

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
STARRED QUESTION NO: 67*
TO BE ANSWERED ON: 07.02.2022

India State of Forest Report, 2021

*67. SHRIMATI SANGEETA KUMARI SINGH DEO:
DR. JAYANTA KUMAR ROY:

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

- (a) whether the forest cover in the country has increased according to the India State of Forest Report, 2021 and if so, the details thereof;
- (b) the details of the increase in forest or tree cover required to achieve the National Determined Contribution;
- (c) the progress in implementation of afforestation schemes and the funds released for the purpose during the last three years;
- (d) the details of action plan of the Government to take up community tree plantation, dry land afforestation and avenue plantation along with the measures taken to popularise afforestation programmes with the objective of maintaining the ecosystem and increasing the forest area in the country; and
- (e) the details of reserved forests, protected forest areas, village forests and unclassified forests?

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 Lok Sabha Starred Question No. 67 due for reply on 07.02.2022 regarding 'India State of Forest Report, 2021' by Shrimati Sangeeta Kumari Singh Deo and Dr. Jayanta Kumar Roy.

- (a) 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. The ISFR-2021 has recently been released by the Ministry on 13th January, 2022. As per ISFR 2021, there is an overall increase of 1540 square kilometre of forest cover at the national level as compared to the previous assessment i.e. ISFR 2019. The details of State and Union Territory wise forest cover are given at **Annexure I**.
- (b) & (c) India is committed to create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030 as per Nationally Determined Contribution (NDC) under Paris Agreement. India is on track to meet Nationally Determined Contributions (NDC) targets under Paris Agreement. The Forest Survey of India estimates carbon stock of forest by using National Forest Inventory data collected during forest inventory and forest cover area following the guidelines given by United Nation Framework Convention on Climate Change (UNFCCC). The carbon stock for 2021 has been estimated to be 7204 million tones. There is an increase of 79.4 million tonnes of carbon stock as compared to the last assessment of 2019. The annual increase is 39.7 million tonnes, which is 145.6 million tonnes CO₂ equivalent. India has already achieved 1.97 billion tonnes of additional carbon sink as compared to the base year of 2005.

The remaining target can be achieved by increasing forest and tree cover of the country through implementation of various Central and State sponsored schemes. The Central Government schemes are mainly comprised of Green India Mission (GIM), National Afforestation Programme (NAP), Compensatory Afforestation Funds under Compensatory Afforestation Fund Management and Planning Authority (CAMPA), afforestation activities under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA), Green Highway Policy 2015, Policy for enhancement of Urban Greens, National Agro-forestry Policy and Sub-mission on Agro-forestry (SMAF), National Bamboo Mission and National Mission for Sustainable Agriculture. In addition to above, State and UT Governments have their own afforestation and reforestation programmes. Almost every State has activities under social forestry, which largely focuses on tree planting in the areas outside forests.

The State /UT-wise details of fund released under National Afforestation Programme, Green India Mission and Compensatory Afforestation Funds for the last three years are given in **Annexure-II, III and IV**.

- (d) "Increasing substantially the forest/tree cover in the country through massive afforestation and social forestry programmes, especially on all denuded, degraded and unproductive lands" is one of the objective of the National Forest Policy, 1988. National Forest Policy further provides a massive need based and time bound programme of afforestation tree planting on all degraded and denuded lands in the country. Considering the policy prescription, the Ministry of Environment, Forest and Climate Change has been implementing various centrally sponsored schemes on afforestation /plantation.

The National afforestation programme (NAP) scheme is implemented by three tier institutional setup through the State Forest Development Agency (SFDA) at the state level, Forest Development Agency (FDA) at the forest division level and the Joint Forest Management Committees (JFMCs) at the village level, which are registered societies.

The multi-departmental efforts have yielded good results in conserving and developing forest cover as evident from the fact that the Forest cover as reported in the latest India State of Forest Report (ISFR) 2021 has increased by 12,294 square kilometre in last seven years (ISFR-2015 to ISFR-2021) .

- (e) As per ISFR 2021, State/UT wise details of Recorded Forest Area i.e. reserve forest, protected forest and unclassed forest are given at **Annexure V**.

