

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**LOK SABHA**  
**UNSTARRED QUESTION NO. 3480**  
TO BE ANSWERED ON 16.03.2018

**India State of Forest Report 2017**

3480. SHRI SATAV RAJEEV:  
SHRI DHANANJAY MAHADIK:  
SHRIMATI SUPRIYA SULE:  
SHRI MOHITE PATIL VIJAYSINH SHANKARRAO:  
DR. J. JAYAVARDHAN:  
SHRI P.R. SUNDARAM:

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

- (a) whether the India State of Forest Report 2017 has been released and if so, the details thereof;
- (b) whether there is change in forest cover in 2017 over 2015, if so, the details thereof and the reasons therefor;
- (c) the States that showed most increase in forest area along with top five States in terms of percentage of area under forest, State/UT-wise;
- (d) whether any legal provision exists to check deforestation and large scale felling of trees, if so, the details thereof along with the funds allocated, sanctioned and utilized for protection and conservation of forests during each of the last three years and the current years, State/UT-wise;
- (e) the progress made so far in preparing comprehensive mapping of forest cover/area in the country; and
- (f) the details of the steps taken by the Government to increase the forest cover along with the achievement made so far in this regard?

**ANSWER**

**MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**  
**(DR. MAHESH SHARMA)**

- (a) & (b) Yes, Madam. The India State of forest Report-2017 was released recently by the Ministry of Environment, Forest and Climate Change. The total forest and tree cover of the country, as per the latest "India State of Forest Report 2017" published by Forest Survey of India, is 8,02,088 square kilometers which is 24.39% of the total geographical area of the country. It shows an increase of 8021 square kilometers over that of the India State of Forest Report 2015 (updated). The State-wise details of changes in forest cover and tree cover are given in **Annexure-I & II**. The probable reason for change in India State of Forest report is given in **Annexure-III**.
- (c) The details of forest cover change in State showing increase is given in **Annexure IV**. The top five States in term of percentage area under forest is given in **Annexure V**.

- (d) Protection of forests by taking various measures including legal measures as per the extant acts, rules and regulations is primarily the responsibility of respective State/UT Governments. The Ministry of Environment, Forest and Climate Change supports the efforts of the state/UT Governments in forest protection by providing financial assistance under the erstwhile Intensification of forest Management Scheme (IFMS) which was revised and replaced as Forest Fire Prevention and Management Scheme (FPM). The details of fund release to States/UTs under the erstwhile IFMS Scheme during 2014-15 to 2016-17 under the revised FPM Scheme during the current financial year (2017-18) is given in **Annexure VI**.
- (e) Forest Survey of India carries out wall to wall mapping of forest cover once in every two years using remote sensing satellite imageries followed by intensive ground truthing. The first India State of Forest Report (ISFR) was published in 1987. The 15<sup>th</sup> report in this series, i.e. ISFR 2017 was released recently which coincides with three decades of forest cover mapping.
- (f) To further increase the forest cover in the country, afforestation programmes are being taken up under various Centrally Sponsored Schemes such as National Afforestation Programme (NAP) and Green India Mission (GIM) being implemented by 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 (MGNREGS), Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) and under Compensatory Afforestation Fund Management and Planning Authority (CAMPA).

National Afforestation Programme (NAP) of the Ministry of Environment & Forests is a Centrally Sponsored Scheme for afforestation and eco-restoration of degraded forests and adjoining areas through people's participation in the country. An amount of Rs. 3778.63 crores has been released to the states to treat an area of 21.78 lakh hectares since inception of this programme during 2000-02 to 2017-18 (as on 28.02.2018).

National Mission for a Green India (GIM) is one of the eight Missions outlined under the National Action Plan on Climate Change. So far fund amounting to Rs. 157.19 crore has been released under GIM to nine States for carrying out various activities under the mission, during 2015-16 to 2017-18 (as on 28.02.2018).

