

## **Alarming growth of 'Plastic Waste' in Assam**

In 2004, ENVIRON (a group of environmental management for sustainable development) conducted a study on plastic waste types and its generation in Assam. As per the study, the generation of different types of plastic waste of Assam was around 50,000kg/day. Whereas, in Guwahati City alone was 5000kg/day.

After ten years the same study was again conducted by ENVIRON in the year 2014. Accordingly as per the compiled study report, plastic waste generation in Assam was around 1, 48,000 kg/day and in Guwahati City was 22,000kg/day.

ENVIRON is still continuing its research on plastic waste types and its generation. As per the study report of 2018 the growth of plastic wastes are enhanced by around six times in comparison to the year of 2004. Now the state is generating 2, 99,000 kg/day of different types of plastic waste and alone Guwahati City is generating 37000 kg/day.

Year wise comparative list of different types of plastic waste is given below:

		<i>Assam</i>	<i>Guwahati</i>	<i>Assam</i>	<i>Guwahati</i>	<i>Assam</i>	<i>Guwahati</i>
<i>S.</i>	<i>Type of Plastic Waste</i>	<i>Generation/day</i>	<i>Generation/day</i>	<i>Generation/day</i>	<i>Generation/day</i>	<i>Generation/day</i>	<i>Generation/day</i>
<i>N.</i>		<i>(Kg)</i>	<i>(Kg)</i>	<i>(Kg)</i>	<i>(Kg)</i>	<i>(Kg)</i>	<i>(Kg)</i>
		<i>2004</i>	<i>2004</i>	<i>2014</i>	<i>2014</i>	<i>2018</i>	<i>2018</i>
1.	Polythene carry bags	15000	1350	43000	7400	68000	8500
2.	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,	11000	500	29000	3000	80800	9500

	comb etc.)						
3.	Polythene sheet or cover used as rapper of various consumer goods, automobile goods, electronic goods, sanitary goods, clothes, various packaged food, gift rappers, damaged plastic toys, plastic sheet used as for RCC construction and other damaged plastic sheet & plastic thread, damaged plastic pipes, damaged plastic bucket &	8000	700	27000	1900	58000	3300
4.	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	49500	7000
5.	Plastic glass (tea, coffee, water, ice-cream, curd etc.)	3000	250	10000	1500	19700	1700
4.	Disposable syringe and other hospital plastic waste including catheter, operation thread, canola & pipes etc.	5000	1300	11000	3600	14000	4000
7.	Others mostly thermo-set plastic like phenolics used in ovens, handles of cutlery, automotive parts and circuit boards etc.	1000	100	5000	600	9000	3000
	<b>Total</b>	<b>50000</b>	<b>5000</b>	<b>148000</b>	<b>22000</b>	<b>299000</b>	<b>37000</b>

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

Study also revealed that among the total generated plastic waste, **60% plastics are recyclable whereas 40% are non-recyclable as per the present scenario. Non-recyclable plastics are major responsible for the PLASTIC POLLUTION.**



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