

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
STARRED QUESTION NO: 101*
TO BE ANSWERED ON: 10.02.2022

Declining forest cover in States

101. SHRI SANJAY RAUT:

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

- (a) whether the forest cover in the country, particularly in 11 states are continuously declining as per the recently released India State of Forest Report (ISFR)-2021;
- (b) if so, the details thereof, and if not, the reasons therefor;
- (c) whether it is a fact that many environmental experts have objected to using current method to observe forest cover in the country;
- (d) if so, the details thereof and Government response thereto; and
- (e) the details of steps taken by Government to increase tree cover up to 33 percent in the forest area?

ANSWER

MINISTER FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI BHUPENDER YADAV)

- (a) to (e) The statement is laid on the table of the House.

Statement refer to in reply to part (a) to (e) of Rajya Sabha Starred Question No. 101 due for reply on 10.02.2022 regarding 'Declining forest cover in States' by Shri Sanjay Raut:

(a) & (b) Forest Survey of India (FSI), Dehradun, an organization under the Ministry carries out the assessment of forest cover of the country biennially since 1987 and the findings are published in India State of Forest Report (ISFR). The forest cover assessment is a wall-to-wall mapping exercise based on remote sensing supported by intensive ground verification and field data from National Forest Inventory. As per latest ISFR-2021 released on 13th January, 2022, there is an overall increase of 1540 square kilometre at the national level as compared to previous assessment i.e. ISFR-2019. The details of State and Union Territory wise forest cover are given at **Annexure-I**. There has been increase in forest cover in some States while there has been decrease in forest cover in some States as per ISFR 2021. The gain in Forest cover or improvement in forest canopy density may be attributed to conservation measures, afforestation activities, enhanced protection measures in plantation as well as in traditional forest areas and expansion of trees outside forest whereas, loss in forest cover may be attributed due to harvesting of short rotational plantations, shifting cultivation, biotic pressure, clearance in encroached area and developmental activities. The details of States showing decline in forest cover in comparison to previous assessment (ISFR-2019) are given at **Annexure-II**.

(c) & (d) Many environmental experts objected for using the definition of forest cover by Forest Survey of India in the country in different newspaper and media reports. As per decision 19/Conference of Parties (CP) 9-Kyoto Protocol, the forest can be defined by any country depending upon the capacities and capabilities of the country as follows:-

Forest- Forest is defined structurally on the basis of

- Crown cover percentage: Tree crown cover- 10 to 30% (India 10%)
- Minimum area of stand: area between 0.05 and 1 hectare (India 1.0 hectare) and
- Minimum height of trees: Potential to reach a minimum height at maturity in situ of 2 to 5 m (India 2m)

India's definition of forest has been taken on the basis of above three criteria only and very well accepted by United Nations Framework Convention on Climate Change (UNFCCC) and Food and Agriculture Organization (FAO) for their reporting/communications. The forest cover is defined as 'all land, more than one hectare in area, with a tree canopy density of more than 10 percent irrespective of ownership and legal status. Such land may not necessarily be a recorded forest area. It also includes orchards, bamboo and palm'. The definition of forest cover has clearly been defined in all the India State of Forest Report (ISFR) and in all the International communications of India. The definition of forest cover in ISFR represent true picture.

(e) As per National Forest Policy-1988, the national goal should be to have a minimum of one-third of the total land area of the country under forest or tree cover. Various schemes are being implemented by the Central and State Government/Union Territory Administration for increase in forest and tree cover in the country and to achieve the target of forest/tree cover as mentioned in the National Forest Policy-1988. These include the National Afforestation Programme (NAP) and Green India Mission (GIM) being implemented by the Ministry of Environment, Forest and Climate Change. Afforestation activities are also taken up under various

programmes/funding sources such as Mahatma Gandhi National Rural Employment Guarantee Scheme, Compensatory Afforestation Funds under Compensatory Afforestation Fund Management and Planning Authority (CAMPA).

