

**GOVERNMENT OF INDIA  
MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION**

**LOK SABHA  
UNSTARRED QUESTION NO. 2630  
TO BE ANSWERED ON 10.03.2021**

**ENVIRONMENT STATISTICS**

**2630. SHRIMATI MANEKA SANJAY GANDHI:**

**Will the Minister of STATISTICS AND PROGRAMME IMPLEMENTATION be pleased to state:**

- (a) whether the Government has recently released any environment statistics since March 2020 and if so, the details thereof;**
- (b) whether the Government has measured any changes in air pollution during the lockdown period since March, 2020, if so, the details thereof;**
- (c) the details of different environment statistics developed and prepared for the National Resource Accounts of India;**
- (d) the details of the situation of all the States and Union Territories including Delhi in these environment statistics; and**
- (e) the details of the standards and norms laid down for assessing National Air Quality in the country?**

**ANSWER**

**MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION AND MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF PLANNING (RAO INDERJIT SINGH)**

- (a) The Ministry brings out annual publication on Environment Statistics and Environment Accounting with titles: “EnviStats India; Vol. I: Environment Statistics” and “EnviStats India; Vol. II: Environment Accounts” respectively. The 3<sup>rd</sup> issue of the publication “EnviStats India; Vol. II: Environment Accounts” for the year 2020 was released on 30<sup>th</sup> September, 2020.**

**(b) Central Pollution Control Board (CPCB), as per the mandate under the Air (Prevention and Control of Pollution) Act, 1981, collects and disseminates information in respect of matters relating to air pollution. CPCB released “A report on Impact of lockdown on ambient air quality” in September 2020, containing the analysis of the air quality data, derived from continuous ambient air quality stations for the pre-lockdown period, lockdown phases-I and II, and for corresponding periods in 2019. The highlights of air quality for major cities in India, as presented in the report, are at Annexure - I.**

**(c) & (d) Natural Resource Accounting (NRA) is an emerging discipline and work in the area has been started by MoSPI as per the accounting system developed by the United Nations. NRA deals with stocks and stock changes of natural assets, comprising biological resources (produced or wild), subsoil assets, water and land with their aquatic and terrestrial ecosystems. The accounts of the following ecosystems have been compiled by MoSPI.**

<b>Type of account</b>	<b>Topics covered</b>
<b>Ecosystem extent</b>	<b>Change matrix of Land Use – Land Cover (LULC) from 2005-06 to 2011-12 and 2011-12 to 2015-16</b> <b>Asset Account for Land Use Land Cover (LULC), 2005-06, 2011-12 and 2015-16</b> <b>Land Degradation Account, 2005-06 and 2015-16</b> <b>Wetland Extent Account, 2006-07</b>
<b>Ecosystem condition</b>	<b>Soil nutrient indices</b> <b>Water quality accounts</b> <b>Forest condition account</b> <b>Cropland condition account</b>
<b>Ecosystem services</b>	<b>Crop provisioning services (monetary)</b> <b>Timber provisioning services (monetary)</b> <b>Non-Timber Forest Products (NTFP) provisioning services (monetary)</b> <b>Carbon retention services provided by forests (physical and monetary)</b> <b>Nature-based tourism (monetary)</b> <b>Soil erosion prevention services provided by croplands (physical)</b>

<b>Thematic Accounts</b>	<b>Biodiversity - Extent of protected areas; State-wise Floral and faunal species accounts; Species Richness of IUCN Red List species</b>
<b>Individual environmental asset accounts (SEEA CF)</b>	<b>Forests – Growing Stocks of Timber and Carbon Water</b>

**Statistics related to these domains are developed and collected by the different ministries of the Government of India and the State Governments as per their mandate. The Ecosystem Accounts developed so far do not have a single indicator which can describe the situation of all the States and Union Territories including Delhi.**

**(e) Central Pollution Control Board has notified the revised National Ambient Air Quality Standards in Gazette of India, Extra-ordinary Part-II Section 3, sub section (ii), dated Nov 18, 2009. The revised National Ambient Air Quality Standards are annexed as Annexure - II.**

LOK SABHA QUESTION NO. 2630 DUE FOR ANSWER ON 10.03.2021

**Comparative AQI during 25th March to 3rd May 2019 and 2020 (first two phases of lockdown during 2020) for major cities in India**

City Name	No. Of days in Good- Satisfactory AQI during 25 <sup>th</sup> March to 3 <sup>rd</sup> May	
	2019	2020
Delhi	1	22
Faridabad	0	13
Ghaziabad	0	16
Gurugram	2	19
Noida	2	25
Mumbai	34	40
Kolkata	30	31
Bengaluru	5	40
Patna	5	17
Chennai	35	40

**LOK SABHA QUESTION NO. 2630 DUE FOR ANSWER ON 10.03.2021****Revised National Ambient Air Quality Standards (NAAQS)**[NAAQS Notification dated 18<sup>th</sup> November, 2009]

S. No.	Pollutants	Time Weighted Average	Concentration in Ambient Air		Methods of Measurement
			Industrial, Residential, Rural and other Areas	Ecologically Sensitive Area (notified by Central Government)	
1	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Annual*	50	20	1. Improved West and Gaeke 2. Ultraviolet Fluorescence
		24 Hours**	80	80	
2	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Annual*	40	30	1. Modified Jacob & Hochheiser 2. Chemiluminescence
		24 Hours**	80	80	
3	Particulate Matter (Size <10µm) or PM <sub>10</sub> µg/m <sup>3</sup>	Annual*	60	60	1. Gravimetric 2. TEOM 3. Beta attenuation
		24 Hours**	100	100	
4	Particulate Matter (Size <2.5 µm) or PM <sub>2.5</sub> µg/m <sup>3</sup>	Annual*	40	40	1. Gravimetric 2. TEOM 3. Beta attenuation
		24 Hours**	60	60	
5	Ozone (O <sub>3</sub> ), µg/m <sup>3</sup>	8 hours**	100	100	1. UV photometric 2. Chemiluminescence 3. Chemical Method
		1 hours**	180	180	
6	Lead (Pb), µg/m <sup>3</sup>	Annual *	0.50	0.50	1. AAS/ICP Method after sampling using EPM 2000 or equivalent filter paper 2. ED-XRF using Teflon filter
		24 Hour**	1.0	1.0	
7	Carbon Monoxide (CO), mg/m <sup>3</sup>	8 Hours **	02	02	Non dispersive Infra Red (NDIR) Spectroscopy
		1 Hour**	04	04	
8	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Annual*	100	100	1. Chemiluminescence 2. Indophenol blue method
		24 Hour**	400	400	
9	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>	Annual *	05	05	1. Gas chromatography based continuous analyzer 2. Adsorption and Desorption followed by GC analysis
10	Benzo(a)Pyrene (BaP)-particulate phase only, ng/m <sup>3</sup>	Annual*	01	01	Solvent extraction followed by HPLC/GC analysis
11	Arsenic (As), ng/m <sup>3</sup>	Annual*	06	06	AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni), ng/m <sup>3</sup>	Annual*	20	20	AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

\* Annual Arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform interval.\*\* 24 hourly 08 hourly or 01 hourly monitored values, as applicable shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

NOTE: Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.