

GOVT. OF HIMACHAL PRADESH

FOREST DEPARTMENT



**WORKING PLAN FOR THE FORESTS
OF**

KINNAUR FOREST DIVISION

(01-04-2019 TO 31-03-2029)

VOLUME -II

BY

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Under the guidance of

***Addl. Pr. CCF Working Plan &
Settlement, Mandi
Himachal Pradesh***

***Conservator of Forests
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	a) Biodiversity assessment carried out	Detail report prepared not attached but Separate volume prepared		
	b) Regeneration survey	Not required		

Appendix -I					
Detail of Forests transferred from Wildlife Division Sarahan to Kinnaur Forest Division					
Sr. No.	Name of Forest	Compartment No.		Working Circle	Area (in hac.)
		Old No.	New No.		
1	2	3	4	5	6
A) Rupi Bhaba, Sangla and Lippa Asrang Wild Life Sanctuary					
Part –I Rupi Bhaba Sanctuary					
	Demarcated Protected Forest				
1	Rushnang	C-87	20	REH. WC	196.27
2	Rushnang	C-88	21	FSWC	242
3	Dutrang	C-89	22	REH. WC	124.65
4	Kampunang	C-90	23	DK WZ	9.3
5	Yeti	C-91	24	REH. WC	510.7
6	Saknathpa	C-92	25	REH. WC	150
	G Total DPF				1232.92
	Undemarcated Protected Forest				
1	Rupi	UPF 2	2	DK WZ	17.5
2	Rupi	UPF 6	4	DK WZ	15.5
3	Shorang	UF -14	5	DK WZ	40
4	Rupi	UPF - 1	1	FSWC	50
5	Rupi	UPF - 4	3	FSWC	15
6	Shorang	UF 15	6	REH. WC	90
7	Shorang	UF 16	7	REH. WC	35
8	Kampunng (darchi)	UPF 27	9	FSWC	200
9	Kampunng (darchi)	UPF 28	10	FSWC	200
10	Kampunng (darchi)	UPF 29	11	FSWC	350
11	Rushmang	UPF 32		FSWC	220
12	Saknathpa	UPF - 26	8	REH. WC	200
13	Dutrang	UPF - 30	12	REH. WC	150
14	Dutrang	UPF - 31	13	REH. WC	420
15	Rushmang	UPF – 32	14	FSWC PB U	220
	G Total UPF				2223
G. Total Part –I					3455.92

Part-II Rakcham Chitkul Sanctuary					
Demarcated Protected Forest					
1	C-157	Bassaring	63	DKWC DZ	234.72
2	C-163	Seringche	67	DKWC DZ	8.5
3	C-162 (a)	Seringche	66 (a)	REH. WC	42.49
4	C-162 (b)	Seringche	66 (b)	REH. WC	50.6
5	C-162 (c)	Seringche	66 (c)	REH. WC	93.08
6	C-160	Rakcham	64	REH. WC	2.43
7	C-161	Rakcham	65	REH. WC	19.83
		G total			451.65
Undemarcated Protected Forest					
1	UPF – 159 (Batseri beat)			---	3769.38
2	UPF – 160 (Batseri beat)			---	873.64
3	UPF – 160 (Rakchham Beat)			---	4007.74
Total					8650.76
G. Total Part –II					9102.41
G Total Part –I and Part – II					12558.33

Appendix- II

List of UPF Forest converted into New DPFs						
Name of Range	Sr. No.	Name of Forest	Compartment No.	Area in Ha.	Allotment to Working Circle	Notification No. & Date
1	2	3	4	5	6	7
Kilba	1	Tiuden Kilba	NDPF - 1	268.31	REH. WC	Ft 5-2/1994 dated 13/11/1995
Kilba	2	Wadang	NDPF - 2	51.46	REH. WC	Ft 7-13/87 dated 09/02/1988
Kilba	3	Baturi Kanda	NDPF - 3	65.56	REH. WC	Ft 5-2/1994 dated 13/11/1995
Kilba	4	Ananti Dhar	NDPF - 4	137.02	REH. WC	FF-B-f (5)2/93 Dated 16/08/1993
Kilba	5	Monorang	NDPF - 5	185.27	REH. WC	Ft 5-2/1994 dated 13/11/1995
Kilba	6	Kamru Chanso	NDPF - 6	74.4	REH. WC	Ft 5-2/1994 dated 13/11/1995
Kilba	7	Rutrang	NDPF - 7	12.18	REH. WC	Ft 5-2/1994 dated 13/11/1995
Kilba	8	Punang Kanda (Khas)	NDPF - 8	11.94	REH. WC	Ft 5-2/1994 dated 13/11/1995
Kilba	9	Punang (Nayardim)	NDPF - 9	165.31	REH. WC	Ft 5-2/1994 dated 13/11/1995
Total				971.45		

Appendix-III						
Range wise area statement of forest (showing new and old compartment numbers) area in hac. and allotment to different working circle						
a) List of Demarcated Protected Forest						
Range	Sr. No.	Name of forest	Old DPF No.s.	New DPF No.	Area in Ha.	Allotment
1	2	3	4	5	6	7
BHABA NAGAR	1	Kandlu-Chhonda (Chaura)	68(a)-I	1 (a)	43.70	DK WZ PB III
	2	Kandlu-Chhonda (Chaura)	68(a)-II	1 (b)	65.56	FS WC PB II
	3	Kandlu-Chhonda (Chaura)	68(b) -I	1 (c)	285.85	FS WC PB U
	4	Kandlu-Chhonda (Chaura)	68(b)-II	1 (d)	62.60	FS WC PB I
	5	Kundlu Chaunda (Chaura)	C-68 (b) III	1 (e)	24.28	REH. WC
	6	Kandlu-Chhonda (Chaura)	68(c)	1 (f)	167.13	DK WZ PB I
	7	Kundlu Chaunda (Chaura)	C-69 (a)	2 (a)	20.23	REH. WC
	8	Kandlu-Chhonda (Khuni)	C-69(b)	2 (b)	51.00	FS WC PB I
	9	Kandlu-Chhonda (Khuni)	69 (c)	2 (c)	69.6	DK WZ PB IV
	10	Bundo Kutang	C- 73	6	375.95	FS WC PB U
	11	Rupi Shorang II	C-98	30	27	REH. WC
	12	Rupi Shorang I	C-99	31	2.83	REH. WC
	13	Ramni	130(a)-I	36 (a)	85.93	FS WC PB I
	14	Ramni	130(a)-II	36 (b)	51.80	DK WZ PB I
	15	--do--	130(a)-III	36 (c)	97.00	DK WZ PB I
	16	--do--	130(b)	36 (d)	269.93	FS WC PB U
	17	Jani	131	37	113.30	DK WZ PB II
	18	Lisnam	132(a)	38 (a)	93.50	DK WZ PB III
	19	Lisnam	C-132 (b)	38 (b)	110.5	REH. WC