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Annexure referred to in reply to part (b) of the Lok Sabha Unstarred Question No. 3480 due for answer on 16.03.2018 regarding 'India State of Forest Report 2017'

**Change in Forest Cover of States/UTs between 2015 and 2017 assessments**

(area in square kilometer)

State	Geographic Area	Total Forest cover as per ISFR-2017	Percent of Geographic area	Change in forest cover wrt ISFR 2015 (updated)
Andhra Pradesh	162968	28,147	17.27	2141
Arunachal Pradesh	83743	66,964	79.96	-190
Assam	78438	28,105	35.83	567
Bihar	94163	7,299	7.75	45
Chhattisgarh	135192	55,547	41.09	-12
Delhi	1483	192.41	12.97	3.64
Goa	3702	2,229	60.21	19
Gujarat	196244	14,757	7.52	47
Haryana	44212	1,588	3.59	8
Himachal Pradesh	55673	15,100	27.12	393
Jammu & Kashmir *	222236	23,241	10.46	253
Jharkhand	79716	23,553	29.55	29
Karnataka	191791	37,550	19.58	1101
Kerala	38852	20,321	52.30	1043
Madhya Pradesh	308252	77,414	25.11	-12
Maharashtra	307713	50,682	16.47	-17
Manipur	22327	17,346	77.69	263
Meghalaya	22429	17,146	76.45	-116
Mizoram	21081	18,186	86.27	-531
Nagaland	16579	12,489	75.33	-450
Odisha	155707	51,345	32.98	885
Punjab	50362	1837	3.65	66
Rajasthan	342239	16,572	4.84	466
Sikkim	7096	3,344	47.13	-9
Tamil Nadu	130060	26,281	20.21	73
Telangana	112077	20,419	18.22	565
Tripura	10486	7,726	73.68	-164
Uttar Pradesh	240928	14,679	6.09	278
Uttarakhand	53483	24,295	45.43	23
West Bengal	88752	16,847	18.98	21
A&N Islands	8249	6,742	81.73	-9
Chandigarh	114	21.56	18.91	-0.10
Dadra & Nagar Haveli	491	207	42.16	1
Daman & Diu	111	20.49	18.46	0.88
Lakshadweep	30	27.10	90.33	0.04
Puducherry	490	53.67	10.95	-3.28
<b>Grand Total</b>	<b>32,87,469</b>	<b>708273</b>	<b>21.54</b>	<b>6778</b>

Annexure referred to in reply to part (b) of the Lok Sabha Unstarred Question No. 3480 due for answer on 16.03.2018 regarding 'India State of Forest Report 2017'

Tree Cover in States/UTs in India

(area in square kilometer)

State	Geographic Area	Total Tree cover as per ISFR-2017	Percent of Geographic area	Change in Tree cover w.r.t ISFR 2015 (updated)
Andhra Pradesh	162968	3,753	2.30	-212
Arunachal Pradesh	83743	807	0.96	46
Assam	78438	1,496	1.91	-117
Bihar	94163	2,263	2.40	81
Chhattisgarh	135192	3,833	2.84	204
Delhi	1483	113	7.62	2
Goa	3702	323	8.73	-2
Gujarat	196244	8,024	4.09	110
Haryana	44212	1,415	3.20	60
Himachal Pradesh	55673	822	1.48	65
Jammu & Kashmir *	222236	7,815	3.52	-539
Jharkhand	79716	2,922	3.67	139
Karnataka	191791	5,713	2.98	161
Kerala	38852	2,959	7.62	8
Madhya Pradesh	308252	8,073	2.62	300
Maharashtra	307713	9,831	3.19	273
Manipur	22327	220	0.99	-23
Meghalaya	22429	657	2.93	-53
Mizoram	21081	467	2.22	-68
Nagaland	16579	379	2.29	-2
Odisha	155707	3,993	2.56	7
Punjab	50362	1,622	3.22	78
Rajasthan	342239	8,266	2.42	-3
Sikkim	7096	35	0.49	0
Tamil Nadu	130060	4,671	3.59	166
Telangana	112077	2,669	2.38	120
Tripura	10486	215	2.05	-18
Uttar Pradesh	240928	7,442	3.09	398
Uttarakhand	53483	767	1.43	15
West Bengal	88752	2,136	2.41	48
A&N Islands	8249	35	0.42	-2
Chandigarh	114	10	8.77	1
Dadra & Nagar Haveli	491	30	6.11	2
Daman & Diu	111	10	9.01	0
Lakshadweep	30	2	6.67	-2
Puducherry	490	27	5.51	0
<b>Grand Total</b>	<b>32,87,469</b>	<b>93,815</b>	<b>2.85</b>	<b>1243</b>

