

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**LOK SABHA**  
**UNSTARRED QUESTION NO. 4066**  
TO BE ANSWERED ON 04.01.2019

**Increase in Forest Cover**

4066. KUNWAR BHARATENDRA:  
SHRI PRATHAP SIMHA:  
KUMARI SHOBHA KARANDLAJE:

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

- (a) the details of the increase in forest or tree cover required to achieve the National Determined Contribution;
- (b) whether the forest cover in the country has increased by about 1 percent according to the Indian State of forest Report (ISFR) 2017, if so, the details thereof;
- (c) the details of the area where massive deforestation and forest denudation has taken place during the last three years and the reasons therefor along with the steps taken to check further forest denudation;
- (d) the progress in implementation of afforestation schemes and the funds released for the purpose during the last three years;
- (e) the 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
- (f) the details of reserved forests, protected forest areas, village forests and unclassified forests?

**ANSWER**

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

- (a) India is committed to create an additional carbon sink of 2.5 to 3 billion tonnes of CO<sub>2</sub> 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 2017 has been estimated to be 7083 million tonnes. There is an increase of 39 million tonnes of carbon stock as compared to the estimates of previous assessment.

The average annual increase of carbon stock is worked out to be around 35 million tonnes. At this rate India would reach around 1.9 billion tonnes of CO<sub>2</sub> equivalent by 2030. The shortfall of about 0.6 to 1.1 billion tonnes of CO<sub>2</sub> equivalent can also be achieved by (a)

improving the density of natural forests and (b) raising plantation in available non-forest lands and on available wasteland.

- (b) Forest Survey of India, Dehradun, a subordinate organization under the Ministry 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 forest and tree cover in the country is 8,02,088 square kilometers (forest cover 708273 square kilometer, tree cover 93815 square kilometer) which is 24.39% of the geographical area of the country. There is an increase of 8021 square kilometer (forest cover 6778 square kilometer, tree cover 1243 square kilometer) of total forest and tree cover compared to that of ISFR-2015 which is about 1% of total forest and tree cover in the country.
- (c) For various developmental activities in the country, permission for diversion of the forest is granted by the Central Government under Forest (Conservation) Act, 1980. The forest land diverted under Forest Conservation Act, 1980 during the period from 01.01.2015 to 11.12.2018 is 52338.75 hectares. The State/UTs wise details are given in **Annexure-I**. To compensate for the loss of forest cover, compensatory afforestation on equal area of non-forest land and degraded forest land is taken up by the State Government.
- (d) & (e) 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 Compensatory Afforestation Fund. National Mission for a Green India (GIM) is one of the eight 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. GIM activities were started in the Financial Year 2015-16.

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

- (f) As per India State of Forest Report-2017 published by Forest Survey of India, Dehradun, the State/UT wise details of reserved forests, protected forests areas and unclassified forests are given in **Annexure-V**. The Ministry does not maintain the information of village forests.

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Annexure referred to in reply to part (c) of the Lok Sabha Unstarred Question No. 4066 due for answer on 04.01.2019 regarding ' Increase in Forest cover'

**Statement Showing Cases For State/UTs wise diversion of Forest Land in Under FC Act 1980 during the period 01.01.2015 to 11.12.2018.**

(Area in hectares)

