

Gorakhpur City : 2031 Solid Waste Management



Solid

THE WASTE OF A CITY



calls Saptahik Abhiyans (weekly campaigns). That in the course of the week the accumulated muck finds its way back into the open drains, clogging them further, is another matter.

Solid Waste Generation in Gorakhpur City (per day); 2009

Category	Generation amount (in tonnes)	Percentage
Residential	168.13	57.86
Construction & Other	41.4	14.24
Commercial	40	13.76
Industrial	40	13.76
Hotel	0.53	0.18
Clinical Waste	0.50	0.17
Total	290.56*	100

Source: GMC Commissioner's office
 *About 10 tonnes are unaccounted for.

At the current levels of growth rates, Gorakhpur's population will be 1154044. Assuming the present day per capita generation of solid wastes will continue, the waste generated per hour in 2031 will be 23100 kgs. That the annual per-capita solid waste generation is estimated to increase taking the nation as a whole by 1-1.33 percent has not been considered. The aim is not to calculate at this point in time the exact magnitude of the waste generated but to focus on a more efficient waste management system.

OMINOUS PORTENDS

Come December 2031 and vehicles will not be able to ply on Gorakhpur's roads. Its citizens will have a tough time negotiating huge mounds of garbage in going about their daily business. This is inevitable in a city that potentially will generate every hour 231 quintals of paper, rubber, synthetics, glass, metals, polythene bags, vegetable peels, animal remnants, construction materials, medical wastes and drain silt. This load of solid waste will be ruinous to all humans, animals and the entire eco-system. Urgent action is needed to prevent it. This grim scenario is going to be aggravated due to climate change impacts, including greater flooding and water logging resulting in a higher incidence of vector borne diseases. The city's poor, about a third of the city's population of 622701 (2001 Census), will be the most severely affected.

THE ALARMING PRESENT

Gorakhpur generates about 300 tonnes of solid wastes daily. 240 tonnes are supposed to be collected daily by the Gorakhpur Municipal Corporation while one-fifth remains piled up on the roadside. These 420 tonnes generated a week are supposed to be removed through what the GMC

SPREADING THE DIRT NOT SO EVENLY

What is of greater concern is the total lack of a policy and a vision of solid waste management (SWM). There are no permanent dumping grounds, no operational incinerator for medical wastes (though an incinerator has been sanctioned recently for the state run Baba Raghav Das Medical College) and no efforts to sort and re-cycle the waste leave alone generating revenues from composting and other means. Waste collected through street sweeping and drain cleaning is often carried to the waste storage depots (open dumps) using traditional hand carts. The open dumps are not designated by the GMC and are only temporary sites. The sanitary workers do not use protective gear like gloves, masks or boots.

The waste collected from one area is generally dumped in another, especially the low lying water logging prone areas. The poorly maintained older landfill sites are silently contaminating the groundwater due to leachate production, but there is not much awareness about this. A lot of the waste is left piled up by the roadside to fall back into the

drains. Ninety percent of the city's drains are not covered. Most of these drains are along the roads. Doorstep collection is done in only in 10 out of the 206 colonies of the city, but the collection is not very regular. Such municipal solid waste management and open dumping of garbage facilitates the breeding of disease vectors like flies, mosquitoes, cockroaches, rats and other pests, seriously jeopardizing the health of the citizens.

UNCIVIC HABITS AND PRACTICES

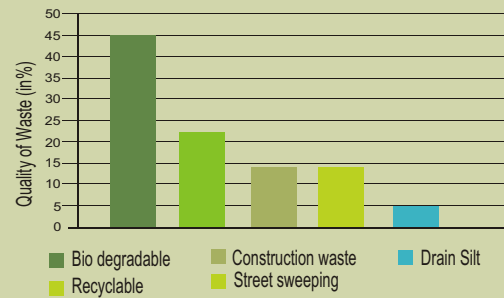
Civic sense is not the forte of most of Gorakhpur's citizens. There are municipal solid waste collection points (Kura Garh) in 40 locations. But the people living in the area do not bother to throw their garbage into the dumper but strew it all around. Sometimes they just dump their garbage in any open area around their homes, instead of bothering to use the nearby dumper.