Afforestation activities are also taken up under various schemes of State Government /UT Administration. National Mission for a Green India (GIM) is one of the ongoing Missions outlined under the National Action Plan on Climate Change. It aims at protecting, restoring, and enhancing India's forest cover and responding to Climate Change through plantation activities in the forest and non-forest areas. GIM activities were started in Financial Year 2015-16. The activities under GIM are being implemented by Joint Forest Management Committees (JFMCs) at the village level.

**Annexure referred to in reply to part (b) of the Rajya Sabha Starred Question No. 101
due for answer on 10.02.2022 regarding ‘Declining forest cover in States’**

State and Union Territory wise details of forest cover as per ISFR 2021

(Area in square kilometre)

S. No.	State/UTs		Geographical Area (GA)	Total Forest Cover	Percentage of Geographical area	Change in Forest Cover w.r.t ISFR 2019
1	Andhra Pradesh		1,62,968	29,784	18.28	647
2	Arunachal Pradesh		83,743	66,431	79.33	-257
3	Assam		78,438	28,312	36.09	-15
4	Bihar		94,163	7,381	7.84	75
5	Chhattisgarh		1,35,192	55,717	41.21	106
6	Delhi		1,483	195.00	13.15	-0.44
7	Goa		3,702	2,244	60.62	7
8	Gujarat		1,96,244	14,926	7.61	69
9	Haryana		44,212	1,603	3.63	1
10	Himachal Pradesh		55,673	15,443	27.73	9
11	Jharkhand		79,716	23,721	29.76	110
12	Karnataka		1,91,791	38,730	20.19	155
13	Kerala		38,852	21,253	54.70	109
14	Madhya Pradesh		3,08,252	77,493	25.14	11
15	Maharashtra		3,07,713	50,798	16.51	20
16	Manipur		22,327	16,598	74.34	-249
17	Meghalaya		22,429	17,046	76.00	-73
18	Mizoram		21,081	17,820	84.53	-186
19	Nagaland		16,579	12,251	73.90	-235
20	Odisha		1,55,707	52,156	33.50	537
21	Punjab		50,362	1,847	3.67	-2
22	Rajasthan		3,42,239	16,655	4.87	25
23	Sikkim		7,096	3,341	47.08	-1
24	Tamil Nadu		1,30,060	26,419	20.31	55
25	Telangana		1,12,077	21,214	18.93	632
26	Tripura		10,486	7,722	73.64	-4
27	Uttar Pradesh		2,40,928	14,818	6.15	12
28	Uttarakhand		53,483	24,305	45.44	2
29	West Bengal		88,752	16,832	18.96	-70
30	A & N Islands		8,249	6,744	81.75	1
31	Chandigarh		114	22.88	20.07	0.85
32	Dadra & Nagar Haveli and Daman & Diu		602	227.75	37.83	0.10
33	Jammu & Kashmir	Shape file Area* (54,624)	2,22,236	21,387	39.15	29
34	Ladakh	Shape file Area* (1,68,055)		2,272	1.35	18
35	Lakshadweep		30	27.10	90.33	0.00
36	Puducherry		490	53.30	10.88	0.89
Total			32.87.469	7,13.789	21.71	1,540

* Area of shape file provided by Survey of India (August, 2021). Notified geographical areas for individual UTs from SOI are awaited.

**Annexure referred to in reply to part (b) of the Rajya Sabha Starred Question No. 101
due for answer on 10.02.2022 regarding ‘Declining forest cover in States’**

Details of States showing decline in Forest cover as per ISFR 2021 in comparison to previous
assessment i.e. ISFR 2019.

(Area in square kilometre)				
Sl. No.	State/UT	Geographical Area (GA)	Total Forest Cover	Change in Forest Cover w.r.t. ISFR 2019
1.	Arunachal Pradesh	83,743	66,431	-257
2.	Manipur	22,327	16,598	-249
3.	Nagaland	16,579	12,251	-235
4.	Mizoram	21,081	17,820	-186
5.	Meghalaya	22,429	17,046	-73
6.	West Bengal	88,752	16,832	-70
7.	Assam	78,438	28,312	-15
8.	Tripura	10,486	7,722	-4
9.	Punjab	50,362	1,847	-2
10.	Sikkim	7,096	3,341	-1
11.	Delhi	1,483	195.00	-0.44