

Forests & Protected Areas

List of Tables

- 10.1:** Recorded Forest Area in Uttarakhand
- 10.2:** Forest Cover Assessment
- 10.3:** District wise Forest Cover
- 10.4:** Forest Cover Change Matrix
- 10.5:** Altitude-wise Forest Cover
- 10.6:** Estimates of Tree Cover
- 10.7:** Growing Stock of Forest and Tree outside
- 10.8:** Details of Plantation
- 10.9:** Production of Timber
- 10.10:** Annual Production and Value of Resins and Tendu Leaves
- 10.11:** Fund Released under National Bamboo Mission
- 10.12:** Area under Joint Forest Management (JFMs) Programme
- 10.13:** Grants-in-Aids for Forests
- 10.14:** Fund Released under National Afforestation Programme
- 10.15:** Amount sanctioned for National Environment Awareness Campaign (NEAC)
- 10.16:** Area of Tree Plantations Raised under Twenty-Point Programme
- 10.17:** Estimate of Annually Burnt Forest Area due to Fire (2002-2008)
- 10.18:** Detail of National Parks, Wildlife Sanctuaries
- 10.19:** Area and year of Creation of Tiger Reserves
- 10.20:** Details of Biosphere Reserves
- 10.21:** Details of Conservations Reserves
- 10.22:** Details of World Heritage Site

Table 10.1: Recorded Forest Area in Uttarakhand

(in sq. km)

Forest	Year of Assessment		
	2011	2013	2015
Reserved Forests	24638	24643	26547
Protected Forest	9882	9885	9855
Un classed Forest	131	123	1568
Total Forest Area	34651	34651	38000
% of Forest Area to Geographical Area	64.79	64.79	71.05

Table 10.2: Forest Cover Assessment

(in sq. km.)

Year of Assessment	Total Forest Cover
2001	23354
2003	24460
2005	24442
2007	24495
2009	24495
2011	24496
2013	24508
2015	24240

Source (Tables 10.1-10.2): Forest Survey of India, Ministry of Environment, Forest and Climate Change, Govt. of India (State of Forest Report 2001, 2003, 2005, 2007, 2011, 2013, 2015).
<http://fsi.nic.in/> (accessed on 16.01.2016)

Table 10.3: District wise Forest Cover

(in sq. km.)

District	G.A.	2015 Assessment				% of G.A.	Change	Scrub
		VDF	MDF	OF	Total			
Almora	3,139	224	929	430	1583	50.43	6	10
Bageshwar	2,246	200	834	329	1363	60.69	-22	4
Chamoli	8,030	441	1561	679	2681	33.39	-19	5
Champawat	1,776	348	570	266	1184	67.04	-3	6
Dehradun	3,088	620	647	335	1602	51.88	-8	24
Pauri Garhwal	5329	519	1954	796	3269	61.34	-22	78
Haridwar	2360	27	301	260	588	24.92	-27	4
Nainital	4215	602	1939	463	3004	70.67	-70	12
Pithorgarh	7090	509	1013	580	2102	29.65	2	39
Rudraprayg	1984	241	591	298	1130	56.96	0	7
Tehri Garwal	3642	296	1239	621	2156	59.2	8	88
Udham Singh Nagar	2542	157	246	103	506	19.91	-40	2
Uttarkahi	8016	570	1778	724	3072	38.32	-73	28
Total	53483	4754	13602	5884	24240	43.32	-268	307

G.A.=Geographical Area; VDF=Very Dense Forest; MDF= Moderate Dense Forest; O F= Open Forest

Table 10.4: Forest Cover Change Matrix

(in sq. km)

2011 Assessment	2015 Assessment					Total 2013
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest (VDF)	4754	19	0	0	12	4785
Moderately Dense Forest	0	13543	318	0	250	14111
Open Forest	0	40	5458	20	94	5612
Scrub	0	0	0	262	0	262
Non Forest	0	0	108	25	28580	28713
Total 2013	4754	13602	5884	307	28936	53483
Net Change	-31	-509	272	45	223	

Source (Tables 10.3-10.4): Forest Survey of India, Ministry of Environment, Forest and Climate Change, Govt. of India (State of Forest Report 2011,2013, 2015).
<http://fsi.nic.in/> (accessed on 16.01.2016)

Table 10.5: Altitude-wise Forest Cover (2015 Assessment)

(in sq. km.)

