

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 2836
TO BE ANSWERED ON 28.12.2018

Forest Land

2836. SHRIMATI KAMLA DEVI PAATLE:

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

- (a) the total area of forest land in the country, State/UT-wise;
- (b) the details of decline/rise in the area of forest land during each of the last five years along with the reasons therefor, State/UT-wise;
- (c) whether large areas of forest land have been/are being encroached upon in various parts of the country including Chhattisgarh, if so, the details thereof along with the remedial steps taken by the Government in this regard;
- (d) whether forest departments in some States including Chhattisgarh have identified additional areas of forest land in the States concerned; and
- (e) if so, the details thereof?

ANSWER

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

- (a) & (b) Forest Survey of India, Dehradun, carries out the assessment of forest cover of the country biennially and the findings are published in India State of Forest Report (ISFR). As per the latest report i.e. ISFR- 2017, the total area under forest and tree cover in the country is 8,02,088 square kilometer which is 24.39% of geographical area, out of this, forest cover in the country is 7,08,273 square kilometers which is 21.54% of the geographical area of the country. There is an increase of 6778 square kilometer of total forest cover compared to that of ISFR-2015 (updated). The details of forest cover as per ISFR-2011 to 2017 is as below:-

(Area in square kilometers)

Year of ISFR	Total Forest Cover
2011	6,92,027
2013	6,97,898
2015	7,01,495 (updated)
2017	7,08,273

The State-wise details of changes in forest cover are given in **Annexure-I**. The probable reasons for change in Forest cover are given in **Annexure-II**.

- (c) to (e) As per the data received from various States/UTs, the area of forest land encroached upon in the various States/UTs are given in **Annexure III**. Since, removal of encroachment from forest land falls within the domain of State Government, the Ministry has requested all States/UTs on several occasions to remove encroachment as per the existing acts/rules and ensure that no further encroachment takes place,

Annexure referred to in reply to part (b) of the Lok Sabha Unstarred Question No. 2836 due for answer on 28.12.2018 regarding 'Forest Land'

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
Grand Total	32,87,469	708273	21.54	6778

Annexure II

Annexure referred to in reply to part (b) of the Lok Sabha Unstarred Question No. 2836 due for answer on 28.12.2018 regarding 'Forest Land'

State wise Details for Reasons for Change in Forest Cover

State	Possible Reasons
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.
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.

State	Possible Reasons
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 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.

State	Possible Reasons
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 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 III

Annexure referred to in reply to part (c) of the Lok Sabha Unstarred Question No. 2836 due for answer on
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State/UTs wise details of area under encroachment

(Area in hectare)

S. No.	Name of States/UTs	Area under Encroachment	As on Date
1	Andhra Pradesh	1690.72	31.03.2016
2	Bihar	132.21	31.03.2015
3	Chhattisgarh	19330.64	31.01.2016
4	Gujarat	34791.00	19.03.2011
5	Goa	Nil	25.02.2013
6	Haryana	520.00	31.03.2016
7	Himachal Pradesh	2339.02	31.03.2016
8	Jharkhand	26496.00	07.08.2017
9	Jammu & Kashmir	10279.28	31.03.2017
10	Karnataka	82734.81	31.03.2017
11	Kerala	7801.10	31.03.2017
12	Madhya Pradesh	534717.28	31.03.2016
13	Maharashtra	67012.56	31.03.2016
14	Odisha	78505.08	22.07.2011
15	Punjab	8175.31	31.03.2017
16	Rajasthan	10839.76	31.03.2017
17	Tamil Nadu	15041.57	31.03.2017
18	Telangana	3056.00	31.03.2017
19	Uttar Pradesh	23954.41	31.03.2017
20	Uttarakhand	9534.10	13.12.2017
21	West Bengal	10214.80	31.03.2016
22	Arunachal Pradesh	58636.13	31.03.2016
23	Assam	317215.39	17.03.2015
24	Manipur	6726.51	31.03.2017
25	Meghalaya	9378.00	12.03.2011
26	Mizoram	11408.16	28.11.2017
27	Nagaland	2479.96	31.03.2017
28	Sikkim	2817.21	31.03.2016
29	Tripura	6.77	08.08.2014
30	A & N Islands	4068.69	31.03.2016
31	Chandigarh	14.00	03.08.2017
32	D&N Haveli	614.40	31.03.2013
33	Daman & Diu	87.83	28.09.2010
34	Lakshadweep	Nil	28.08.2010
35	Delhi	629.51	11.04.2012
36	Puducherry	Nil	21.10.2010
	TOTAL	1361248.21	