S. No.	States/UTs	No. of Cases	Area Diverted
1	Andaman and Nicobar	6	20.14
2	Andhra Pradesh	34	3474.57
3	Arunachal Pradesh	12	451.37
4	Assam	0	0.00
5	Bihar	117	1125.22
6	Chandigarh	2	0.39
7	Chhattisgarh	35	3770.87
8	Dadar & Nagar Haveli	9	5.40
9	Daman and Diu	0	0.00
10	Delhi	1	12.00
11	Goa	8	42.75
12	Gujarat	106	2008.07
13	Haryana	895	1470.27
14	Himachal Pradesh	115	781.88
15	Jammu and Kashmir	0	0.00
16	Jharkhand	30	685.90
17	Karnataka	60	784.75
18	Kerala	8	15.82
19	Lakshadweep	0	0.00
20	Madhya Pradesh	204	12727.62
21	Maharashtra	32	3709.19
22	Manipur	7	263.20
23	Meghalaya	2	142.93
24	Mizoram	1	0.24
25	Nagaland	0	0.00
26	Orissa	57	4968.28
27	Pondicherry	0	0.00
28	Punjab	679	1294.53
29	Rajasthan	78	2789.97
30	Sikkim	8	24.30
31	Tamil Nadu	11	542.40
32	Telangana	28	7874.02
33	Tripura	9	83.98
34	Uttar Pradesh	4	163.76
35	Uttarakhand	237	2813.77
36	West Bengal	9	291.15
Grand Total		<b>2804</b>	<b>52338.75</b>

Annexure referred to in reply to part (d)& (e) of the Lok Sabha Unstarred Question No. 4066 due for answer on 04.01.2019 regarding 'Increase in forest cover'

**Details of State/UTs wise funds released under Compensatory Afforestation Funds**

State/UT	FY-15-16	FY-16-17	FY-17-18	FY-18-19
	Release (Rs.)	Release (Rs.)	Release (Rs.)	Release (Rs.)
Andhra Pradesh	850,000,000	890,000,000	970,000,000	1,044,700,000.00
Andaman Nicobar	10,000,000			
Arunachal Pradesh	620,000,000	1,500,000,000		3,541,500,000
Assam		300,000,000	700,000,000	458,400,000
Bihar	341,400,000	330,000,000	393,100,000	376,190,000
Chandigarh	21,179,000	10,000,000	11,300,000	12,700,000
Chhattisgarh	2,390,000,000	2,800,000,000		
Dadar Nagar Havelli				
Daman & Diu				
Delhi	39,100,000	40,000,000		
Goa				
Gujarat	330,000,000	990,000,000	270,000,000	2,726,600,000
Haryana	640,000,000	180,000,000	800,000,000	1,442,000,000
Himachal Pradesh	769,800,000	1,320,000,000	1,200,000,000	1,325,200,000
Jammu Kashmir	310,000,000	1,020,000,000	690,000,000	
Jharkhand	1,410,000,000	1,490,000,000	2,340,000,000	2,862,500,000
Karnataka	600,000,000	875,200,000	860,000,000	1,014,000,000
Kerala			80,000,000	146,100,000
Madhya Pradesh	2,130,000,000	1,400,000,000	2,000,000,000	2,687,600,000
Maharashtra	1,550,000,000	2,050,000,000	1,990,000,000	2,250,000,000
Manipur	250,000,000	150,000,000	295,000,000	248,500,000
Meghalaya	165,600,000		70,000,000	

Mizoram	100,000,000	77,300,000	68,500,000	
Orissa	3,220,000,000	4,260,000,000	14,940,400,000	5,540,000,000
Punjab	490,000,000	660,000,000	640,000,000	792,000,000
Rajasthan	480,000,000	1,410,600,000	1,790,000,000	1,692,400,000
Sikkim	110,000,000	90,000,000		
Tamilnadu	22,000,000	90,000,000	126,800,000	
Telengna	760,000,000	1,182,180,000	1,270,000,000	2,373,800,000
Tripura	110,000,000	120,000,000	7,100,000	2,309,000,000
UP	1,770,000,000	1,320,000,000	1,230,000,000	1,506,000,000
Uttrakhand	1,640,000,000	1,707,100,000	960,000,000	3,030,000,000
West Bengal		210,000,000		212,200,000
<b>Total</b>	<b>21,129,079,000</b>	<b>26,472,380,000</b>	<b>33,702,200,000</b>	<b>37,591,390,000</b>

**Annexure III**

**Annexure referred to in reply to part (d) & (e) of the Lok Sabha Unstarred Question No. 4066  
due for answer on 04.01.2019 regarding ‘ Increase in Forest cover’**

