

Alarming growth of Plastic Waste generation in Assam

In the year 2004 a preliminary study was conducted by a group of members of ENVIRON in various zones of Assam. It was estimated that daily generated plastic waste of Assam was around 50,000kg/day; 15, 00,000kg/month and 1, 80,00000kg/year. Whereas, in Guwahati alone was 5000kg/day; 1, 50,000kg/month or 18,00000kg/year.

After ten years ENVIRON has again conducted a study in the year 2014. As per the study alarming generated growth of plastic waste is found. ENVIRON study reveals that plastic waste generated in Assam is around 1, 48,000 kg/day; 44, 40,000kg/month and 540, 20,000kg/year. Whereas, Guwahati City alone generating plastic waste 22,000kg/day; 6, 60,000kg/month and 80, 30,000kg/month.

A list of different types of generated plastic waste is given below:

S. N.	Type of Plastic Waste	Assam	Guwahati	Assam	Guwahati
		Generation/day (Kg) 2004	Generation/day (Kg) 2004	Generation/day (Kg) 2014	Generation/day (Kg) 2014
1.	Polythene carry bags	15000	1350	43000	7400
2.	Plastic glass (tea, coffee, water, ice-cream, curd etc.)	3000	250	10000	1500
3.	Plastic bottle (water bottle, saline bottle, cold drinks & straw pipe, cosmetics, shampoo, detergent, various automobile lubricants, edible oil, fruit juice, medicine bottle etc.)	7000	800	23000	4000
4.	Disposable syringe and other hospital plastic waste including catheter, operation thread, canola & pipes etc.	5000	1300	11000	3600
5.	Various plastic packaging (vegetable oil, salt, milk, tea, coffee, biscuits & snakes, chips, spices, magi, noodles, chocolate, pan-masala, medicine blister strip, shampoo, detergent, lubricants, toothpaste & tooth brush, medicine, cosmetics, pen, comb etc.)	11000	500	29000	3000
6.	Polythene sheet or cover used as rapper of various consumer goods, automobile goods, electronic goods, sanitary	9000	800	32000	2500

	goods, clothes, various packaged food, damaged plastic toys, condoms, plastic sheet used as for RCC construction and other damaged plastic sheet & plastic thread, damaged plastic pipes, damaged plastic bucket & other including thermo-set plastic like phenolics used in ovens, handles of cutlery, automotive parts and circuit boards etc.				
Total		50000	5000	148000	22000

As per the study of ENVIRON, along with the thermo-set plastics all the multilayered and laminated thermoplastics are non-recyclable whereas all the single component of thermoplastics like PET (Polyethylene Terephthalate), HDPE (High-Density Polyethylene), PVC (Polyvinyl Chloride), LDPE (Low-Density Polyethylene), PP (Polypropylene), PS (Polystyrene) etc. are recyclable.

ENVIRON study reveals that at the present scenario out of the total generated plastic waste, 60% plastics are recyclable whereas 40% are non-recyclable plastics.