The major markets and commercial establishments too contribute their share to this chaos of solid waste mismanagement. According to the GMC, the city's 15 main commercial markets contribute about 30 tonnes per day of solid waste. Then there are the mixed zones comprising commercial (shops and markets) residential areas. Some 530 of them are used as small and medium vegetable, fruit and fish markets in the residential area. The Mahewa market is one of the biggest markets for vegetable, fruits and fish. The total waste generated by these markets is estimated to be about 10 tonnes per day. In the markets too the system of primary collection proves ineffective as wastes are dumped by the generators on the streets/ roads.

There are some 230 hospitals and nursing homes in Gorakhpur. Many of these dump their wastes as solid wastes and not as bio-medical wastes.

Water bodies in an around the city are under increasing threat due to the lack of a regular dumping ground. Garbage is dumped near the Chilua Tal, Maheva, Domingarh and many other low lying areas. Refuse is thrown on the roadside in many of these places, sometimes set aflame or dumped into the fields. The Chilua Tal, a fresh water lake that ultimately drains into the Rohin river, is dying a slow death because of this. The Rohin too is getting affected. Solid wastes are also dumped into the Ramgarh Tal and the Rapti river.

Solid Waste in Gorakhpur



Solid Waste Management in Gorakhpur

- ▶ 300 tonnes of solid waste generated daily is dumped on the roads /wayside or open dumps.
- ▶ Piles of solid wastes are thrown into water bodies.
- ▶ Segregation at source is not practiced
- ▶ Solid waste is transported in open vehicles
- ▶ Slaughter house wastes are mixed with other solid wastes
- ▶ Improper management of biomedical wastes in all health care facilities



A RAY OF HOPE

Recently, a Rs 156.30 million plan for solid waste management of the city has been sanctioned by the government under the Urban Integrated Development Scheme for Small and Medium Towns scheme. The GMC has initiated land acquisition near Maheswara for a SWM facility. The government of UP has decided to take the project in a public private partnership mode for door to door collection, secondary collection, segregation, transportation and scientific disposal. A Hyderabad based private company has been contracted for this.. There are provisions for revenue generation in this project. The private company will charge Rs 598 per tonne from the GMC which in turn will charge the generators appropriately.



This will not be sufficient. The GMC will have to mobilize resources and develop appropriate mechanisms to do so. In the long run, it might be necessary to develop a system of fees and tax incentives to promote market mechanisms to effect reduction at source. An example is the inclusion of the costs of disposal into production costs, thereby lowering the tendency to overuse packaging materials and promoting the use of re-cyclable /re-usable packaging. This would also promote amongst consumers the habit of re-using materials.

At the same time, the GMC will need to implement effectively the MSW Rules 2000 and other mandatory rules and regulations. Penalties need to be imposed rigorously. The GMC might need to prosecute repeated offenders, especially the rich and the powerful. Effective institutional reforms, coordination with other departments and agencies, recruiting suitable staff and adequately training the present ones will be essential for an efficient waste management system.

CITIZENS' ACTION NEEDED

The GMC alone will not be able to solve the SWM problem. Gorakhpur's citizens will have to consciously act to save their city. This would entail:

- **Generating less waste by re-using and recycling as much as possible**
- **Segregating the waste at source**
- **Using the facilities for dumping garbage installed by the GMC**
- **Stopping the use of plastic bags**

NGOs and other civil society organizations can play a very important role by educating the citizens into voluntary compliance. They can highlight people's requirements for urban services. A major service would be rendered by organizing the ragpickers into waste-management associations/groups to work under the supervision of appropriate GMC committees and the relevant residents' or market associations.



Asian Cities Climate Change Resilience Network (ACCCRN)



Gorakhpur Environmental Action Group

224, Purdilpur, M.G. College Road,
Post Box # 60, Gorakhpur-273001 (U.P.)
Phone # 91 551 2230004, Fax # 91 551 2230005
E-mail : geag2@sancharnet.in, geag_india@yahoo.com
Website : www.geagindia.org