GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA UNSTARRED QUESTION NO. 4088 TO BE ANSWERED ON 04.01.2019

Generation of Waste

4088. SHRI KALIKESH N. SINGH DEO:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) the details of the total quantum ofwaste generated per year since the last five years in the country, State/UT-wise;
- (b) the details of waste collected andtreated out of total quantity of wastegenerated in a year;
- (c) whether the Government has introduced any state-of-the-arttechnological innovation in order to productively treat waste collected in the country;
- (d) if so, the details of such innovationthereof; and
- (e) whether the Government conducts any awareness events in order to educate the citizens on hazards associated with different types of wastes and effective management of the same and if so, the details thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (DR. MAHESH SHARMA)

- (a)&(b) According to Ministry of Housing and Urban Affairs (MoHUA), 52.9 Million Tonne per Annum (MTPA) of solid waste is generated in the country,out of which 46% is processed. The State/UT-wise details are annexed. As per estimates by Central Pollution Control Board (CPCB)0.18MTPA of Bio-medical waste (BMW) is generated in the country, out of which 97% is treated. Further, 7.17 MTPA of hazardous waste is generated, out of which 91% is recycled or treated and 25,940 tons of plastic waste is generated.
- (c)&(d) The Government had comprehensively revised and notified the waste management rules in 2016 onhazardouswaste, E-waste, solid waste, plastic waste, construction & demolition waste and bio-medical waste. The rules emphasize on recycle and recovery and provide for technological options for management of such wastes. The recycler/ operator/generator may opt for any recycling/ resource recovery or technological options, after due evaluation by concerned authorities *viz*. State Pollution Control Boards/Committees, Central Pollution Control Board, Local Bodies.

The CPCB in its guidelines for collection, segregation & disposal of plastic waste has prescribed for technology solutions including utilization of plastic waste in road construction, coprocessing in Cement Kilns, conversion of plastic waste into liquid RDF (Oil) and disposal of plastic waste through Plasma Pyrolysis Technology.

Similarly, the BMW Management Rules, 2016 prescribes incineration, plasma pyrolysis, autoclave/microwave/hydro clave, combination of sterilization & shredding, dry heat sterilization as treatment technologies for category-specific disposal of bio-medical waste.

The Ministry of Electronics and Information Technology (MeitY) is undertaking research and development projects for e-waste recycling/recovery and has set up following demonstration/pilot projects:

- Demonstration plant at Bangalore on "Environmentally Sound Methods for Recovery of Metals from Printed Circuit Boards (PCBs) Phase II" operated by Centre for Materials for Electronics Technology (C-MET), Hyderabad and E-Parisara, Bengaluru.
- Pilot plant at National Metallurgical Laboratory (NML), Jamshedpur involving physical separation and chemical leaching methods for recycling/recovery of electronic waste;
- Demonstration plant at Central Institute of Plastics Engineering & Technology (CIPET), Bhubaneswaron converting plastics from e-waste to virgin master batch for use in value added products. The process is capable of converting about 76% of waste plastic into master batch.
- (e) The Government of India hosted the World Environment Day (WED) on June 05, 2018. The theme of WED 2018 was 'Beat Plastic Pollution'. Various awareness activities including beach and river clean-ups, exhibitions and school programmes were organized during the event. Further, under the scheme of "Creation of Management Structure for Hazardous Substances", the Ministry provides financial assistance under for organizing awareness programs and capacity building activities for all waste management rules. Till date,20 Capacity-building programmes and regional consultations have been conducted on waste management rules.

ANNEXURE REFERRED TO IN PART (a) AND (b) OF LOK SABHA UNSTARRED QUESTION NO. 4088 DUE FOR REPLY ON 04.01.2019 REGARDING GENERATION OF WASTE RAISED BY SHRI KALIKESH N. SINGH DEO

State/UT-wise details on Solid Waste generation and processing (till November, 2018)

S. No.	Name of State/ Union	Total Waste Generation	Total Waste Processing
	Territory	(in Million Tons per Annum)	(in percentage, %)
1.	Andhra Pradesh	2,330,160	29%
2.	Andaman & Nicobar Islands	36,500	52%
3.	Arunachal Pradesh	66,065	20%
4.	Assam	413,910	35%
5.	Bihar	828,915	43%
6.	Chandigarh UT	172,280	85%
7.	Chhattisgarh	601,885	84%
8.	Daman & Diu	11,680	65%
9.	Dadra & Nagar Haveli	12,775	0%
10.	NCT of Delhi	3,832,500	55%
11.	Goa	94,900	65%
12.	Gujarat	3,702,925	57%
13.	Haryana	1,647,610	17%
14.	Himachal Pradesh	124,830	40%
15	Jammu & Kashmir	501,510	8%
16.	Jharkhand	849,335	42%
17.	Karnataka	3,650,000	32%
18.	Kerala	227,760	60%
19.	Madhya Pradesh	2,344,760	65%
20.	Maharashtra	8,238,050	44%
21.	Manipur	64,240	50%
22.	Meghalaya	97,820	58%
23.	Mizoram	73,365	4%
24.	Nagaland	124,830	52%
25	Odisha	992,800	12%
26.	Puduchery UT	127,750	10%
27.	Punjab	1,496,500	33%
28.	Rajasthan	2,372,500	55%
29.	Sikkim	32,485	66%
30.	Tamil Nadu	5,601,655	55%
31.	Telangana	2,690,415	73%
32.	Tripura	153,300	45%
33.	Uttar Pradesh	6,132,000	57%
34.	Uttarakhand	513,190	38%
35.	West Bengal	2,810,500	5%
	Total/ Average	52,971,720	46.03%