Altitude Zone	VDF	MDF	OF	Total
0-500	548	1732	546	2826
500-1000	1035	2189	794	4018
1000-2000	1727	5477	2820	10024
2000-3000	1345	3074	1202	5621
3000-4000	99	1126	506	1731
>4000	0	4	16	20
Total	4754	13602	5884	24240

VDF=Very Dense Forest; MDF= Moderate Dense Forest; O F= Open Forest

Table 10.6: Estimates of Tree Cover

Year	Tree Cover	
	Area (sq. km.)	% of G.A.
2011	642	1.20
2013	703	1.32
2015	752	1.41

Table 10.7: Growing Stock of Forest and Tree outside

Geographical Area (Km ²)	Recorded Forest Area (Km ²)	Growing Stock (volume in million cum)		
		Forest	Tree Outside Forest	Total
53483	38000	440.718	19.56	460.278

Source (Tables 10.5-10.7): Forest Survey of India, Ministry of Environment, Forest and Climate Change, Govt. of India (State of Forest Report 2011,2013, 2015).
<http://fsi.nic.in/> (accessed on 16.01.2016)

Table 10.8: Details of Plantation

(in ha)

Year	Area Planted
2006-07	28934
2007-08	28829
2008-09	25727
2009-10	20945

Source : Indian Council Forestry Research Education (ICFRE), MoEF&CC, Govt. of India; State Forest Departments (Forestry Statistics India-2011).
<http://www.icfre.org/UserFiles/File/Institute-ICFRE/2013/Stat/Forestry-stat-07Mar13.htm>
 (accessed on 16.01.2016)

Table 10.9: Production of Timber(in '000 m³)

2006-07	2007-08	2008-09	2009-10
283.08	310.58	271.62	242.62

Table 10.10: Annual Production and Value of Resins

Year	Resins	
	Weight (100 Tons)	Value (Rs. Crore)
2006-07	198.19	46.33
2007-08	192.98	29.97
2008-09	187.52	30.81
2009-10	196.08	54.57

Table 10.11 : Fund Released under National Bamboo Mission

(Rs. in Lakh)

Year	Fund Released
2006-07	261.87
2007-08	387
2008-09	285.47
2009-10	79.5

Table 10.12: Area under Joint Forest Management (JFMs) Programme

Year	JFM Committees (in Nos.)	Area Under JFM (sq. km.)
2010	12089	5449.6

Source (Table 10.9-10.12) : Indian Council Forestry Research Education (ICFRE), MoEF&CC, Govt. of India State Forest Departments (Forestry Statistics India-2011).
<http://www.icfre.org/UserFiles/File/Institute-ICFRE/2013/Stat/Forestry-stat-07Mar13.htm>
 (accessed on 16.01.2016)

Table 10.13: Grants-in-Aids for Forests

(in Rs. Crore)

Year	Grant-in-Aids
2010-11	25.68
2011-12	25.68
2012-13	51.36
2013-14	51.36
2014-15	51.36
2010-2015	205.44

Table 10.14: Fund Released under National Afforestation Programme

(in Rs. Crore)

Year	Grant-in-Aids
2006-07	11.52
2007-08	12.39
2008-09	9.24
2009-10	7

Table 10.15: Amount sanctioned for National Environment Awareness Campaign (NEAC)

Year	Amount (Rs. in Lakh)
2004-05	3.49
2005-06	7.70
2006-07	3.79
2007-08	5.96
2008-09	5.65
2009-10	6.83

Source (Table 10.13-10.15) : Indian Council Forestry Research Education (ICFRE), MoEF&CC, Govt. of India State Forest Departments (Forestry Statistics India-2011).

