

## **FORESTS & PROTECTED AREAS**

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**Table 9.1: Recorded Forest Area (km<sup>2</sup>)**

<b>Year</b>	<b>2007</b>	<b>2009</b>	<b>2011</b>
Reserved Forests	1898	1898	1898
Protected Forest	33060	33130	33130
Un classed Forest	2075	2005	2005
Total Forest Area	37033	37033	37033
% of Forest Area to G.A.	66.52	66.52	66.52

**Source:** State of Forest Report 2009, 2011, 2013, Forest Survey of India, Dehradun

**Table 9.2: Forest Cover**

<b>Year</b>	<b>Assessment Year (Area km<sup>2</sup>)</b>
1987	12480
1989	12480
1991	12480
1993	12502
1995	12501
1997	12521
1999	13082
2001	14360
2003	14359
2005	14369
2007	14668
2009	14668
2011	14679
2013	14683

**Source:** State of Forest Report 2001, 2005, 2007, 2009, 2011, 2013, Forest Survey of India, Dehradun  
<http://www.fsi.org.in/>

**Table 9.3:** Forest Area According to Legal Classification (Hectares)

Year	Forest under the control of forest department					Forests not under the control of forests department	Total (Col 6+7)
	Reserved forests	Protected forests	Unclassified forests	Others forests	Total		
2000-01	1,89,613	33,04,277	97,657	36,949	36,28,496	74,790	37,03,286
2001-02	1,89,613	33,04,277	97,657	36,949	36,28,496	74,790	37,03,286
2002-03	1,89,613	33,04,277	97,657	36,949	36,28,496	74,790	37,03,286
2003-04	1,89,613	33,04,277	97,657	36,949	36,28,496	74,790	37,03,286
2004-05	1,89,613	33,04,277	97,657	36,949	36,28,496	74,790	37,03,286
2005-06	1,89,613	33,04,277	97,657	36,949	36,28,496	74,790	37,03,286
2006-07	1,89,613	33,04,277	97,657	36,949	36,28,496	74,790	37,03,286
2007-08	1,89,786	33,05,973	97,668	36,949	36,28,376	75,000	37,05,376
2008-09	1,89,786	33,12,970	88,634	36,949	36,28,339	74,958	37,03,297
2009-10	1,89,786	33,12,970	88,634	36,949	36,28,339	74,958	37,03,297
2010-11*	1,89,786	33,12,970	88,634	36,949	36,28,339	74,958	37,03,297
2011-12*	1,89,786	33,12,970	88,634	36,949	36,28,339	74,958	37,03,297
2012-13*	1,89,613	33,12,289	88,634	36,949	36,27,485	75,812	37,03,297

**Source:** Forest Department, Himachal Pradesh.  
Statistical Year Book of Himachal Pradesh 2013-14  
\*(Provisional)

**Table 9.4:** Recorded Forest Area in Himachal Pradesh (As per ISFR) (Km<sup>2</sup>)

Year	2009	2011	2013
Total forest Area	37033	37033	37033
Reserved Forest	1898	1898	1898
Protected Forest	33060	33130	33130
Unclassified Forest	2075	2005	2005

**Source:** ISFR-2013, Forest Survey of India.  
Statistical Year Book, India 2015  
\* the figure includes 295 km<sup>2</sup> of proposed RF and 1838 km<sup>2</sup> of deemed RF  
(Vested Forest and Ecologically Fragile Land)

**Table 9.5:** District wise Forest Area- 2010-11\*

District	Geographical area by professional survey (Km <sup>2</sup> )	Forest Area (Km <sup>2</sup> )	% of Forest area to geographical area in the District	% of Total Forest area in the District
Bilaspur	1167	428	36.7	1.1
Chamba	6522	5030	77.1	13.6
Hamirpur	1118	219	19.6	0.6
Kangra	5739	2842	49.5	7.7
Kinnaur	6401	5093	79.6	13.7
Kullu	5503	4952	89.9	13.4
Lahaul & Spiti	13841	10133	73.2	27.4
Mandi	3950	1860	47.1	5.0
Shimla	5131	3418	66.6	9.2
Sirmaur	2825	1843	65.2	5.0
Solan	1936	727	37.6	2.0
Una	1540	487	31.6	1.3
<b>H.P.</b>	<b>55673</b>	<b>37033</b>	<b>66.5</b>	<b>100.00</b>

Source: Forest Department, Himachal Pradesh.  
Statistical Year Book of Himachal Pradesh 2012 -13  
\*(Provisional)