	20	Maneothi Shilani	NC-1	163	83.69	REH. WC
	21	Safurti Kuf	NC-2	164	58.64	REH. WC
	22	Chaura	NC-3	165	66.36	REH. WC
	23	Nigulsari	NC-4	166	40.21	REH. WC
	24	Thach	NC-5	167	51.86	REH. WC
	25	Ramni	NC-16	178	7.37	REH. WC
	26	Jani Kanda	NC-17	179	28.2	REH. WC
	27	Lisnam	NC-18	180	35.43	REH. WC
	28	Sholtu	NC-19	181	18.43	REH. WC
		Total			2407.88	

b) List of Un-Demarcated Protected Forest						
BHABA NAGAR	1	Rupi	UPF - 1	1	50	FS WC PB U
	2	Rupi	UPF 2	2	17.50	DK WZ PB I
	3	Rupi	UPF - 4	3	15	FS WC PB I
	4	Rupi	UPF 6	4	15.50	DK WZ PB I
	5	Shorang	UPF -14	5	40.00	DK WZ PB II
	6	Shorang	UPF 15	6	90	REH. WC
	7	Shorang	UPF 16	7	35	REH. WC
	8	Lisnam	UPF-46	28	387	FS WC PB U
	9	--do--	UPF-47	29	305	FS WC PB U
	10	Janni	UPF-48	30	400	FS WC PB U
	11	Ramni	UPF-49	31	550	FS WC PB II
	12	Ramni	UPF 50	32	470	REH. WC
		Total			2375	
		G Total			4782.88	
a) List of Demarcated Protected Forest						
KALPA	1	Barang	C-171(a)	75 (a)	21.85	DK DZ PB I
	2	Barang	C-171(b)	75 (b)	29.14	DK DZ PB II
	3	Barang	C-172 (a)	76 (a)	38.45	REH. WC
	4	Barang	C-172(b)	76 (b)	36.42	DK DZ PB II
	5	Barang	C-173	77	13.76	DK DZ PB III
	6	Barang	C-174(a)	78 (a)	28.33	DK DZ PB III
	7	Barang	C-174 (b)	78 (b)	67.99	REH. WC
	8	Barang	C- 175 (a)	79 (a)	97.93	FS WC PB II
	9	Barang	C-175 (b)	79 (b)	53.42	DK DZ PB III
	10	Tangling	C-176	80	131.5	REH. WC
	11	Tangling	C-177	81	232.3	REH. WC
	12	Tangling	C-178	82	112.1	NWC
	13	Tangling	C-179	83	117.75	NWC
	14	Tangling	C-180	84	232.30	NWC
	15	Purbani	C-181(a)	85 (a)	69.20	REH. WC
	16	Purbani	C-181(b)	85 (b)	69.20	REH. WC
	17	Purbani	C-181(c)	85 (c)	105.60	REH. WC
	18	Purbani	C-182(a)	86 (a)	26.70	REH. WC
	19	Purbani	C-182(b)	86 (b)	21.85	REH. WC
	20	Purbani	C-183(a)	87 (a)	77.70	REH. WC
	21	Purbani	C-183(b)	87 (b)	12.55	REH. WC
	22	Purbani	C-184(a)	88 (a)	102.40	REH. WC
	23	Purbani	C-184(b)	88 (b)	63.13	REH. WC

	24	Purbani	C-184(c)	88 (c)	69.20	REH. WC
	25	Purbani	C-185	89	123.83	REH. WC
	26	Kashang-II	C-233	137	23.88	REH. WC
	27	Kashang-I	C-234(a)	138 (a)	87.00	REH. WC
	28	--do--	C-234(b)	138 (b)	79.72	REH. WC
	29	Kashang-I	C-234 ©	138 (c)	26.71	NWC
	30	Pangi-I	C-235	139	48.56	REH. WC
	31	Pangi-II	C-236	140	42.08	REH. WC
	32	Boktu	C-237	141	91.86	REH. WC
	33	Boktu	C- 238	142	66.37	DK DZ PB I
	34	Telangi	C-239	143	192.63	REH. WC
	35	Telangi	C- 240 (a)	144 (a)	74.46	DK DZ PB I
	36	Telangi	C-240 (b)	144 (b)	37.23	NWC
	37	Duni	C-241	145	89.03	NWC
	38	Chini	C242	146	162.68	NWC
	39	Chini	C- 243 (a)	147 (a)	16.2	DK DZ PB I
	40	Chini	C- 243 (b)	147 (b)	18.6	DK DZ PB II
	41	Rogi I	C- 244	148	17	DK DZ PB II
	42	Roghi II	C-245 (a)	149 (a)	25.5	REH. WC
	43	Roghi III	C-245 (b)	149 (b)	3.24	REH. WC
	44	Kastiarang	C-246	150	32.37	DK DZ PB II
	45	Kastiarang	C-247	151	206.39	REH. WC
	46	Runang	C-248 (a)	152 (a)	74.46	REH. WC
	47	Runang	C-248 (b)	152 (b)	63.53	DK DZ PB III
	48	Yulla Miru I	C-249	153	23.07	REH. WC
	49	Yulla Miru II	C-250	154	3.24	REH. WC
	50	Yulla-Miru-III	C-251	155	7.28	REH. WC
	51	Yulla-Miru-IV	C-252	156	38.04	REH. WC
	52	Yulla-Miru-V	C-253	157	16.19	REH. WC
	53	Urni-I	C-254	158	6.07	REH. WC
	54	Urni II	C-255 (a)	159 (a)	30.75	DK DZ PB I
	55	Urni II	C-255 (b)	159 (b)	76.08	DK DZ PB I
	56	Chagaon IV	C-256	160	35.61	REH. WC
	57	Chagaon III	C-257	161	17.4	DK DZ PB III
	58	Chagaon II	C-258 (a)	162 (a)	69.2	REH. WC
	59	Chagaon I	C-258 (b)	162 (b)	144.07	REH. WC
	60	Rang Runang	NC-21	183	97.57	REH. WC
	61	Putka	NC-23	185	114.96	FS WC PBU
	62	Goli	NC-24	186	113.18	REH. WC
	63	Telgancho	NC-25	187	58.61	REH. WC