<http://www.icfre.org/UserFiles/File/Institute-ICFRE/2013/Stat/Forestry-stat-07Mar13.htm>

(accessed on 16.01.2016)

Table 10.16: Area of Tree Plantations Raised under Twenty -Point Programme

Year	Area Covered under Public and & Forest Lands (in '000 ha)
2006-07	149.7
2007-08	146.43
2008-09	120.85
2009-10	27.16

Table 10.17: Estimate of Annually Burnt Forest Area due to Fire (2002-2008)

Recorded Forest Area (in km ²)	34651
Heavy and Moderate Forest Fires (in km ²)	1420.83
Heavy, Moderate and Mild Forest Fires (in km ²)	1868.26

Source (Tables 10. 16-10.17): Indian Council Forestry Research Education (ICFRE), MoEF&CC, Govt. of India; State Forest Departments (Forestry Statistics India-2011).
<http://www.icfre.org/UserFiles/File/Institute-ICFRE/2013/Stat/Forestry-stat-07Mar13.htm>
 (accessed on 16.01.2016)

Table 10.18: Detail of National Parks, Wildlife Sanctuaries

Name of District	Name of NPs /Sanctuaries/ Conservation Reserve	Year of Establishment	Area (km ²)
<i>National Parks = 6 Nos.</i>		<i>Wildlife Sanctuaries = 7 Nos.</i>	
National Parks			
Nainital	Corbett National Park	1936	520.82
Uttarkashi	Gangotri National Park	1989	2390.02
Uttarakashi	Govind National Park	1990	472.08
Chamoli	Nanda Devi National Park	1982	624.60
Dehradun	Rajaji National Park	1983	820.00
Chamoli	Valley of Flowers National Park	1982	87.50
Total			4915.02
Wildlife Sanctuaries			
Pithoragarh	Askot Wildlife Sanctuaries	1986	600.00
Almora	Binsar Wildlife Sanctuaries	1988	47.07
Uttarkashi	Govind Pashu Vihar Wildlife Sanctuaries	1955	485.89
Rudraprayag	Kedarnath Wildlife Sanctuaries	1972	975.20
Dehradun	Mussoorie Wildlife Sanctuaries	1993	10.82
Nainital	Nandhaur Wildlife Sanctuaries	2012	269.96
Pauri Garhwal	Sonanadi Wildlife Sanctuaries	1987	301.18
Total			2690.12
Grand Total			

Source: Wildlife Institute of India, MoEF&CC, Govt. of India
http://wii.gov.in/images//images/documents/n_parks_nov_2015.pdf
http://wii.gov.in/images//images/documents/wls_nov_2015.pdf (accessed on 16.01.2016)

Table 10.19: Area and year of Creation of Tiger Reserves

Tiger Reserves	Year of Creation	Area of the core / critical tiger habitat (in sq. km)	Area of the buffer / peripheral (in sq. km)	Total area (in sq. km)
Rajaji National Park	2015	255.63	819.54	1075.17
Corbet National Park	1973	821.99	466.32	1288.31
Total		1077.62	1285.86	2363.48

Table 10.20: Details of Biosphere Reserves

Name	Nanda Devi
Date of Notification	18/01/1988
Area (in sq. Km.)	5860.69
Location (State)	Uttarakhand

Table 10.21: Details of Conservations Reserves

Name	Area (km²)	Districts
Asan Wetlands	4.444	Dehradun
Jhilmi Jheel	37.84	Haridwar
Pawalgarah	58.25	Nainital
Nanda Devi Himalayan Bird	111.90	Nainital

Table 10.22: Details of World Heritage Site

Name	Area (km²)	Districts
Nanda Devi National Park	630.00	Chamoli
Valley of Flowers	87.50	Chamoli

Source (Tables 10.19-10.22): Wildlife Institute of India, MoEF&CC, Govt. of India.
http://wiienvis.nic.in/Database/trd_8222.aspx (accessed on 16.01.2016)