GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UN-STARRED QUESTION N0. 70
TO BE ANSWERED ON 21.06.2019

Industrialisation and Air Pollution

70. SHRI JANARDAN SINGH SIGRIWAL:

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

(a)   whether the Government is aware of the fact that increasing pollution and rapid industrialization is making India's air more toxic and if so, the details thereof;
(b)   whether it is a fact that there are around one lakh deaths every year due to breathing ailments;
(c)   if so, the details thereof along with the death cases due to air pollution reported in various cities of the country including Delhi;
(d)   the details of Carbon dioxide concentration level in India's metro cities; and
(e)   the further measures taken/being taken by the Government to tackle such situation?

ANSWER

MINISTER FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI PRAKASH JAVADEKAR)

(a) Data of 43 million plus cities has been analysed for various pollutants during 2015-2017. Analysis of data revealed that SO_2 levels were within the National Ambient Air Quality Standard (NAAQS). With respect to NO_2, 14 cities showed an increasing trend, 14 cities showed a decreasing concentration, 14 cities showed a fluctuating trend and 1 city revealed steady concentration. With respect to PM_{10}, 14 cities showed an increasing trend, 8 cities showed a decreasing concentration, 21 cities showed a fluctuating trend. With respect to $PM_{2.5}$, trends are available for 15 cities and out of 15 cities, 05 cities showed an increasing trend, 04 cities showed a decreasing concentration, 06 cities showed a fluctuating trend. The data set is placed at **Annexure**.

(b) & (c) Air pollution is one of the triggering factors for respiratory ailments and associated diseases. However, there are no conclusive data available in the country to establish direct correlation of death/disease exclusively due to air pollution.

(d) Carbon dioxide, a greenhouse gas, is not monitored city-wise. As per India's Second Biennial Update Report (BUR) to United Nations Framework Convention on Climate Change (UNFCCC), the net national Green House Gases emissions were around 2.306 billion tonnes of CO_2 equivalent in 2014.

(e) The Government has taken several steps to address air pollution,which *inter alia*, includes the following:

- notification of National Ambient Air Quality Standards
- revision of emission standards for industrial sectors from time to time
- setting up of monitoring network for assessment of ambient air quality
- introduction of cleaner / alternate fuels like gaseous fuel (CNG, LPG etc.)
- ethanol blending
- launching of National Air Quality index
- leapfrogging from BS-IV to BS-VI fuel standards
- notification of Construction and Demolition Waste Management Rules
- banning of burning of biomass
- streamlining the issuance of Pollution Under Control Certificate
- issuance of directions under Section 18(1)(b) of Air (Prevention and Control of Pollution) Act, 1981 and under Section 5 of Environment (Protection) Act, 1986 for controlling air pollution
- installation of on-line continuous (24x7) monitoring devices by major industries
- notification of Graded Response Action Plan (GRAP) for Delhi and NCR
- Comprehensive Action Plan (CAP) for air pollution control in Delhi and NCR
- formulation of National Clean Air Programme (NCAP)
- organization of clean air campaigns, etc.

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Annexurereferred to in reply to Lok Sabha Unstarred Question No. 70 due forreply on 21.06.2019 regarding 'Industrialization and Air Pollution' By Shri Janardan Singh Sigriwal, Hon'ble Member of LoK Sabha

Annexure

Air quality status of million plus cities for 2015, 2016 and 2017
(Annual average in µg/m³)

Sl. No.	State	Cities	2015				2016				2017			
			SO_2	NO_2	PM_{10}	$PM_{2.5}$	SO_2	NO_2	PM_{10}	$PM_{2.5}$	SO_2	NO_2	PM_{10}	$PM_{2.5}$
1.	Uttar Pradesh	Agra	4	22	186	-	5	22	198	-	4	19	185	124
2.	Gujarat	Ahmedabad	13	21	89	29	14	27	108	34	14	29	120	38
3.	Uttar Pradesh	Allahabad	4	26	250	-	4	37	196	-	4	40	140	
4.	Punjab	Amritsar	11	30	148	-	12	29	194	-	11	27	168	-
5.	Maharashtra	Aurangabad	13	40	83	-	14	39	92	-	10	33	83	-
6.	Karnataka	Bangalore	6	20	119	54	3	31	103	51	2	31	92	46
7.	Madhya Pradesh	Bhopal	3	23	158	105	3	15	89	27	4	15	93	41
8.	Tamilnadu	Chennai	13	20	59	22	10	18	65	25	9	17	62	32
9.	Tamilnadu	Coimbatore	4	25	47	30	6	24	59	35	5	26	49	34
10.	Delhi	Delhi	5	65	220	95	7	66	278	118	7	68	241	106
11.	Jharkhand	Dhanbad	12	37	168	-	15	37	226	-	15	37	238	-
12.	Maharashtra	Dombivali/Amber nath	20	53	104	-	26	76	128	-	27	70	176	-
13.	Haryana	Faridabad	15	74	105	56	-	-	-	-	-	-	-	-
14.	Uttar Pradesh	Ghaziabad	23	37	260	-	15	28	235	-	22	34	280	-
15.	Madhya Pradesh	Gwalior	10	14	125	77	10	14	96	52	10	17	110	47
16.	West Bengal	Howrah	15	43	123	73	10	59	119	67	11	63	110	64
17.	Telangana	Hydrabad	4	23	93	-	4	27	100	49	6	28	108	54
18.	Madhya Pradesh	Indore	11	20	97	-	11	20	95	54	11	21	80	43
19.	Madhya Pradesh	Jabalpur	9	28	90	40	10	23	71	32	10	21	74	23
20.	Rajasthan	Jaipur	7	36	171	-	8	33	199	-	8	30	177	-
21.	Rajasthan	Jodhpur	6	24	152	-	6	23	168	-	6	21	180	-