	64	Gunshanang	NC-26	188	141.76	REH. WC
	65	Rangley	NC-27	189	81.68	REH. WC
	66	Tharu	NC-28	190	286.38	REH. WC
	67	Kashti	NC-29	191	121.98	REH. WC
	68	Uchaden	NC-30	192	31.87	REH. WC
	69	Bragdo	NC-31	193	36.99	REH. WC
	70	Shakamo	NC-32	194	30.53	REH. WC
	71	Uravaning	NC-33	195	43.93	REH. WC
	72	Rushanang	NC-34	196	220.59	REH. WC
		G Total DPF			5281.13	
b) List of Un-Demarcated Protected Forest						
	1	Chini	UF 33	15	225	REH. WC
	2	Duni	UF 34	16	110	REH. WC
	3	Boktu	UF 35	17	110	REH. WC
		G Total UPF			445	
		G Total			5726.13	
a) List of Demarcated Protected Forest						
KATGAON	1	Rushnang	C-87	20	196.27	REH. WC
	2	Rusnang	C-88	21	242.00	FSWC PB U
	3	Dutrang	C-89	22	124.65	REH. WC
	4	Kampunang	C-90	23	9.30	DK WZ PB I
	5	Yeti	C-91	24	510.7	REH. WC
	6	Saknathpa	C-92	25	150	REH. WC
		G Total DPF			1232.92	
b) List of Un-Demarcated Protected Forest						
KATGAON	1	Saknathpa	UPF - 26	8	200	REH. WC
	2	Kampunng (Darchi)	UPF 27	9	200.00	FSWC PB U
	3	Kampunng (Darchi)	UPF 28	10	200.00	FSWC PB I
	4	Kampunng (Darchi)	UPF 29	11	350.00	FSWC PB II
	5	Dutrang	UPF - 30	12	150	REH. WC
	6	Dutrang	UPF - 31	13	420	REH. WC
	7	Rushmang	UPF 32	14	220.00	FSWC PB U
		Total			1740	
		G Total			2972.92	
a) List of Demarcated Protected Forest						
KILBA	1	Punang	C-133	39	231.9	REH. WC
	2	Punang	C-134 a	40 (a)	66.75	DK WZ PB I
	3	Punang	C-134 b	40 (b)	48.95	DK WZ PB II
	4	Phinla-I	C-135	41	64.35	FS WC PB U
	5	Phinla-II	C-136 a	42 (a)	37.25	DK WZ PB IV

	6	Phinla	C-136 b	42 (b)	53.40	DK WZ PB III
	7	Junpan	C-137 (a)	43 (a)	34.4	REH. WC
	8	Junpn	C-137 b	43 (b)	60.30	DK WZ PB III
	9	Tikru - Wasankan	C-138 a	44 (a)	75.70	DK WZ PB III
	10	--do--	C-138 b	44 (b)	50.60	DK WZ PB III
	11	Tiuden	C-139 a	45 (a)	49.75	DK WZ PB III
	12	Tiuden	C-139 b	45 (b)	75.70	DK WZ PB II
	13	Tueden	C-139 ©	45 (c)	50.2	REH. WC
	14	Kilba	C-140	46	98.75	REH. WC
	15	Kanahi	C-141	47	115.75	REH. WC
	16	Kumkumi	C-142	48	68.40	DK DZ PB I
	17	Sapni	C-143	49	55.45	DK DZ PB II
	18	Sapni	C-144	50	17.80	DK DZ PB III
	19	Baturi	C-145	51	37.65	DK DZ PB III
	20	Baturi	C-146	52	36.00	DK DZ PB I
	21	Baturi	C-147	53	50.20	DK DZ PB I
	22	Baturi	C-148	54	39.65	DK DZ PB I
	23	Brua	C-149	55	17.40	DK DZ PB II
	24	Brua	C-150	56	65.95	REH. WC
	25	Shoang	C-151 (a)	57 (a)	129.9	REH. WC
	26	Shoang	C-151 (b)	57 (b)	147.3	REH. WC
	27	Chansu	C-152 (a)	58 (a)	97.5	REH. WC
	28	Chansu	C-152 (b)	58 (b)	75.7	REH. WC
	29	Chidu	C-153	59	144.88	FS WC PB U
	30	Limsanthang	C-154 (a)	60 (a)	39.65	DK DZ PB I
	31	Limsanthang	C-154 (b)	60 (b)	35.60	DK DZ PB II
	32	Limsanthang	C-154 (c)	60 (c)	40.87	DK DZ PB I
	33	Rukti Hurba	C-155	61	177.25	REH. WC
	34	Rukti Hurba	C-156	62	177.25	REH. WC
	35	Bassaring	C-157	63	234.72	DK DZ PB II
	36	Rakcham	C-160	64	2.43	REH. WC
	37	Rakcham	C-161	65	19.83	REH. WC
	38	Seringche	C-162 (a)	66 (a)	42.49	REH. WC
	39	Seringche	C-162 (b)	66 (b)	50.60	REH. WC
	40	Seringche	C-162 (c)	66 (c)	93.08	REH. WC
	41	Seringche	C-163	67	8.50	DK DZ PB III
	42	Pawanang I	C-164	68	2.83	REH. WC
	43	Pawanang II	C-165	69	78.1	REH. WC
	44	Wadang	C-166	70	119.38	REH. WC
	45	Ralli	C-167	71	260.60	DK DZ PB II

	46	Mebar	C-168	72	212.05	REH. WC
	47	Meber	C-169 a	73 (a)	21.04	DK DZ PB III
	48	Meber	C-169 b	73 (b)	24.68	DK DZ PB III
	49	Barang	C-170 a	74 (a)	55.04	DK DZ PB III
	50	Barang	C-170 b	74 (b)	23.88	DK DZ PB III
	51	Punang Kanda	NC-20	182	48.81	REH. WC
	52	Rally	NC-22	184	77.7	REH. WC
		G T otal DPF			3943.91	
KILBA	1	Tiuden Kilba		NDPF - 1	268.31	REH. WC
	2	Wadang		NDPF - 2	51.46	REH. WC
	3	Baturi Kanda		NDPF - 3	65.56	REH. WC
	4	Ananti Dhar		NDPF - 4	137.02	REH. WC
	5	Monorang		NDPF - 5	185.27	REH. WC
	6	Kamru Chanso		NDPF - 6	74.4	REH. WC
	7	Rutrang		NDPF - 7	12.18	REH. WC
	8	Punang Kanda		NDPF - 8	11.94	REH. WC
	9	Punang		NDPF - 9	165.31	REH. WC
		G T otal NDPF			971.45	
b) List of Un-Demarcated Protected Forest						
KILBA	1	Brua	UF 36	18	252	REH. WC
	2	Brua	UF 37	19	412	REH. WC
	3	Brua	UF 38	20	245	REH. WC
	4	Brua	UF 39	21	235	REH. WC
	5	Baturi	UF 40	22	155	REH. WC
	6	Baturi	UF 41	23	75	REH. WC
	7	Tuedan	UF 42	24	182	REH. WC
	8	Junpan	UF 43	25	242	REH. WC
	9	Phinla	UF 44	26	330	REH. WC
	10	Punang	UF 45	27	280	REH. WC
		Total			2408	
		G ToTAL			7323.36	
a) List of Demarcated Protected Forest						
MOORANG	1	Holdaring	C-186	90	265.07	REH. WC
	2	Ribba West	C-187	91	169.67	REH. WC
	3	Ribba Eest	C-188(a)	92 (a)	55.85	REH. WC
	4	Ribba East	C-188(b)	92 (b)	69.60	REH. WC
	5	Ralda	C-189(a)	93 (a)	54.63	REH. WC
	6	Ralda	C-189(b)	93 (b)	72.84	REH. WC
	7	Ralda	C-190(a)	94 (a)	68.4	REH. WC
	8	Ralda	C-190(b)	94 (b)	108.45	REH. WC

