid waste on the ground.



Shri Venkaiah Naidu launching the Municipal Solid Waste Management Manual along with Mr. Rajiv Gauba, Secretary MoUD; Mr. Wolfgang Hanning, Country Director GIZ and Mr. Dirk Walther, Project Director, GIZ

Dirk Walther
Project Director
Support to National Urban Sanitation Policy (SNUSP) – II
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
B5/2, 2nd floor, New Delhi 110029, INDIA
E: dirk.walther@giz.de
T: +91 11 4949 5353
F: +91 11 2460 3831
W: www.giz.de/india
www.urbansanitation.org

Author
Vaishali Nandan
vaishali.nandan@giz.de
Shweta Dua
shweta.dua@giz.de
Editor
Soma Biswas
soma.biswas@giz.de
Registered Office: Bonn and Eschborn, Germany
E: info@giz.de
I: www.giz.de

Project Name:	Support to National Urban Sanitation Policy (SNUSP II)
Commissioned by:	Federal Ministry for Economic Cooperation and Development, Germany (BMZ), Government of Germany
Implementing agency:	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Partner Organisation:	Ministry of Urban Development (MoUD)
States:	Andhra Pradesh, Maharashtra, Uttarakhand, Kerala and Telangana
Country:	India
Overall Term:	April 2014 – December 2017