Sl. No.	State	Cities	2015				2016				2017			
			SO$_2$	NO$_2$	PM$_{10}$	PM$_{2.5}$	SO$_2$	NO$_2$	PM$_{10}$	PM$_{2.5}$	SO$_2$	NO$_2$	PM$_{10}$	PM$_{2.5}$
22.	Uttar Pradesh	Kanpur	6	36	201	-	7	39	217	-	7	45	224	-
23.	West Bengal	Kolkata	7	56	105	55	4	49	113	70	6	41	120	71
24.	Rajasthan	Kota	6	34	134	-	7	30	109	-	8	28	130	-
25.	Uttar Pradesh	Lucknow	8	28	169	-	8	27	214	-	8	26	246	102
26.	Punjab	Ludhiana	11	27	139	-	11	25	139	-	10	28	162	-
27.	Tamilnadu	Madurai	13	25	64	32	15	24	76	38	14	23	67	30
28.	Uttar Pradesh	Meerut	6	39	144	-	7	55	157	-	7	52	153	-
29.	Maharashtra	Mumbai	4	25	106	26	6	30	119	20	3	18	151	40
30.	Maharashtra	Nagpur	10	25	90	-	16	26	118	-	9	27	102	-
31.	Maharashtra	Nashik	15	23	78	-	13	27	85	-	12	22	81	-
32.	Maharashtra	Navi Mumbai	18	42	125	-	19	46	118	-	22	45	105	-
33.	Bihar	Patna	4	41	204	-	4	32	212	-	5	39	156	-
34.	Maharashtra	PimpriChinchwad	23	52	102	-	32	71	105	-	23	61	82	-
35.	Maharashtra	Pune	23	62	99	-	28	78	107	-	21	65	102	-
36.	Chattisgarh	Raipur	13	36	188	-	12	31	148	-	10	27	103	-
37.	Gujarat	Rajkot	13	19	83	30	13	21	92	32	16	22	106	37
38.	Jharkhand	Ranchi	19	36	220	-	20	37	196	-	19	37	142	-
39.	Jammu & Kashmir	Shrinagar	@	@	@	@	@	@	@	@	@	@	@	@
40.	Gujarat	Surat	14	20	89	31	13	22	92	31	16	26	106	36
41.	Maharashtra	Thane	28	58	117	-	18	60	122	-	18	47	125	-
42.	Gujarat	Vadodara	14	20	87	33	14	23	92	30	16	23	108	36
43.	Uttar Pradesh	Varanasi	19	33	145	-	11	32	256	-	10	38	244	-
44.	Maharashtra	Vasai-virar	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
45.	Andhra Pradesh	Vijaywada	6	37	110	-	6	44	102	-	6	29	99	-
46.	Andhra Pradesh	Vishakhapatnam	9	19	61	-	8	18	77	-	9	17	73	-

NB. NA- no monitoring station in the city, @ -monitoring station sanctioned but not yet operational, '-' data not received, National Ambient Air Quality Standard (NAAQS) for Residential, Industrial, Rural and others Areas (Annual average) for SO$_2$ = 50 µg/m^3, NO$_2$ = 40 µg/m^3, PM$_{10}$ = 60 µg/m^3 & PM$_{2.5}$ = 40 µg/m^3 and SO$_2$ = 20 µg/m^3, NO$_2$ = 30 µg/m^3, PM$_{10}$ = 60 µg/m^3 and PM$_{2.5}$ = 40 µg/m^3 for Ecologically sensitive area.

The data furnished in the table for year 2017 is as available on date.