	9	Rispa	C-191	95	172.4	NWC
	10	Rispa	C-192	96	70.82	NWC
	11	Tidong-I	C-193	97	271.15	REH. WC
	12	Tidong-I	C-194	98	124.65	REH. WC
	13	Tidong-II	C-195	99	3.23	REH. WC
	14	Tidong-III	C-196	100	57.05	REH. WC
	15	Tidong-IV	C-197	101	41.68	REH. WC
	16	Chakra	C-216	120	31.16	REH. WC
	17	Lirang	C-217	121	82.15	REH. WC
	18	Shalmati -I	C-218	122	28.33	REH. WC
	19	Shalmati -II	C-219(a)	123 (a)	72.03	REH. WC
	20	Shalmati -II	C-219(b)	123 (b)	22.26	REH. WC
	21	Shalmati -III	C-220	124	17.81	REH. WC
	22	Rirang	C-221	125	83.36	REH. WC
	23	Rirang	C-222(a)	126 (a)	78.10	REH. WC
	24	Rirang	C-222 (b)	126 (b)	80.94	REH. WC
	25	Rirang	C-223(a)	127 (a)	36.83	REH. WC
	26	Kirarng	C-223 (b)	127 (b)	147.71	REH. WC
	27	Kirarng	C-224	128	106.43	REH. WC
	28	Kirarng	C-225	129	62.32	REH. WC
	29	Jangi	C-226	130	209.22	NWC
	30	Korti-Akpa	C-227	131	467.82	NWC
	31	--do--	C-228	132	294.21	NWC
	32	Rarang-I	C-229	133	221.36	NWC
	33	Rarang-II	C-230	134	33.99	REH. WC
	34	Khorangi	C-231	135	92.27	REH. WC
	35	Khorangi	C-232(a)	136 (a)	126.67	REH. WC
	36	Khorangi	C-232(b)	136 (b)	65.96	REH. WC
		G T otal DPF			3966.42	
b) List of Un-Demarcated Protected Forest						
Nil						
		G total			3966.42	
a) List of Demarcated Protected Forest						
NICHAR	1	Kandlu-Chhonda	C- 70 (a) I	3 (a)	66.36	DK WZ PB II
	2	Kandlu-Chhonda (Tikrang)	C- 70 II	3(b)	82.15	FS WC PB U
	3	Kundlu Chaunda (Tikrang)	C-70 (b)	3 (c)	178.46	REH. WC
	4	Tranda Soldang	C-71 (a) I	4 (a)	125.45	REH. WC
	5	Tranda Soldang (Kutangang)	C- 71(a)-II	4 (b)	207.6	FS WC PB II
	6	Tranda Soldang (Kutangang)	C 71 (b) I	4 (c)	40	DK WZ PB II

	7	Tranda Soldang (Kutangang)	C- 71 (b) II	4 (d)	72.49	FS WC PB I
	8	Tranda Soldang (Kutangang)	C 71 (b) III	4 (e)	41.27	DK WZ PB I
	9	Tranda	C 72 (a)	5 (a)	55.85	DK WZ PB III
	10	Tranda	C 72 (b)	5 (b)	63.95	DK WZ PB IV
	11	Bari(Raida)	C-74(a)	7 (a)	52.60	FS WC PB II
	12	Bari Raida	C-74 (b)	7 (b)	230.67	REH. WC
	13	--do--	C-74©	7 (c)	375.95	FS WC PB I
	14	Bari	75 (a)	8 (a)	42.08	DK WZ PB I
	15	Bari	C-75(b)	8 (b)	167.54	FS WC PB I
	16	Bari (Balpanchi)	C-76(a)	9 (a)	47.35	FS WC PB I
	17	Bari Balpanchi	C-76 (b)	9 (b)	82.8	REH. WC
	18	--do--	C-76©	9 (c)	73.00	FS WC PB II
	19	Bari (Kot Dharang)	C-77	10	129.5	FS WC PB U
	20	Sungra	C-78	11	62.32	DK WZ PB II
	21	Gutrang	C -79(a)	12 (a)	102.80	FS WC PB I
	22	Gutrang	C-79 (b)	12 (b)	191	REH. WC
	23	Nichar (Sharang)	C-80	13	38.04	DK WZ PB II
	24	Nichar West	C-81	14	48.97	DK WZ PB II
	25	Nichar East (Bara Jungle	C-82	15	52.20	DK WZ PB II
	26	Nichar East (Kashpo)	C-83	16	64.75	REH. WC
	27	Chhachi Dhar	C-84	17	109.66	DK WZ PB I
	28	Chhnang	C-85	18	35.60	DK WZ PB III
	29	Panvi	C-86 (a)	19 (a)	84.98	DK WZ PB III
	30	--do--	C-86(b)	19 (b)	73.25	DK WZ PB II
	31	Des Kidang	C-126	32	180.5	REH. WC
	32	Dippi	C-127	33	122.20	DK WZ PB IV
	33	Kaksthal	C-128(a)	34 (a)	191.00	DK WZ PB IV
	34	--do--	C-128(b)	34 (b)	114.93	DK WZ PB IV
	35	Mazgani	C-129	35	185.35	REH. WC
	36	Bari	NC-6	168	9.02	REH. WC
	37	Kangoos	NC-7	169	15.14	REH. WC
	38	Rango	NC-8	170	72.37	REH. WC
	39	Somo	NC-9	171	95.67	FS WC PB II
	40	Chott Kanda	NC-10	172	379.49	REH. WC
	41	Panvi Khas	NC-11	173	35.88	REH. WC
	42	Fuktover	NC-12	174	272.99	FS WC PB II
	43	Shalling	NC-13	175	483.33	REH. WC
	44	Morang Kanda	NC14	176	305.57	FS WC PB U
	45	Kaksthal	NC-15	177	117.43	REH. WC