**Annexure III**

Annexure referred to in reply to part (b) of the Lok Sabha Unstarred Question No. 3480 due for answer on 16.03.2018 regarding 'India State of Forest Report 2017'

**State wise Details for Reasons for Change in Forest Cover**

<b>State</b>	<b>Possible Reasons</b>
Andhra Pradesh	The main reason for net increase of 2141 sq km in forest cover in the State can be attributed to plantation and conservation activities both within and outside the Recorded Forest areas as well as improvement in interpretation due to better radiometric resolution of the recent satellite data from Resourcesat-2. The decrease in the forest cover in East Godavari and Prakasam districts are mainly due to rotational felling of commercial plantations.
Arunachal Pradesh	A decrease of 190 sq km observed in the in the forest cover of the State can be attributed to shifting cultivation and developmental activities.
Assam	An increase of 567 sq km in the forest cover is mainly due to the plantations mostly outside forest areas. The decrease in forest cover in some districts is mainly due to rotational felling in tea gardens, shifting cultivation and developmental activities.
Bihar	A net positive change of 45 sq km observed in the state could be attributed to plantations and conservation. .
Chhattisgarh	A small decrease of 12 sq km observed in the State can be attributed to mining activities, diversion of land for developmental activities and rotational felling. Positive changes observed in some districts are due to plantation and conservation activities.
Delhi	An increase of 3.64 sq km has been observed which can be attributed to plantation activities and conservation whereas the decrease in forest cover at some places is due to developmental activities.
Goa	An increase of 19 sq km in forest cover observed in the State is mostly due to expansion of tree cover outside Recorded Forest Areas. However, forest cover within the Recorded Forest Area has decreased by 9 sq km due to mining and other developmental activities.
Gujarat	An increase of 47 sq km observed in the State can be attributed to plantation and conservation both within and outside recorded forest areas as well as due to conservation and expansion of mangrove cover.
Haryana	A net increase of 8 sq km in forest cover observed is mostly due to increase in tree cover outside recorded forest areas. The decrease in forest cover in certain pockets is due to rotational felling.

State	Possible Reasons
Himachal Pradesh	The main reason for net increase of 393 sq km in forest cover in the State can be attributed to plantation and conservation activities both within and outside the Recorded Forest Areas as well as improvement in interpretation due to better radiometric resolution of the recent satellite data from Resourcesat-2.
Jammu & Kashmir	The main reason for net increase of 253 sq km in forest cover in the State can be attributed to plantation and conservation activities as well as improvement in interpretation due to better radiometric resolution of the recent satellite data from Resourcesat-2.
Jharkhand	A net increase of 29 sq km has been observed in the State which can be attributed to plantation and conservation efforts within recorded forest areas. Although, there is an increase of 314 sq km in forest cover within Recorded Forest Areas, its effect on forest cover has been offset due to felling of trees outside it.
Karnataka	The main reason for net increase of 1,101 sq km in forest cover in the State can be attributed to plantation and conservation activities both within and outside the Recorded Forest Areas as well as improvement in interpretation due to better radiometric resolution of the recent satellite data from Resourcesat-2. Large scale increase in commercial plantation of palms outside forest areas, density improvement in scrub forests and expansion of mangrove cover due to conservation and rehabilitation efforts are also the major reasons for the increase observed in the state.
Kerala	The main reason for net increase of 1,043 sq km in forest cover in the State can be attributed to commercial plantations outside Forest areas as well as improvement in interpretation due to better radiometric resolution of the recent satellite data from Resourcesat-2.
Madhya Pradesh	A net decrease of 12 sq km has been observed in the State which could be attributed to expansion of agriculture, developmental activities, submergence, mining and rotational felling.
Maharashtra	A net decrease of 17sq km has been observed in the State can be attributed to rotational fellings, submergence, agricultural expansion and other developmental activities. Although a decrease of 149 sq km has been observed within Recorded Forest areas, the overall decrease has been offset due to expansion of tree cover outside forest areas. Rehabilitation efforts have led to appreciable increase in Mangrove Cover of the State over west coast.
Manipur	A net increase of 263 sq km has been observed in the state due to plantation and conservation, as well as re growth in shifting