**Table 9.6:** Species-Wise Area, Growing Stock and Annual Yield - 2010-11

Name of species	Forest area (Km <sup>2</sup> )	Growing stock ('000 Cu.m.)	Annual yield Prescribed by volume ('000 Cu.m.)
Deodar	890	16,517	1,736
Kail	698	13,365	1,320
Chil (Chir Pine)	1,346	12,481	981
Fir/spruce	1,029	39,364	2,430
Sal	190	4,852	280
Ban-Oak	596	5,949	156
Mohr-Oak	32	201	N.P
Kharsu-Oak	118	1,717	21
Maple	N.A	298	12
Horse chestnut	N.A	N.A	N.P
Walnut	N.A	126	2
Bird-cherry	N.A	15	N.P
Other Broad Leaves Species	533	5,217	30
<b>Total</b>	<b>5,432</b>	<b>1,00,102</b>	<b>6,968</b>

Source: Forest Department, Himachal Pradesh.  
N.P: Not Prescribed

**Table 9.7:** Two Year Comparison of Out-Turn and Value of Minor Forest Produce

Minor Forest Products	Unit	Year-wise outturn and value of minor forest produce			
		2010-11		2011-12	
		Out-turn	Value (₹ In '000)	Out-turn	Value (₹ In '000)
Bamboo	Hect.	416	7,693	675	2901
Resin	Tonne	5847	1,03,258	5825	1,02,457
Bhabbar Grass	"	211	103	524	332
Medicinal Herbs	"	1241	28,860	694	33,190
Khair		1991	79,305	971	41,981
Other Minor Products	"	-	2658	-	2684
<b>Total</b>	"	-	<b>2,21,877</b>	-	<b>1,83,545</b>

**Source:** Forest Department, Himachal Pradesh

\*Quantity & Value shown does not include the information of medicinal herbs extracted/sold through Panchyats and value is estimated.

**Table 9.8:** Two Year Comparison of Out -Turn and Value of Major Forest Produce

Minor Forest Products	Unit	Year-wise outturn and value of major forest produce			
		2010-11		2011-12	
		Out-turn (Cubic Mts.)	Value (Rs. In'000)	Out-turn (Cubic Mts.)	Value (Rs. In '000)
Shisham	"	2,363	51,190	925	21,933
Sal	"	16,367	1,77,402	7,106	1,06,284
Deodar	"	8,940	4,25,758	12,825	6,10,778
Chil (Chir Pine)	"	1,01,192	15,55,523	50,635	9,43,330
Kail	"	29,588	11,25,646	32,510	12,36,810
Fir/Spruce	"	58,894	10,17,158	31,890	7,15,516
Other Broad leaves	"	28,060	96,611	10,166	47,821
Total Industrial wood	"	2,45,404	44,49,288	1,46,057	36,82,472
Fuel wood	"	979	1363	42	122

**Source:** Forest Department, Himachal Pradesh.

**Table 9.9:** Forests Distribution by Canopy Density

<b>Himachal Pradesh</b>	<b>Area (km<sup>2</sup>)</b>	<b>Percentage</b>
Forest Area Legally Defined	37033	100.0
Very Dense Forests (crown density > 70%)	3224	8.7
Moderately Dense Forests (crown density 40% < 70%)	6381	17.2
Open Forest (crown density 10-40%)	5074	13.7
Forest blanks with crown density < 10%	5978	16.2
Un-culturable barren land (alpine pasture, snow area etc.)	16376	44.2

**Source:** Himachal Forest Statistics -2013

**Table 9.10:** Forests as Per Crown Density (SFI-FSI) Area in km<sup>2</sup>

<b>Year of Survey</b>	<b>Dense Forests (Crown density &gt; 40%)</b>	<b>Open Forests (Crown density 10% - &lt; 40%)</b>	<b>Total Forest Cover</b>	<b>Total Forests Area</b>
1991	8911	2869	11780	37591
1993	9565	2937	12502	35407
1995	9565	2936	12501	35518
1997	9560	2961	12521	36986
1999	9120	3962	13082	37033
2001	10429	3931	14360	37033
2003	8976	5377	14353	37033
2005	9610	5056	14666	37033
2009	9607	5061	14668	37033
2011	9605	5074	14679	37033