		G Total DPF			5579.51	
b) List of Un-Demarcated Protected Forest						
NICHAR	1	Mazgani	UF 51	33	417	REH. WC
	2	Mazgani	UF 52	34	455	REH. WC
	3	Panvi	Uf 53	35	640	REH. WC
	4	Panvi	UF 54	36	950	REH. WC
	5	Chhachi Dhar	UF 55	37	400	REH. WC
	6	Nichar East	UF 56	38	550	REH. WC
	7	Nichar East	UF 57	39	100	REH. WC
	8	Kandlu Chaunda	UF 58	40	150	REH. WC
	9	Kandlu Chaunda	UF 59	41	75	REH. WC
		Total			3737	
		G Total			9316.51	
a) List of Demarcated Protected Forest						
POOH	1	Rishi	C-198	102	34.40	REH. WC
	2	Dubling	C-199	103	34.40	REH. WC
	3	Siba-IV	C-200	104	32.27	REH. WC
	4	Siba-III	C-201	105	9.71	REH. WC
	5	Siba-II	C-202	106	9.71	REH. WC
	6	Siba-I	C-203	107	42.90	REH. WC
	7	Ropa-II	C-204	108	25.09	REH. WC
	8	Ropa-I	C-205	109	163.49	REH. WC
	9	Giaboung-III	C-206	110	17.40	REH. WC
	10	Giaboung-III	C-207	111	25.50	REH. WC
	11	Giaboung-I	C-208	112	168.65	REH. WC
	12	Talling	C-209	113	86.60	REH. WC
	13	Sunam	C-210	114	106.84	REH. WC
	14	Kanam	C-211	115	82.96	NWC
	15	Tabang	C-212	116	30.75	NWC
	16	Labrang	C-213	117	101.17	NWC
	17	Koila-pilu	C-214	118	178.87	NWC
	18	Kirmang	C-215	119	237.15	NWC
		G T otal DPF			1387.86	

Range wise list of Forest and Allotment of Areas to Working Circle and Periodic Blocks

Name of Range	Sr. No	Name of Forest	Compartment No (old)	Compartment No (New)	Area	Area of Included cultivation	P.B. I	P .B. II	P.B. III	P.B. IV	PB U	Total
Deodar Kail Working Circle (Wet Zone)												
Bhaba Nagar	1	Kandlu-Chhonda (Chaura)	68(a)-I	1 (a)	43.7	0	0	0	43.7	0	0	43.7
	2	Kandlu-Chhonda (Chaura)	68(c)	1 (f)	167.13	0.8	167.13	0	0	0	0	167.13
	3	Kandlu-Chhonda (Khuni)	69 (c)	2 (c)	69.6	0.4	0	0	0	69.6	0	69.6
	4	Ramni	130(a)-II	36 (b)	51.8	0	51.8	0	0	0	0	51.8
	5	--do--	130(a)-III	36 (c)	97	0	97	0	0	0	0	97
	6	Jani	131	37	113.3	0	0	113.3	0	0	0	113.3
	7	Lisnam	132(a)	38 (a)	93.5	0	0	0	93.5	0	0	93.5
		Total			636.03	1.2	315.93	113.3	137.2	69.6	0	636.03
	8	Rupi	UPF 2	2	17.5	0	17.5	0	0	0	0	17.5
	9	Rupi	UPF 6	4	15.5	0	15.5	0	0	0	0	15.5
	10	Shorang	UF -14	5	40	0	0	40	0	0	0	40
		Total			73	0	33	40	0	0	0	73
		G Total			709.03	1.2	348.93	153.3	137.2	69.6	0	709.03
Katgaon	11	Kampunang	C-90	23	9.3	0	9.3	0	0	0	0	9.3
		Total			9.3	0	9.3	0	0	0	0	9.3
Kilba	12	Punang	C-134 a	40 (a)	66.75	1.2	66.75	0	0	0	0	66.75
	13	Punang	C-134 b	40 (b)	48.95	0	0	48.95	0	0	0	48.95
	14	Phinla-II	C-136 a	42 (a)	37.25	0	0	0	0	37.25	0	37.25
	15	Phinla	C-136 b	42 (b)	53.4	0	0	0	53.4	0	0	53.4
	16	Junpn	C-137 b	43 (b)	60.3	0	0	0	60.3	0	0	60.3
	17	Tikru - Wasankan	C-138 a	44 (a)	75.7	0	0	0	75.7	0	0	75.7
	18	--do--	C-138 b	44 (b)	50.6	0	0	0	50.6	0	0	50.6
	19	Tiuden	C-139 a	45 (a)	49.75	0	0	0	49.75	0	0	49.75
	20	Tiuden	C-139 b	45 (b)	75.7	0	0	75.7	0	0	0	75.7
		Total			518.4	1.2	66.75	124.65	289.75	37.25	0	518.4
Nichar	21	Kandlu-Chhonda	C- 70 (a) 1	3 (a)	66.36	0	0	66.36	0	0	0	66.36
	22	Tranda Soldang (Kutangang)	C 71 (b) I	4 (c)	40	0	0	40	0	0	0	40
	23	Tranda Soldang (Kutangang)	C 71 (b) III	4 (e)	41.27	0	41.27	0	0	0	0	41.27
	24	Tranda	C 72 (a)	5 (a)	55.85	16.19	0	0	55.85	0	0	55.85
	25	Tranda	C 72 (b)	5 (b)	63.95	5.65	0	0	0	63.95	0	63.95
	26	Bari	75 (a)	8 (a)	42.08	0	42.08		0	0	0	42.08
	27	Sungra	C-78	11	62.32	0.8	0	62.32	0	0	0	62.32
	28	Nichar (Sharang)	C-80	13	38.04	0	0	38.04	0	0	0	38.04