State	Possible Reasons
	cultivation areas.
Meghalaya	A net decrease of 116 sq km has been observed in the State due to shifting cultivation, rotational felling and developmental activities. Increase in forest cover in certain pockets is due to plantation activities.
Mizoram	The net decrease of 531 sq km in forest cover in Mizoram can be attributed to shifting cultivation and developmental activities. Increase in forest cover in certain pockets is due to regeneration of Bamboo and other plantations. .
Nagaland	A net decrease of 450 sq km in forest cover observed in the State can be attributed to shifting cultivation and development activities.
Odisha	The main reason for net increase of 885 sq km in forest cover in the State can be attributed to plantation and conservation activities both within and outside the Recorded Forest areas as well as improvement in interpretation due to better radiometric resolution of the recent satellite data from Resourcesat-2. The reasons for decrease in forest cover observed in some districts can be attributed to developmental activities.
Punjab	Much of the 66 sq km increase in the forest cover can be attributed to increase in tree cover outside recorded forest areas.
Rajasthan	A net gain of 466 sq km has been observed in forest cover of the State which can be attributed to plantations, regeneration of fast growing species and conservation efforts.
Sikkim	A net loss of 9 sq km in forest cover observed in the State can be attributed to developmental activities.
Tamil Nadu	A net increase of 73 sq km in the forest cover of the State can be attributed to plantations and conservation efforts within Recorded forest areas. The negative change observed in some areas is mainly due to harvesting of trees outside forests and developmental activities.
Telangana	A net increase of 565 sq km has been observed in the State compared to the previous assessment, the reasons for which can be attributed to expansion of tree cover mostly outside recorded forest areas. The decrease in Forest Cover in Adilabad and Khammam districts are due to the rotational felling of commercial plantations.
Tripura	A net decrease of 164 sq km in the forest cover of the State can be attributed to shifting cultivation, harvesting of mature rubber plantations and other developmental activities. In some cases, positive change due to extension of area under rubber plantation has also been observed.
Uttar Pradesh	A net increase of 278 sq km has been observed in the State

State	Possible Reasons
	compared to the previous assessment which can be attributed to plantation and conservation.
Uttarakhand	A net increase of 23 sq km has been observed in the State which can be attributed to expansion of tree cover outside forests. However, forest cover within Recorded Forest Area shows a net decrease of 49 sq km which can be attributed to rotational fellings and developmental activities.
West Bengal	A net increase of 21 sq km has been observed in the State can be attributed to plantation activities mostly outside recorded forest areas as well as due to conservation of mangroves.
A&N Islands	A net decrease of 9 sq km in forest cover observed is mainly due to developmental activities.
Chandigarh	A small negative change of 0.10 Sq km in the forest cover of the UT could be attributed to developmental activities.
Dadra & Nagar Haveli	An increase of 1 sq km in forest cover observed is due to increase in tree cover outside recorded forest areas.
Daman & Diu	An increase of 0.88 Sq km in forest cover observed in the UT can be attributed to expansion of tree cover outside the recorded forest area.
Lakshadweep	A small negative change of 0.04 sq km observed is due to felling of trees outside forests.
Puducherry	The main reason for decrease of 3.28sq km in forest cover can be attributed to harvesting of trees outside forests.



**Annexure IV**

Annexure referred to in reply to part (c) of the Lok Sabha Unstarred Question No. 3480 due for answer on 16.03.2018 regarding 'India State of Forest Report 2017'

**Forest Cover gain in State/UTs as per ISFR 2017**

(area in square kilometer)

<b>State</b>	<b>Geographical Area</b>	<b>Total Forest</b>	<b>Change in forest cover wrt ISFR 2015 (updated)</b>
Andhra Pradesh	162968	28,147	2141
Assam	78438	28,105	567
Bihar	94163	7,299	45
Delhi	1483	192.41	3.64
Goa	3702	2,229	19
Gujarat	196244	14,757	47
Haryana	44212	1,588	8
Himachal Pradesh	55673	15,100	393
Jammu & Kashmir	222236	23,241	253
Jharkhand	79716	23,553	29
Karnataka	191791	37,550	1101
Kerala	38852	20,321	1043
Manipur	22327	17,346	263
Odisha	155707	51,345	885
Punjab	50362	1837	66
Rajasthan	342239	16,572	466
Tamil Nadu	130060	26,281	73
Telangana	112077	20,419	565
Uttar Pradesh	240928	14,679	278
Uttarakhand	53483	24,295	23
West Bengal	88752	16,847	21
Dadra & Nagar Haveli	491	207	1
Daman & Diu	111	20.49	0.88
Lakshadweep	30	27.10	0.04