**Source:** Himachal Forest Statistics -2013

**Table 9.11:** Forest Areas (2011-12)

District	Geographical area by professional survey	Legal Forest area (km <sup>2</sup> )	% of Forest area to Geographical area in the District	% of Total Forest Area of the State
Bilaspur	1167	428	36.7	1.1
Chamba	6528	5030	77.1	13.6
Hamirpur	1118	219	19.6	0.6
Kangra	5739	2842	49.5	7.7
Kinnaur	6401	5093	79.6	13.8
Kullu	5503	4952	89.9	13.4
Lahaul & Spiti	13835	10133	73.2	27.4
Mandi	3950	1860	47.1	5.0
Shimla	5131	3418	66.6	9.2
Sirmaur	2825	1843	65.2	5.0
Solan	1936	728	37.6	1.9
Una	1540	487	31.6	1.3
<b>H.P.</b>	<b>55673</b>	<b>37033</b>	<b>66.5</b>	<b>100.0</b>

Source: Himachal Forest Statistics -2013

**Table 9.12:** Cases Approved Under Forest Conservation Act up to 31-01-2014

Proposals	Area in ha.	No. of Proposals
PWD Roads	1760.664	714
Other Roads	440.426	58
HEP	4281.961	221
Mining	827.182	52
R/Lines	13.979	4
Irrigation	145.908	76
T/Lines	2943.037	123
Other	1237.291	374
<b>Total</b>	<b>11650.448</b>	<b>1622</b>

Source: Himachal Forest Statistics -2013

**Table 9.13:** Sources of Forest Revenue

Name of Produce	Revenue collected (Rs. In lac.)		
	2009-10	2010-11	2011-12
Timber and other Forest Production removed from forests by Govt. Agency	17.76	106.63	22.18
Sale of timber and other forest produce removed from forests by consumer/purchaser	3076.35	3601.99	3166.91
Drift and waif wood	1.09	0	0
Sale of timber and other forest produce removed from forests other than HPSFC	1922.62	1148.35	5565.38
Minor Forest Produce including Medicinal Plants	104.61	6.11	11.18
Grazing and Grass Cutting	12.04	12.05	12.66
Miscellaneous Products	2076.71	1668.70	1875.14
Revenue from forests not managed by Government	0.01	0.20	1.03
<b>Total</b>	<b>7211.22</b>	<b>6544.03</b>	<b>10654.48</b>

Source: Himachal Forest Statistics -2013



**Table 9.14:** Forest Revenue and Expenditure (Rs. in lac.)

Year	Revenue	Expenditure				Capital Outlay (FD)	Total	Net surplus over Non- plan expenditure
		Non- plan	Plan					
			Forest Deptt.	Project				
1990-91	1451	1961	1281	2203	124	5569	(-) 510.34	
1991-92	2430	2091	1227	3029	378	6725	339	
1992-93	2343	2308	1355	3456	481	7600	35	
1993-94	6536	2617	3495	1200	255	7567	3919	
1994-95	4711	2887	3806	1574	257	8524	1824	
1995-96	4494	3378	3968	2035	226	9607	1116	
1996-97	4119	4168	4060	2403	297	10928	(-) 49	
1997-98	4115	4541	4393	2253	401	11588	(-) 426	
1998-99	998	9161	6125	2419	594	18299	(-) 8163	
1999-00	68937	10584	6594	2886	568	20632	56353	
2000-01	1654	13296	5716	3150	353	22515	(-)11642	
2001-02	2898	12936	5509	3176	329	21952	(-) 10038	
2002-03	3152	26001	5577	2684	318	34580	(-) 22849	
2003-04	7893	9939	2109	2928	342	15318	(-) 2246	
2004-05	10217	9500	2676	3082	325	15583	717	
2005-06	14963	9284	6373	2878	748	19283	5679	
2006-07	4555	10051	6991	5296	579	22917	(-)5496	
2007-08	5360	12527	6727	5278	633	25165	(-)7167	
2008-09	5540	19174	4957	6202	1140	31473	(-)13634	
2009-10	7211	21851	4592	7115	1109	34667	(-)14640	
2010-11	6544	22911	4046	9014	771	36742	(-) 16367	
2011-12	10654	23835	4357	8993	522	37707	(-)13181	

**Source:** Annual Administration Reports.  
Himachal Forest Statistics -2013

**Table 9.15:** Forest Plantations Raised From 1950-51 Onwards by Species (Area in ha.)

Name of species	Area Planted from 1950-51 to 2008-09 (ha.)	Plantation raises during		Total area of Plantations as on 31-03-2011
		2009-10	2010-11	
Deodar	137301	3425	2620	143346
Kail	12842	105	119	13066
Fir/Spruce	18248	109	68	18425
Chil	282415	743	572	283730
Other Conifer	113	-	-	113
Walnut	4001	72	38	4111
Willow	10407	135	77	10619
Khair	173641	1178	1425	176244
Shisham	21390	829	682	22901
Bamboo	8930	1242	754	10928
Mulberry	1378	-	-	1378
Poplar	14958	127	51	15136
Robinia	51463	765	387	52615
Leucenia	4415	548	232	5195
Kachnar	2513	711	503	3727
Other Broad Leaf Species	282761	9046	8692	300499
<b>Total</b>	<b>1026776</b>	<b>19035</b>	<b>16220</b>	<b>1062031</b>