	29	Nichar West	C-81	14	48.97	0	0	48.97	0	0	0	48.97
	30	Nichar East (Bara Jungle	C-82	15	52.2	0	0	52.2	0	0	0	52.2
	31	Chhachi Dhar	C-84	17	109.66	0	109.66	0	0	0	0	109.66
	32	Chhnang	C-85	18	35.6	0	0	0	35.6	0	0	35.6
	33	Panvi	C-86 (a)	19 (a)	84.98	2.42	0	0	84.98	0	0	84.98
	34	--do--	C-86(b)	19 (b)	73.25	0	0	73.25	0	0	0	73.25
	35	Dippi	C-127	33	122.2	0	0		0	122.2	0	122.2
	36	Kaksthal	C-128(a)	34 (a)	191	0	0		0	191	0	191
	37	--do--	C-128(b)	34 (b)	114.93	0	0		0	114.9 3	0	114.93
		Total			1242.66	25.06	193.01	381.14	176.4 3	492.0 8	0	1242.66
		G Total			2479.39	27.46	617.99	659.09	603.3 8	598.9 3	0	2479.39
Deodar Kail working circle (Dry Zone)												
Kalpa	38	Barang	C-171(a)	75 (a)	21.85		21.85	0	0	0	0	21.85
	39	--do--	C-171(b)	75 (b)	29.14	0	0	29.14	0	0	0	29.14
	40	--do--	C-172(b)	76 (b)	36.42	0	0	36.42	0	0	0	36.42
	41	--do--	C-173	77	13.76	0.4	0	0	13.76	0	0	13.76
	42	--do--	C-174(a)	78 (a)	28.33	0	0	0	28.33	0	0	28.33
	43	--do--	C-175 (b)	79 (b)	53.42	0	0	0	53.42	0	0	53.42
	44	Boktu	C- 238	142	66.37	0	66.37	0	0	0	0	66.37
	45	Telang	C- 240 (a)	144 (a)	74.46	0	74.46	0	0	0	0	74.46
	46	Chini	C- 243 (a)	147 (a)	16.2	0	16.2	0	0	0	0	16.2
	47	Chini	C-243 (b)	147 (b)	18.6	0	0	18.6	0	0	0	18.6
	48	Rogi I	C- 244	148	17	0	0	17	0	0	0	17
	49	Kastiarang	C-246	150	32.37	0	0	32.37	0	0	0	32.37
	50	Runang	C-248 (b)	152 (b)	63.53	0	0	0	63.53	0	0	63.53
	51	Urni II	C-255 (a)	159 (a)	30.75	0	30.75	0	0	0	0	30.75
	52	Urni II	C-255 (b)	159 (b)	76.08	0	76.08	0	0	0	0	76.08
	53	Chagaon III	C-257	161	17.4	0	0	0	17.4	0	0	17.4
		Total			595.68	0.4	285.71	133.53	176.4 4	0	0	595.68
Kilba	54	Kumkumi	C-142	48	68.4	0	68.4	0	0	0	0	68.4
	55	Sapni	C-143	49	55.45	0	0	55.45	0	0	0	55.45
	56	Sapni	C-144	50	17.8	0.4	0	0	17.8	0	0	17.8
	57	Baturi	C-145	51	37.65	0	0	0	37.65	0	0	37.65
	58	Baturi	C-146	52	36	0	36	0	0	0	0	36
	59	Baturi	C-147	53	50.2	1.62	50.2	0	0	0	0	50.2
	60	Baturi	C-148	54	39.65	1.2	39.65	0	0	0	0	39.65
	61	Brua	C-149	55	17.4	0		17.4	0	0	0	17.4
	62	Limsanthang	C-154 (a)	60 (a)	39.65	0	39.65	0	0	0	0	39.65
	63	Limsanthang	C-154 (b)	60 (b)	35.6	0	0	35.6	0	0	0	35.6
	64	Limsanthang	C-154 (c)	60 (c)	40.87	0	40.87	0	0	0	0	40.87
	65	Bassaring	C-157	63	234.72	10.12	0	234.72	0	0	0	234.72

	66	Seringche	C-163	67	8.5	0	0		8.5	0	0	8.5
	67	Ralli	C-167	71	260.6	0	0	260.6	0	0	0	260.6
	68	Meber	C-169 a	73 (a)	21.04	0	0	0	21.04	0	0	21.04
	69	Meber	C-169 b	73 (b)	24.68	0	0	0	24.68	0	0	24.68
	70	Barang	C-170 a	74 (a)	55.04	0	0	0	55.04	0	0	55.04
	71	Barang	C-170 b	74 (b)	23.88	0	0	0	23.88	0	0	23.88
		Total			1067.13	13.34	274.77	603.77	188.59	0	0	1067.13
		G Total			1662.81	13.74	560.48	737.3	365.03	0	0	1662.81
Fir Spruce working circle												
Bhaba Nagar	72	Kandlu-Chhonda (Chaura)	68(a)-II	1 (b)	65.56	0	0	65.56	0	0	0	65.56
	73	Kandlu-Chhonda (Chaura)	68(b) -I	1 (c)	285.85	0	0	0	0	0	285.85	285.85
	74	Kandlu-Chhonda (Chaura)	68(b)-II	1 (d)	62.6	0	62.6	0	0	0	0	62.6
	75	Kandlu-Chhonda (Khuni)	C-69(b)	2 (b)	51	0	51	0	0	0	0	51
	76	Bundo Kutang	C- 73	6	375.95	0	0	0	0	0	375.95	375.95
	77	Ramni	130(a)-I	36 (a)	85.93	0	85.93	0	0	0	0	85.93
	78	--do--	130(b)	36 (d)	269.93	0	0	0	0	0	269.93	269.93
		Total DPF			1196.82	0	199.53	65.56	0	0	931.73	1196.82
	79	Rupi	UPF - 1	1	50	30	0	0	0	0	50	50
	80	Rupi	UPF - 4	3	15	0	15	0	0	0	0	15
	81	Lishnam	UF-46	28	387	0	0	0	0	0	387	387
	82	--do--	UF-47	29	305	0	0	0	0	0	305	305
	83	Janni	UF-48	30	400	45	0	0	0	0	400	400
	84	Ramni	UF-49	31	550	0	0	550	0	0	0	550
		Total			1707	75	15	550	0	0	1142	1707
		G Total			2903.82	75	214.53	615.56	0	0	2073.73	2903.82
Katgaon	85	Rusnang	C-88	21	242	0	0	0	0	0	242	242
		Total			242	0	0	0	0	0	242	242
	86	Kampunng (darchi)	UPF 27	9	200	5	0	0	0	0	200	200
	87	Kampunng (darchi)	UPF 28	10	200	33	200	0	0	0	0	200
	88	Kampunng (darchi)	UPF 29	11	350	5	0	350	0	0	0	350
	89	Rushmang	UPF 32	14	220	0	0	0	0	0	220	220
		Total			970	43	200	350	0	0	420	970
		G Total			1212	43	200	350	0	0	662	1212
Nichar Range	90	Kandlu-Chhonda (Tikrang)	C- 70 II	3(b)	82.15	0	0	0	0	0	82.15	82.15
	91	Tranda Soldang (Kutangang)	C- 71(a)- II	4 (b)	207.6	2.83		207.6	0	0	0	207.6
	92	--do--	C- 71 (b) II	4 (d)	72.49	0	72.49	0	0	0	0	72.49
	93	Bari(Raida)	C-74(a)	7 (a)	52.6	0	0	52.6	0	0	0	52.6