Annexure-I

Annexure referred to in reply to part (a) of the Lok Sabha Starred Question No. 67 due for answer on 07.02.2022 regarding 'India State of Forest Report, 2021'

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	2,22,236	21,387	39.15	29
34	Ladakh		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 (c) of the Lok Sabha Starred Question No. 67 due for answer on 07.02.2022 regarding 'India State of Forest Report, 2021'

Details of State wise funds released under National Afforestation Programme

(Rupees in Crore)				
S. No.	State	FY 2018-19	FY 2019-20	FY 2020-21
1	Andhra Pradesh	6.38	0.00	0.00
2	Bihar	0.00	1.18	0.80
3	Chhattisgarh	7.82	5.71	9.88
4	Goa	0.00	0.00	0.00
5	Gujarat	0.00	0.00	0.00
6	Haryana	0.00	0.00	0.00
7	Himachal Pradesh	2.92	0.52	0.57
8	Jammu & Kashmir	0.00	0.00	0.00
9	Jharkhand	0.00	0.00	0.00
10	Karnataka	10.99	0.00	0.00
11	Kerala	0.00	0.00	0.00
12	Madhya Pradesh	7.78	0.00	0.57
13	Maharashtra	15.33	0.00	0.00
14	Odisha	11.36	8.45	13.67
15	Punjab	0.00	0.00	0.00
16	Rajasthan	1.95	0.00	0.00
17	Tamil Nadu	2.07	0.00	0.00
18	Telangana	0.00	0.00	0.00
19	Uttar Pradesh	0.32	0.00	0.00
20	Uttarakhand	2.58	0.00	1.06
21	West Bengal	0.00	0.00	0.00
22	Arunachal Pradesh	0.00	0.00	0.00
23	Assam	0.58	0.00	0.00
24	Manipur	4.38	0.00	0.00
25	Meghalaya	0.74	0.00	0.00
26	Mizoram	7.79	0.00	7.40
27	Nagaland	6.41	2.35	4.27
28	Sikkim	5.98	0.00	0.88
29	Tripura	0.00	3.76	1.33
	Total	95.38	21.97	40.43

Annexure III

Annexure referred to in reply to part (c) of the Lok Sabha Starred Question No. 67 due for answer on 07.02.2022 regarding 'India State of Forest Report, 2021'

State-wise details of funds released under Green India Mission.**(Rs. in Lakh)**

Sl. No.	State/UT	2018-19	2019-2020	2020-21
1	Andhra Pradesh	266.62	-	-
2	Chhattisgarh	536.07	503.608	166.0924
3	Himachal Pradesh	-	-	1708.5
4	Jammu & Kashmir (UT)	-	-	2572.7
5	Karnataka	162.34	220.993	235.1396
6	Kerala	-	1631.813	-
7	Manipur	488.81	416.229	673.635
8	Mizoram	2236.4	1770.901	299.4801
9	Odisha	474.33	1418.919	2601.436
10	Punjab	-	318.57	-
11	Uttarakhand	-	-	2789.1
12	Madhya Pradesh	2415.9	3065.298	-
13	Maharashtra	1030.2	-	-
14	Sikkim	332.36	312.42	219.287
15	West Bengal	-	942.6488	-
	Total	7943.03	10601.3998	11265.3701

Annexure IV

Annexure referred to in reply to part (c) of the Lok Sabha Starred Question No. 67 due for answer on 07.02.2022 regarding 'India State of Forest Report, 2021'

State wise approved annual plan of operation by Adhoc CAMPA for the year 2018-19 and National Authority for the financial year 2019-20 to 2020-21. (Rs. In Crore)				
Sl. No.	Name State/UTs	Year 2018-19	Year 2019-20	Year 2020-21
1	Andaman & Nicobar	1.56	0.00*	2.13
2	Andhra Pradesh	104.47	322.97	330.82
3	Arunachal Pradesh	354.15	0.00*	155.46
4	Assam	45.84	55.89	88.34
5	Bihar	46.62	140.18	239.47
6	Chandigarh	1.27	1.87	2.26
7	Chhattisgarh	0.00	848.51	1346.92
8	Goa	0.00	0.00*	19.55
9	Gujarat	212.66	17.95	32.68
10	Haryana	144.20	0.00***	240.69
11	Himachal Pradesh	132.52	96.84	203.95
12	Jammu & Kashmir	0.00	145.82	158.38
13	Jharkhand	286.25	0.00***	184.83
14	Karnataka	101.40	399.29	376.56
15	Kerala	14.61	146.22	212.94
16	Ladakh	0.00	0.00*	15.79
17	Madhya Pradesh	268.76	506.38	860.96
18	Maharashtra	225.00	499.38	599.32
19	Manipur	24.85	30.36	27.79
20	Meghalaya	0.00	0.00*	33.97
21	Mizoram	8.30	19.23***	32.66
22	Odisha	554.00	610.52*****	773.39
23	Punjab	79.20	64.73****	177.85
24	Rajasthan	182.03	267.69	280.98
25	Sikkim	0.00	54.38	66.90
26	Tamil Nadu	7.00	0.00*	66.63
27	Telangana	237.38	510.00	483.78
28	Tripura	16.70	16.74	21.51
29	Uttar Pradesh	150.60	285.68	442.01
30	Uttarakhand	303.00	218.00	353.64
31	West Bengal	21.22	70.07	74.00
	Total	3523.59	5328.7	7906.16

* APO not submitted.