**Source:** Plantation Brochures  
Himachal Forest Statistics -2013

**Table 9.16:** Detail of National Parks, Wildlife Sanctuaries and Conservation Reserves

Name of District	Name of NPs /Sanctuaries/ Conservation Reserve	Final Area after Rationalization (km <sup>2</sup> )	Proposed area whose notification is still to be issued
<i>National Parks= 5 Nos.</i>		<i>Wildlife Sanctuaries = 26 Nos.</i>	<i>Conservation Reserves= 3 Nos.</i>
<b>National Parks</b>			
Kullu	Great Himalayan NP	-	905.40
Lahaul-Spiti	Pin Valley NP	-	675.00
Kullu	Khirganga NP	-	705.00
Kullu	Inderkila NP	-	94.00
Sirmour	Simbalwara NP	27.88	-
<b>Total</b>		<b>27.88</b>	<b>2379.40</b>
<b>Sanctuaries</b>			
Mandi	Bandli	32.11	-
Solan	Chail	16.00	-
Lahaul & Spiti	Chandra Tal	38.56	-
Sirmour	Churdhar	55.52	-
Shimla	Darangha ti	171.50	-
Kangra	Dhauladhar	982.86	-
Chamba	Gangul Siyabehi	108.40	-
Kullu	Kais	12.61	-
Chamba	Kalatop Khajjar	17.17	-
Kullu	Kanawar	107.29	-
Kulu	Khokhan	14.94	-
Lahaul & Spiti	Kibber	2220.12	-
Chamba	Kugti	405.49	-
Kinnaur	Lapa Asrang	31.00	-
Solan	Majathal	30.86	-
Kullu	Manali	29.00	-
Kullu & Mandi	Nargu	132.37	-
Kangra	Pong Dam	207.59	-
Kinnaur	Rakchham Chitkul	304.00	-
Sirmour	Renukaji	-	3.87
Kinnaur	Rupi Bhaba	503.00	-
Chamba	Sechu Tuan Nala	390.29	-
Shimla	Shimla Water Catchment	10.00	-
Mandi	Shikari Devi	29.94	-
Shimla	Talra	46.48	-
Chamba	Tundah	64.00	-
<b>Total</b>		<b>5961.10</b>	<b>3.87</b>

<b>Conservation Reserves:</b>			
Solan	Darlaghat	0.67	-
Bilaspur	Naina Devi	17.01	-
Solan	Shilli	1.49	-
<b>Total</b>		19.17.	-
<b>Grand Total</b>		<b>6008.15</b>	<b>2383.27</b>

Source: Himachal Forest Statistics -2013

**Table 9.17:** Zoo Nature Park, Pheasantry etc

<b>Name of Zoo/Pheasantry/Rescue &amp; Rehabilitation Centre/ Bird Park</b>	<b>Date of Establishment</b>	<b>Live Stock Available</b>
<b>Zoo/Nature Park</b>		
HP Nature Park, Kufri	17 <sup>th</sup> May, 1992	127
Renukaja Lion Safari-cum-Zoo	1958	106
Dhauladhar Nature Animal Park, Gopalpur	1992	162
Rewalsar	1 <sup>th</sup> April, 1983	66
<b>Pheasantaries</b>		
Sarahan	1984	28
Khariun (Chail)	1989-90	73
Blossom (Chail)	1987-88	12
<b>Rescue &amp; Rehabilitation Centres</b>		
Tutikandi	1957	17
Manali	1984-85	92
<b>Bird Park</b>		
Chaura Maidan Rajbhavan	8 <sup>th</sup> August, 1994	39

Source: Himachal Forest Statistics -2013

**Table 9.18:** Progress of Joint Forest Management (JFM)

(as on 01-01-2004 and 17-08-2010)

<b>JFM Committees</b>		<b>Area Under JFM (ha)</b>		<b>Total Families in JFM(No.)</b>	
<b>2004</b>	<b>2010</b>	<b>2004</b>	<b>2010</b>	<b>2004</b>	<b>2010</b>
835	1109	290922.8	424649	259069	55000

Source: Annual Report (2003-2004), Ministry of Environment & Forests, Forest Protection Division, Government of India