	94	--do--	C-74©	7 (c)	375.95	0	375.95	0	0	0	0	375.95
	95	Bari	C-75(b)	8 (b)	167.54	0	167.54	0	0	0	0	167.54
	96	Bari (Balpanchi)	C-76(a)	9 (a)	47.35	0	47.35	0	0	0	0	47.35
	97	--do--	C-76©	9 (c)	73	0	0	73	0	0	0	73
	98	Bari (Kot Dharang)	C-77	10	129.5	0	0	0	0	0	129.5	129.5
	99	Gutrang	C -79(a)	12 (a)	102.8	0	102.8	0	0	0	0	102.8
	100	Somo	NC-9	171	95.67	0	0	95.67	0	0	0	95.67
	101	Fuktover	NC-12	174	272.99	0	0	272.99	0	0	0	272.99
	102	Morang Kanda	NC14	176	305.57	0	0	0	0	0	305.57	305.57
		Total			1985.21	2.83	766.13	701.86	0	0	517.22	1985.21
Kalpa	103	Putka	NC-23	185	114.96	0	0	0	0	0	114.96	114.96
	104	Barang	C- 175 (a)	79 (a)	97.93	0	0	97.93	0	0	0	97.93
		Total			212.89	0	0	97.93	0	0	114.96	212.89
Kilba	105	Phinla-I	C-135	41	64.35	1.2	0	0	0	0	64.35	64.35
	106	Chidu	C-153	59	144.88	2.83					144.88	144.88
		Total			209.23	4.03	0	0	0	0	209.23	209.23
		G Total			6523.15	124.86	1180.6 6	1765.3 5	0	0	3577.1 4	6523.15
Neoza Working Circle												
Kalpa	107	Tangling	C-178	82	112.1	0	0	0	0	0	0	112.1
	108	--do--	C-179	83	117.75	0	0	0	0	0	0	117.75
	109	--do--	C-180	84	232.3	0	0	0	0	0	0	232.3
	110	Kashang-I	C-234 ©	138 (c)	26.71	0	0	0	0	0	0	26.71
	111	Telangi	C-240 (b)	144 (b)	37.23	0	0	0	0	0	0	37.23
	112	Duni	C-241	145	89.03	0	0	0	0	0	0	89.03
	113	Chini	C242	146	162.68	10.52						162.68
		Total			777.8	10.52	0	0	0	0	0	777.8
Moorang Range	114	Rispa	C-191	95	172.4	0	0	0	0	0	0	172.4
	115	Rispa	C-192	96	70.82	0	0	0	0	0	0	70.82
	116	Jangi	C-226	130	209.22	0	0	0	0	0	0	209.22
	117	Korti-Akpa	C-227	131	467.82	0.4	0	0	0	0	0	467.82
	118	--do--	C-228	132	294.21	0	0	0	0	0	0	294.21
	119	Rarang-I	C-229	133	221.36	0	0	0	0	0	0	221.36
		Total			1435.83	0.4	0	0	0	0	0	1435.83
Pooh	120	Kanam	C-211	115	82.96	0	0	0	0	0	0	82.96
	121	Tabang	C-212	116	30.75	0	0	0	0	0	0	30.75
	122	Labrang	C-213	117	101.17	0	0	0	0	0	0	101.17
	123	Koila-pilu	C-214	118	178.87	0	0	0	0	0	0	178.87
	124	Kirmang	C-215	119	237.15	0	0	0	0	0	0	237.15
		Total			630.9	0	0	0	0	0	0	630.9

		G Total			2844.53	10.92	0	0	0	0	0	2844.53
Protection Working Circle												
Bhaba Nagar	125	Kundlu Chaunda (Chaura)	C-68 (b) III	1 (e)	24.28	0	0	0	0	0	0	24.28
	126	Kundlu Chaunda (Chaura)	C-69 (a)	2 (a)	20.23	0	0	0	0	0	0	20.23
	127	Rupi Shorang II	C-98	30	27	0	0	0	0	0	0	27
	128	Rupi Shorang I	C-99	31	2.83	0	0	0	0	0	0	2.83
	129	lisnam	C-132 (b)	38 (b)	110.5	0	0	0	0	0	0	110.5
	130	Maneothi Shilani	NC-1	163	83.69	0	0	0	0	0	0	83.69
	131	Safurti Kuf	NC-2	164	58.64	0	0	0	0	0	0	58.64
	132	Chaura	NC-3	165	66.36	0	0	0	0	0	0	66.36
	133	Nigulsari	NC-4	166	40.21	0	0	0	0	0	0	40.21
	134	Thach	NC-5	167	51.86	0	0	0	0	0	0	51.86
	135	Ramni	NC-16	178	7.37	0	0	0	0	0	0	7.37
	136	Jani Kanda	NC-17	179	28.2	0	0	0	0	0	0	28.2
	137	lisnam	NC-18	180	35.43	0	0	0	0	0	0	35.43
	138	Sholtu	NC-19	181	18.43	0	0	0	0	0	0	18.43
		Total			575.03	0	0	0	0	0	0	575.03
	139	Shorang	UPF 15	6	90	0	0	0	0	0	0	90
	140	Shorang	UPF 16	7	35	0	0	0	0	0	0	35
	141	Ramni	UPF 50	32	470	0	0	0	0	0	0	470
		Total			595	595	0	0	0	0	0	595
		G Total			1170.03	595	0	0	0	0	0	1170.03
Katgaon	142	Rushnang	C-87	20	196.27	0	0	0	0	0	0	196.27
	143	Dutrang	C-89	22	124.65	0	0	0	0	0	0	124.65
	144	Yeti	C-91	24	510.7	0	0	0	0	0	0	510.7
	145	Saknathpa	C-92	25	150	10.93	0	0	0	0	0	150
		Total			981.62	10.93	0	0	0	0	0	981.62
	146	Saknathpa	UPF - 26	8	200	43	0	0	0	0	0	200
	147	Dutrang	UPF - 30	12	150	33	0	0	0	0	0	150
	148	Dutrang	UPF - 31	13	420	2	0	0	0	0	0	420
		Total			770	78	0	0	0	0	0	770
		G Total			1751.62	88.93	0	0	0	0	0	1751.62
Kalpa	149	Barang	C-172 (a)	76 (a)	38.45	0	0	0	0	0	0	38.45
	150	--do--	C-174 (b)	78 (b)	67.99	0	0	0	0	0	0	67.99
	151	Tangling	C-176	80	131.5	0	0	0	0	0	0	131.5
	152	Tangling	C-177	81	232.3	0	0	0	0	0	0	232.3
	153	Purbani	C-181(a)	85 (a)	69.2	0	0	0	0	0	0	69.2
	154	--do--	C-181(b)	85 (b)	69.2	1.6	0	0	0	0	0	69.2
	155	--do--	C-181(c)	85 (c)	105.6	0	0	0	0	0	0	105.6
	156	--do--	C-182(a)	86 (a)	26.7	0	0	0	0	0	0	26.7
	157	--do--	C-182(b)	86 (b)	21.85	0	0	0	0	0	0	21.85