**Details of State wise funds released under Green India Mission.**

**Rs. in Lakh**

Sl. No.	States	2015-16		2016-17		2017-18		2018-19	
		Fund Released	Fund Utilized	Fund Released	Fund Utilized	Fund Released	Fund Utilized	Fund Released	Fund Utilized
1	Andhra Pradesh	-	-	105.53	105.53	44.6	-	266.62	-
2	Chhattisgarh	2338.55	2338.55	2023.017	2023.017	1095.272	1095.272	536.07	-
3	Karnataka	105.53	105.53	86.853	86.853	85.734	-	162.339	-
4	Kerala*	914.82	-	-	383.118	-	531.702	-	-
5	Manipur	834.84	834.84	782.285	782.285	641.579	641.579	488.812	-
6	Mizoram	-	-	988.35	988.35	2000	2000	-	-
7	Odisha	182.92	182.92	138.964	138.964	140.556	140.556	474.334	-
8	Punjab*	611.53	-	-	606.11	621.73	-	-	-
9	Uttarakhand**	2020.9	-	-	-	-	-	-	-
10	Sikkim	-	-	-	-	-	-	332.36	-
11	Maharashtra	-	-	-	-	-	-	1030.188	-
12	Madhya Pradesh	-	-	-	-	-	-	1022.497	-
<b>Total</b>		<b>7009.09</b>	<b>3461.84</b>	<b>4124.999</b>	<b>5114.227</b>	<b>4629.471</b>	<b>4409.109</b>	<b>4313.22</b>	<b>-</b>

Note: \*Fund were revalidated for utilization in FY 2016-17.

\*\* Fund were revalidated for utilization in FY 2016-17 and FY 2018-19

## Annexure IV

Annexure referred to in reply to part (d) & (e) of the Lok Sabha Unstarred Question No. 4066 due for answer on 04.01.2019 regarding 'Increase in Forest cover'

## Details of State wise funds released under National Afforestation Programme

(Rs in Crore)						
S. No.	State	2015-16	2016-17	2017-18	2018-19	TOTAL
1	Andhra Pradesh	0.87	1.33	3.36	4.81	5.56
2	Bihar	5.01	2.18	4.23	0.00	11.42
3	Chhattisgarh	10.20	4.92	10.86	2.64	25.98
4	Goa	0.00	0.00	0.00	0.00	0.00
5	Gujarat	8.54	4.36	0.00	0.00	12.90
6	Haryana	0.72	3.50	2.71	0.00	6.93
7	Himachal Pradesh	0.00		1.72	2.92	4.64
8	Jammu & Kashmir	0.00		7.20	0.00	7.20
9	Jharkhand	0.00		0.00	0.00	0.00
10	Karnataka	1.05	7.33	3.24	6.87	11.61
11	Kerala	1.02		0.00	0.00	1.02
12	Madhya Pradesh	9.45	4.00	8.74	7.78	22.19
13	Maharashtra	14.90	4.76	6.73	15.33	26.39
14	Orissa	9.49	4.62	3.49	8.15	17.60
15	Punjab	0.00		0.00	0.00	0.00
16	Rajasthan	0.75		1.40	0.00	2.15
17	Tamil Nadu	1.42	1.56	0.00	2.07	2.98
18	Telangana	0.00		0.00	0.00	0.00
19	Uttar Pradesh	2.68	2.55	0.67	0.32	5.89
20	Uttarakhand	3.05		3.36	2.58	6.41
21	West Bengal	0.00		0.00	0.00	0.00
	<b>Total (Other States)</b>	<b>69.16</b>	<b>41.10</b>	<b>57.71</b>	<b>53.47</b>	<b>221.44</b>
	<b>North Eastern states</b>					0.00
22	<i>Arunachal Pradesh</i>	0.00	0.00	0.86	0.00	0.86
23	<i>Assam</i>	2.56	0.00	0.00	0.00	2.56
24	<i>Manipur</i>	3.67	1.21	3.19	4.38	12.45
25	<i>Meghalaya</i>	1.35	0.00	1.65	0.74	3.74
26	<i>Mizoram</i>	10.17	6.74	5.80	5.90	28.61
27	<i>Nagaland</i>	0.00	5.21	5.85	6.41	17.47
28	<i>Sikkim</i>	1.52	5.09	0.00	5.98	12.59
29	<i>Tripura</i>	5.73	0.00	4.94	0.00	10.67
	<b>Total (NE States)</b>	<b>25.00</b>	<b>18.25</b>	<b>22.29</b>	<b>23.41</b>	<b>88.95</b>
	<b>G. Total</b>	<b>94.16</b>	<b>59.35</b>	<b>80.00</b>	<b>76.88</b>	<b>387.27</b>