**Annexure V**

**Annexure referred to in reply to part (c) of the Lok Sabha Unstarred Question No. 3480 due for answer on 16.03.2018 regarding 'India State of Forest Report 2017'**

**Top five state/ UTs having maximum percentage wise forest cover**

**(area in square kilometer)**

<b>State</b>	<b>Geographical Area</b>	<b>Total Forest Cover as per ISFR 2017</b>	<b>Percent of Forest Cover with respect to Geographical area</b>
Mizoram	21081	18,186	86.27
Arunachal Pradesh	83743	66,964	79.96
Manipur	22327	17,346	77.69
Meghalaya	22429	17,146	76.45
Nagaland	16579	12,489	75.33

## Annexure VI

Annexure referred to in reply to part (d) of the Lok Sabha Unstarred Question No. 3480 due for answer on 16.03.2018 regarding 'India State of Forest Report 2017'

### Details of fund released by Forest Protection Division from 2014-15 to 2017-18

(Rupees in Lakhs)

S. No.	States	2014-15 * Released	2015-16 * Released	2016-17* Released	2017-18** Released (as on 01.03.2018)
<b>Other States</b>					
1	Andhra Pradesh	0.00	0.00	0.00	0.00
2	Bihar	0.00	59.09	88.59	75.00
3	Chhattisgarh	411.96	120.75	211.04	168.00
4	Gujarat	349.71	179.99	122.26	75.00
5	Goa	0.00	0.00	0.00	0.00
6	Haryana	149.56	77.86	93.91	75.00
7	Himachal Pradesh	365.90	302.16	331.36	174.25
8	Jammu & Kashmir	0.00	193.93	95.61	75.00
9	Jharkhand	303.03	83.62	199.63	105.00
10	Karnataka	266.54	228.19	203.27	105.00
11	Kerala	183.76	86.00	163.65	105.00
12	Madhya Pradesh	701.07	420.00	281.15	168.00
13	Maharashtra	228.02	447.32	372.58	257.27
14	Orissa	220.50	136.00	266.14	168.00
15	Punjab	0.00	77.00	0.00	75.00
16	Rajasthan	205.09	112.54	174.22	105.00
17	Tamil Nadu	0.00	203.02	74.29	105.00
18	Telangana	160.73	0.00	0.00	105.00
19	Uttar Pradesh	218.36	156.15	139.72	75.00
20	Uttarakhand	332.57	356.83	304.03	168.00
21	West Bengal	115.46	0.00	92.83	75.00
	<b>Total</b>	<b>4212.26</b>	<b>3240.45</b>	<b>3214.28</b>	<b>2258.52</b>
<b>NE &amp; Sikkim</b>					
1	Assam	0	0	0	0
2	Arunachal Pradesh	219.59	85.07	181.34	102.00
3	Manipur	0	240.76	125.02	110.00
4	Meghalaya	0	180.26	126.57	66.00
5	Mizoram	256.27	153.17	131.29	66.00
6	Nagaland	225.13	122.6	170.01	92.56
7	Sikkim	162.17	150	119.73	108.54
8	Tripura	243.84	147.19	190.76	66.00
	<b>Total</b>	<b>1107.00</b>	<b>1079.05</b>	<b>1044.72</b>	<b>611.10</b>

	<b>Union Territories</b>				
1	A & N Islands		28.00	56.23	9.00
2	Chandigarh		36.99890	74.52	0.00
3	D&N Haveli		0.00	0.00	0.00
4	Daman & Diu		0.00	0.00	0.00
5	Lakshadweep		0.00	0.00	0.00
6	New Delhi		0.00	50.00	30.00
7	Pondicherry	37.77	0.00	0.00	30.00
	<b>Total</b>	<b>37.77</b>	<b>64.99890</b>	<b>180.75</b>	<b>69.00</b>
	<b>Grand Total</b>	<b>5357.03</b>	<b>4384.49890</b>	<b>4439.75</b>	<b>2938.62</b>

\*Released under erstwhile IFMS Scheme

\*\*Released under FPM Scheme

