

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**RAJYA SABHA**  
**UNSTARRED QUESTION NO: 2431**  
TO BE ANSWERED ON 10.08.2023

**Impact assessment study of forest cover**

2431. DR. SASMIT PATRA:

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

- (a) details of the total forest cover in India since 2018 till date in a year-wise and State-wise format;
- (b) the reasons for the increase or decrease of the forest cover as specified above;
- (c) the steps being undertaken to increase the forest cover in the country;
- (d) details of forest fires since 2018 till date in a year-wise and State-wise format that have impacted the forest cover in the country; and
- (e) whether any impact assessment study has been done to study impact of forest cover increase/decrease in the last 10 years and if so, the details thereof?

**ANSWER**

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

(SHRI ASHWINI KUMAR CHOUBEY)

- (a) Forest Survey of India (FSI), Dehradun carries out the assessment of forest cover biennially, since 1987 by using remote sensing techniques. The State/UTs wise and year wise details of forest cover are given in **Annexure-I**.
- (b) The gain in forest cover or improvement in forest canopy density may be attributed to better conservation measures, protection, afforestation activities, tree plantation drives and promotion of agroforestry. While, the decrease in forest cover in few states may be attributed to natural calamities, anthropogenic pressure and developmental activities.
- (c) The Ministry provides technical and financial assistance to States/UTs under various Centrally Sponsored Schemes namely Green India Mission (GIM), Forest Fire Prevention and Management Scheme, CAMPA, Nagar Van Yojana and other schemes of line ministries to increase the forest and tree cover of the country as per the mandate of National Forest Policy, 1988.
- (d) The Forest Survey of India, Dehradun detects forest fire occurring in the country on a daily basis through advanced remote sensing technologies and disseminates forest fire alerts to all States and UTs on a near-real time basis. The details of forest fire alerts generated since 2018 is given at **Annexure-II**.
- (e) The Ministry has not conducted any specific study to assess the impacts of increase or decrease of forest cover in the last 10 years.

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**Annexure referred to in reply to part (a) of the Rajya Sabha Unstarred Question No. 2431 due for answer on  
10.08.2023 regarding "Impact assessment study of forest cover"**

**State/UTs wise details of Forest Cover from ISFR 2017 to ISFR 2021**

<b>(Area in square kilometre)</b>				
<b>State/UT</b>	<b>Geographical area</b>	<b>ISFR 2017</b>	<b>ISFR 2019</b>	<b>ISFR 2021</b>
Andhra Pradesh*	1,62,968	28,147	29,137	29,784
Arunachal Pradesh	83,743	66,964	66,688	66,431
Assam	78,438	28,105	28,327	28,312
Bihar	94,163	7,299	7,306	7,381
Chhattisgarh	1,35,192	55,547	55,611	55,717
Delhi	1,483	192.41	195.44	195
Goa	3,702	2,229	2,237	2,244
Gujarat	1,96,244	14,757	14,857	14,926
Haryana	44,212	1,588	1,602	1,603
Himachal Pradesh	55,673	15,100	15,434	15,443
Jharkhand	79,716	23,553	23,611	23,721
Karnataka	1,91,791	37,550	38,575	38,730
Kerala	38,852	20,321	21,144	21,253
Madhya Pradesh	3,08,252	77,414	77,482	77,493
Maharashtra	3,07,713	50,682	50,778	50,798
Manipur	22,327	17,346	16,847	16,598
Meghalaya	22,429	17,146	17,119	17,046
Mizoram	21,081	18,186	18,006	17,820
Nagaland	16,579	12,489	12,486	12,251
Odisha	1,55,707	51,345	51,619	52,156
Punjab	50,362	1,837	1,849	1,847
Rajasthan	3,42,239	16,572	16,630	16,655
Sikkim	7,096	3,344	3,342	3,341
Tamil Nadu	1,30,060	26,281	26,364	26,419
Telangana	1,12,077	20,419	20,582	21,214
Tripura	10,486	7,726	7,726	7,722
Uttar Pradesh	2,40,928	14,679	14,806	14,818
Uttarakhand	53,483	24,295	24,303	24,305
West Bengal	88,752	16,847	16,902	16,832
A&N Islands	8,249	6,742	6,743	6,744
Chandigarh	114	21.56	22.03	22.88
Dadra & Nagar Haveli	602	227.49	227.49	227.75
Daman & Diu				
Jammu & Kashmir	2,22,236	23,241	21,358	21,387
Ladakh		0	2,254	2,272
Lakshadweep	30	27.10	27.10	27.10
Puducherry	490	53.67	52.41	53.30
<b>Grand Total</b>	<b>32,87,469</b>	<b>7,08,273</b>	<b>7,12,249</b>	<b>7,13,789</b>

**Annexure referred to in reply to part (a) of the Rajya Sabha Unstarred Question No. 2431 due for answer on 10.08.2023 regarding "Impact assessment study of forest cover"**

State/UT-wise number of forest fire detected by Forest Survey of India using MODIS sensors since 2018. (This includes large, continuous and repeated forest fires)

S.No.	State/UT	Jan 2018 to June 2018	Nov 2018 to June 2019	Nov 2019 to June 2020	Nov 2020 to June 2021	Nov 2021 to June 2022	Nov 2022 to June 2023
1	Andaman & Nicobar Islands	3	6	15	2	3	10
2	Andhra Pradesh	1785	1748	1080	2888	1716	2526
3	Arunachal Pradesh	491	926	660	1109	1116	659
4	Assam	1660	1940	3000	3387	2305	2741
5	Bihar	223	203	50	537	222	390
6	Chandigarh	0	0	0	0	0	0
7	Chhattisgarh	3331	1608	416	3112	1942	1581
8	Dadra & Nagar Haveli	0	0	1	3	1	1
9	Daman & Diu	0	0	0	0	0	0
10	Delhi	4	2	3	5	5	0
11	Goa	9	11	4	10	5	7
12	Gujarat	572	224	202	422	236	260
13	Haryana	43	24	39	25	37	34
14	Himachal Pradesh	748	142	80	533	601	97
15	Jammu & Kashmir*	742	62	62	131	524	19
16	Jharkhand	666	363	101	1563	630	753
17	Karnataka	1068	1228	538	932	800	1935
18	Kerala	128	192	142	51	61	231
19	Lakshadweep	0	0	0	0	0	0
20	Madhya Pradesh	4929	2723	1383	7103	3908	1887
21	Maharashtra	3919	2516	1102	4297	2309	1485
22	Manipur	1606	1752	2475	3252	1638	2295
23	Meghalaya	1664	1545	1826	2052	1431	1378
24	Mizoram	2339	2795	2816	4345	2105	2635
25	Nagaland	935	1057	1248	1726	1309	1030
26	Odisha	3735	2123	1326	5307	2086	4024
27	Puducherry	4	0	1	1	0	0
28	Punjab	487	77	52	171	128	59
29	Rajasthan	292	386	420	447	238	232
30	Sikkim	1	11	5	17	11	17
31	Tamil Nadu	221	752	187	202	151	359
32	Telangana	1918	1246	1042	2566	1372	1457
33	Tripura	861	1195	1467	1664	310	1220
34	Uttar Pradesh	1165	855	396	1667	905	568
35	Uttarakhand	1385	1578	167	2710	1337	576
36	West Bengal	125	257	141	548	233	679
<b>Total</b>		<b>37059</b>	<b>29547</b>	<b>22447</b>	<b>52785</b>	<b>29675</b>	<b>31145</b>

\*Jammu & Kashmir includes Ladakh