Annexure referred to in reply to part (f) of the Lok Sabha Unstarred Question No. 4066 due for answer on 04.01.2019 regarding 'Increase in Forest Cover'

**Recorded Forest Areas (RFAs) in States and UTs as per ISFR-2017.**

(Area in sq km)

State/ UT	Geographical Area (GA)	RFA (as revised by SFDs)			Total RFA (2017)	% of GA
		Reserved Forests (RF)	Protected Forests (PF)	Unclassed Forests		
Andhra Pradesh	162968	31,959	5069	230	37258	22.86
Arunachal Pradesh	83,743	10,589	9,779	31,039	51,407	61.39
Assam	78,438	17,864	0	8,968	26,832	34.21
Bihar	94163	693	6183	1	6877	7.30
Chhattisgarh	135192	25,782	24036	9954	59772	44.21
Delhi	1,483	78	24	0	102	6.88
Goa	3,702	253	0	972	1225	33.09
Gujarat	196,244	14,373	2886	4388	21647	11.03
Haryana	44,212	249	1158	152	1559	3.53
Himachal Pradesh	55,673	1,898	33130	2005	37033	66.52
Jammu & Kashmir	222,236	17,643	2551	36	20230	9.10
Jharkhand	79,716	4,387	19185	33	23605	29.61
Karnataka	191,791	28,690	3931	5663	38284	19.96
Kerala	38,852	11,309	0	0	11309	29.11
Madhya Pradesh	308,252	61,886	31098	1705	94689	30.72
Maharashtra	307,713	49,546	6733	5300	61579	20.01
Manipur	22,327	1,467	4,171	11,780	17,418	78.01
Meghalaya	22,429	1,113	12	8,371	9,496	42.34
Mizoram	21,081	4,483	0	1,158	5,641	26.76
Nagaland	16,579	234	0	8,389	8,623	52.01
Odisha	155,707	36049	25133	22	61204	39.31
Punjab	50,362	44	1137	1903	3084	6.12
Rajasthan	342,239	12475	18217	2045	32737	9.57
Sikkim	7,096	5452	389	0	5,841	82.31
Tamil Nadu	130,060	20293	1782	802	22877	17.59
Telangana	112,077	20353	5939	612	26904	24.00
Tripura	10,486	4175	2	2,117	6,294	60.02
<b>Uttar Pradesh</b>	<b>240,928</b>	<b>12071</b>	<b>1157</b>	<b>3354</b>	<b>16582</b>	<b>6.88</b>
Uttarakhand	53,483	26547	9885	1568	38000	71.05
West Bengal	88,752	7054	3772	1053	11879	13.38
A&N Islands	8,249	5613	1558	0	7171	86.93
Chandigarh	114	32	0	3	35	30.70
Dadra & Nagar Haveli	491	199	5	0	204	41.55
Daman & Diu	111	0	0	8	8	7.21
Lakshadweep	30	0	0	0	0	0.00
Puducherry	490	0	2	11	13	2.65
<b>Total</b>	<b>32,87,469</b>	<b>4,34,705</b>	<b>2,19,432</b>	<b>1,13,881</b>	<b>7,67,419</b>	<b>23.34</b>

Source: State Forest Departments