** The Jammu & Kashmir State Authority was notified on 08.01.2020.

*** APO was approved 'in-principle' subject to furnishing additional information, which the State did not provide.

**** APO was approved ex-post facto in 2020-21.

***** Activities' amounting to Rs. 18.00 crore for the APO (2019-20) was approved in the 6th meeting of EC held on 27th and 28th of May, 2020.

Annexure V

Annexure referred to in reply to part (e) of the Lok Sabha Starred Question No. 67 due for answer on 07.02.2022 regarding 'India State of Forest Report, 2021'

Recorded Forest Areas (RFA) in States/UTs as per ISFR-2021

(Area in square kilometre)

Sl. No.	State/ UT		Geographical Area (GA)	RFA (in different categories)			Total RFA (2021)
				Reserved Forest	Protected Forest	Unclassed Forests*	
1.	Andhra Pradesh		1,62,968	31,959	5,069	230	37,258
2.	Arunachal Pradesh		83,743	12,371	11,857	27,312	51,540
3.	Assam		78,438	17,864	0	8,972	26,836
4.	Bihar		94,163	693	6,183	566	7,442
5.	Chhattisgarh		1,35,192	25,897	24,036	9,883	59,816
6.	Delhi		1,483	78	25	0	103
7.	Goa		3,702	119	755	397	1,271
8.	Gujarat		196,244	14,574	2,898	4,398	21,870
9.	Haryana		44,212	249	1,158	152	1,559
10.	Himachal Pradesh		55,673	1,883	28,887	7,178	37,948
11.	Jharkhand		79,716	4,500	18,922	1,696	25,118
12.	Karnataka		191,791	28,690	3,931	5,663	38,284
13.	Kerala		38,852	11,522	0	0	11,522
14.	Madhya Pradesh		3,08,252	61,886	31,098	1,705	94,689
15.	Maharashtra		3,07,713	50,865	6,433	4,654	61,952
16.	Manipur		22,327	984	3,254	13,180	17,418
17.	Meghalaya		22,429	1,113	12	8,371	9,496
18.	Mizoram		21,081	4,499	1,823	1,157	7,479
19.	Nagaland		16,579	234	0	8,389	8,623
20.	Odisha		1,55,707	36,049	25,133	22	61,204
21.	Punjab		50,362	44	1,137	1,903	3,084
22.	Rajasthan		3,42,239	12,176	18,543	2,144	32,863
23.	Sikkim		7,096	5,452	389	0	5,841
24.	Tamil Nadu		1,30,060	20,523	1,053	1,612	23,188
25.	Telangana		1,12,077	25,800	1,592	296	27,688
26.	Tripura		10,486	3,588	2	2,704	6,294
27.	Uttar Pradesh**		2,40,928	11,560	296	5,528	17,384
28.	Uttarakhand		53,483	26,547	9,885	1,568	38,000
29.	West Bengal		88,752	7,054	3,772	1,053	11,879
30.	A & N Islands		8,249	5,613	1,558	0	7,171
31.	Chandigarh		114	32	0	3	35
32.	Dadra & Nagar Haveli and Daman & Diu		602	203	5	6	214
33.	Jammu & Kashmir	Shape file Area*** (54,624)	2,22,236	17,648	2,551	0	20,199
34.	Ladakh	Shape file Area*** (1,68,055)		7	0	0	7
35.	Lakshadweep		30	0	0	0	0
36.	Puducherry		490	0	2	11	13
Total			32,87,469	4,42,276	2,12,259	1,20,753	7,75,288

Source: State/UTs Forest Departments

*Unclassed Forest includes all forest other than Reserve Forest and Protected Forest as reported by State/UTs Forest Departments.

**In case of Uttar Pradesh, the RFA excludes 9,662.764 km of linear plantations along Road, Railway line and Canal.

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

