Forum of Cities that Segregate
8th February 2019
Muzaffarpur, Bihar

CITY ULB NAME:

GANGTOK MUNICIPAL CORPORATION,
SIKKIM, INDIA
What is unique about the waste management model in your city?

a. Segregation at source, Dry and Wet waste.

b. Involvement of outsource agencies, NGO’s, SHG’s, unemployed youths, for management of household wastes.

c. Women empowerment and employment by creating handicrafts & bags from solid wastes.
Existing Status of Waste Management

- Population: 1,70,000 (approximately)
- Number of wards: 17
- Generation: 55 Tons per day/ 90 Tons per day during tourist season
- Composition:
  - Biodegradable: 53%
  - Non-biodegradable waste: 32%
  - Inert: 15%
Existing Status of source segregation and collection of waste

- Segregation percentage for entire town: **60%**
  areas where segregation is happening, if any, also attach photo documentation: **12 Wards.**

- Door to Door Collection efficiency:
  Due to topographically hilly region we have narrow roads which covers 60 to 70 %.
  1. Door to Door collection is done wherever accessible
  2. Municipality vehicles are provided in specific designated areas to collect.
  3. Potters are appointed to collect segregated waste from each household that are inaccessible through roads.
  4. 12 Wards in which segregation is being carried out are Ranipool, Tadong, Daragaon, Deorali, Lower Sichey I & II, Upper Sichey I, Arithang, Tathangchen Syari, Upper Burtuk, Tibet Road, & Chandmari.
  5. Segregation of Dry (Blue Bin) & Wet (Green Bin) waste made mandatory and further segregation of Dry waste can be encouraged.
Existing Status of processing/ disposal

- **Processing/ Treatment**
  - **Biodegradable waste:**
    - **a. Lall Market** (Composting Machine for organic vegetables, capacity of 5 Tons/day) – produces manures
    - **b. Landfill site at Martam** (50 Tons/day) – composting machine for composting wet waste
Existing Status of processing/ disposal

- Non-biodegradable waste:
  a. sent to recycling agents & kabadiwalas

- Construction and demolition waste:
  a. Goes to land fill site for levelling the land layer wise
Existing Legislations on Waste Management

- Bye-laws for Solid Waste Management as per SWM 2016 - No
  
- Status of compliance and monitoring -
  
  - Municipal Commissioner
    - Dy. Commissioner
      - Assistant Commissioner
        - Inspector
          - Assistant Sub Inspector
            - Supervisors
              - Safai Karmacharis/beautifiers
Existing Legislations on Waste Management

• Any penalty provision for littering?
- *Spitting* – Rs. 200/-
- *Littering* – Rs. 5000/-

• Any state policy to ban plastic?
- *Sikkim non-biodegradable garbage (control) amendment act 2001*

• Any other relevant details?
- Government Notifications/ Circulars attached below
Notification on prohibiting use of polythene bags for selling vegetables/other goods

Sub: Prohibition of use of polythene bags for selling vegetables/other goods

Sir/Madam,

Drawing your attention to Notification NoGOS/UD&HD/97-98/6(85) dated 4th June 1998 whereby polythene bags have been banned, I would like to bring to the fore the practise of goods being sold packaged in polythene bags in the local markets, particularly vegetables/other consumable items by vendors, which is not in conformity to the said notification. In this regard, I would like to request for your immediate intervention in putting an end to this practise since the essence of the Sikkim Municipal Solid Waste Plan, 2015 as well as Solid Waste Management Rules 2016, is waste reduction at source. Further, at the time of issuance/renewal of Trade Licenses, this matter must be well incorporated for strict adherence by the vendors. It may also be reiterated that such polythene bags may not be procured from outside Sikkim and brought into our plastic-free state. An Action Taken Report in this regard may be submitted to this office at the earliest.

In order to ensure smooth and speedy implementation of the above, it is requested that all ULBs may work in close coordination with Bazaar Officers, UD&HD as well as field functionaries of SBM – Gramin namely ADC – Dev / BDOs since the primary aim is to curb the menace of poly bags usage.

Yours sincerely,

[Signature]

Copy to:
1. Secretary, RM&DD
2. All Bazaar Officers
3. Office Copy

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Notification on prohibiting Styrofoams

WHEREAS the Government has been initiating various measures to manage the waste and maintain a clean environment, it has been found that a lot of disposable styrofoam items are being rampanty used not only in the bazaar areas but also in the rural areas. The result is that a huge quantity of municipal waste is created in the form of used Styrofoam and other disposable products. These products are environmentally hazardous and occupy a huge space in our landfill. It is also not healthy to eat especially hot items in the styrofoam containers.

Therefore, the government is pleased to ban the sale and use of disposable items, such as, cups, plates, spoons, containers etc made from Styrofoam throughout the state with immediate effect.

By order and in the name of the Governor of Sikkim.

Alok K. Shrivastava, IAS
Chief Secretary
Government of Sikkim
File No. GOS/RMDD/2015-16/157/SAN

[Signature]
Best practices on source segregation, processing and disposal sites

Awareness Campaigns
Notification on prohibiting burning of agricultural waste, leaves, litter, paper wastes and garbage

Notification on prohibiting use of packaged drinking water bottles during any government meetings & functions
Best practices on source segregation, processing and disposal sites

Awareness Campaigns
Plastic waste management

What steps have the GMC ensured to manage plastic waste –

Ban on non-biodegradable waste 1997 act and further amended on 2001

• **Dry waste collection centre** – Land Fill site, Martam

• **Incentives to waste collector** – Medical Insurance, accessories like Gloves, Gumboots, Raincoats, and other tools.

• **Tie up with private party** – All 17 wards collection & segregation of waste is given to outsource agencies, NGO’s & Youth Clubs etc to 12 Wards only. 5 wards are yet to start.

• **Awareness** – Quiz, debates, workshops carried out in Schools, Colleges, Public Places, Taxi Stands, Parking centres etc for spreading awareness.
Major gaps and challenges of source segregation

Enlist major gaps concerning:

1. Management and processing: *(SWM)* bye-laws still to be framed.
2. Status of dumpsites -
3. Compliance and Enforcement -
4. Absence of penal provision -
5. Absence of policy -
Gangtok is the capital of Sikkim. The population goes beyond 7000/sq.km and witnessing rapid urbanization. These factors pose challenges in municipal solid waste management. Gangtok has the steepest rise in altitude over the shortest distance. Most of the area is ecological sensitive. Extreme weather like sub zero temperature, snow falls, territorial rains and high humidity are additional challenges in handling municipal solid waste in GMC. Topographically hilly terrain makes it difficult for commutation and aggregation of waste. Such a high concentration of socio economic activities land availability for any public utility becomes a challenge in GMC. Tourism being one of the major sources of income for the capital, municipal solid waste management becomes very important.
THANK YOU