	158	--do--	C-183(a)	87 (a)	77.7	0	0	0	0	0	0	77.7
	159	--do--	C-183(b)	87 (b)	12.55	0	0	0	0	0	0	12.55
	160	--do--	C-184(a)	88 (a)	102.4	0	0	0	0	0	0	102.4
	161	--do--	C-184(c)	88 (b)	63.13	0	0	0	0	0	0	63.13
	162	--do--	C-184(b)	88 (c)	69.2	0	0	0	0	0	0	69.2
	163	--do--	C-185	89	123.83	0	0	0	0	0	0	123.83
	164	Kashang-II	C-233	137	23.88	0	0	0	0	0	0	23.88
	165	Kashang-I	C-234(a)	138 (a)	87	0	0	0	0	0	0	87
	166	--do--	C-234(b)	138 (b)	79.72	0	0	0	0	0	0	79.72
	167	Pangi-I	C-235	139	48.56	0	0	0	0	0	0	48.56
	168	Pangi-II	C-236	140	42.08	0	0	0	0	0	0	42.08
	169	Boktu	C-237	141	91.86	8.09	0	0	0	0	0	91.86
	170	Telangi	C-239	143	192.63	0.8	0	0	0	0	0	192.63
	171	Roghi II	C-245 (a)	149 (a)	25.5	0	0	0	0	0	0	25.5
	172	Roghi III	C-245 (b)	149 (b)	3.24	0	0	0	0	0	0	3.24
	173	Kastiarang	C-247	151	206.39	0	0	0	0	0	0	206.39
	174	Runang	C-248 (a)	152 (a)	74.46	0	0	0	0	0	0	74.46
	175	Yulla Miru I	C-249	153	23.07	0	0	0	0	0	0	23.07
	176	Yulla Miru II	C-250	154	3.24	0	0	0	0	0	0	3.24
	177	Yulla-Miru-III	C-251	155	7.28	0	0	0	0	0	0	7.28
	178	Yulla-Miru-IV	C-252	156	38.04	0	0	0	0	0	0	38.04
	179	Yulla-Miru-V	C-253	157	16.19	0	0	0	0	0	0	16.19
	180	Urni-I	C-254	158	6.07	0	0	0	0	0	0	6.07
	181	Chagaon IV	C-256	160	35.61	0	0	0	0	0	0	35.61
	182	Chagaon II	C-258 (a)	162(a)	69.2	0	0	0	0	0	0	69.2
	183	Chagaon I	C-258 (b)	162(b)	144.07	0	0	0	0	0	0	144.07
	184	Rang Runang	NC-21	183	97.57	0	0	0	0	0	0	97.57
	185	Goli	NC-24	186	113.18	0	0	0	0	0	0	113.18
	186	Telgancho	NC-25	187	58.61	0	0	0	0	0	0	58.61
	187	Gunshanang	NC-26	188	141.76	0	0	0	0	0	0	141.76
	188	Rangley	NC-27	189	81.68	0	0	0	0	0	0	81.68
	189	Tharu	NC-28	190	286.38	0	0	0	0	0	0	286.38
	190	Kashti	NC-29	191	121.98	0	0	0	0	0	0	121.98
	191	Uchaden	NC-30	192	31.87	0	0	0	0	0	0	31.87
	192	Bragdo	NC-31	193	36.99	0	0	0	0	0	0	36.99
	193	Shakamo	NC-32	194	30.53	0	0	0	0	0	0	30.53
	194	Uravaning	NC-33	195	43.93	0	0	0	0	0	0	43.93
	195	Rushanang	NC-34	196	220.59	0	0	0	0	0	0	220.59
		Total			3694.76	10.49	0	0	0	0	0	3694.76
	196	Chini	UF 33	15	225	0	0	0	0	0	0	225
	197	Duni	UF 34	16	110	0	0	0	0	0	0	110
	198	Boktu	UF 35	17	110	0	0	0	0	0	0	110

		Total			445	0	0	0	0	0	0	445
		G Total			4139.76	10.49	0	0	0	0	0	4139.76
Kilba	199	Punang	C-133	39	231.9	0	0	0	0	0	0	231.9
	200	Junpan	C-137 (a)	43 (a)	34.4	0	0	0	0	0	0	34.4
	201	Tueden	C-139 ©	45 (c)	50.2	0	0	0	0	0	0	50.2
	202	Kilba	C-140	46	98.75	0	0	0	0	0	0	98.75
	203	Kanahi	C-141	47	115.75	0	0	0	0	0	0	115.75
	204	Brua	C-150	56	65.95	0	0	0	0	0	0	65.95
	205	Shoang	C-151 (a)	57 (a)	129.9	0	0	0	0	0	0	129.9
	206	Shoang	C-151 (b)	57 (b)	147.3	0	0	0	0	0	0	147.3
	207	Chansu	C-152 (a)	58 (a)	97.5	0	0	0	0	0	0	97.5
	208	Chansu	C-152 (b)	58 (b)	75.7	0	0	0	0	0	0	75.7
	209	Rukti Hurba	C-155	61	177.25	0	0	0	0	0	0	177.25
	210	Rukti Hurba	C-156	62	177.25	6.45	0	0	0	0	0	177.25
	211	Rakcham	C-160	64	2.43	0	0	0	0	0	0	2.43
	212	Rakcham	C-161	65	19.83	0	0	0	0	0	0	19.83
	213	Seringche	C-162 (a)	66 (a)	42.49	0	0	0	0	0	0	42.49
	214	Seringche	C-162 (b)	66 (b)	50.6	0	0	0	0	0	0	50.6
	215	Seringche	C-162 (c)	66 (c)	93.08	0.4	0	0	0	0	0	93.08
	216	Pawanang I	C-164	68	2.83	0	0	0	0	0	0	2.83
	217	Pawanang II	C-165	69	78.1	0	0	0	0	0	0	78.1
	218	Wadang	C-166	70	119.38	0	0	0	0	0	0	119.38
	219	Mebar	C-168	72	212.05	0	0	0	0	0	0	212.05
	220	Punang Kanda	NC-20	182	48.81	0	0	0	0	0	0	48.81
	221	Rally	NC-22	184	77.7	0	0	0	0	0	0	77.7
		Total			2149.15	6.85	0	0	0	0	0	2149.15
	222	Tiuden Kilba		NDPF - 1	268.31	0	0	0	0	0	0	268.31
	223	Wadang		NDPF - 2	51.46	0	0	0	0	0	0	51.46
	224	Baturi Kanda		NDPF - 3	65.56	0	0	0	0	0	0	65.56
	225	Ananti Dhar		NDPF - 4	137.02	0	0	0	0	0	0	137.02
	226	Monorang		NDPF - 5	185.27	0	0	0	0	0	0	185.27
	227	Kamru Chanso		NDPF - 6	74.4	0	0	0	0	0	0	74.4
	228	Rutrang		NDPF - 7	12.18	0	0	0	0	0	0	12.18
	229	Punang Kanda		NDPF - 8	11.94	0	0	0	0	0	0	11.94
	230	Punang		NDPF - 9	165.31	0	0	0	0	0	0	165.31
		Total			971.45	0	0	0	0	0	0	971.45
	231	Brua	UF 36	18	252	0	0	0	0	0	0	252
	232	Brua	UF 37	19	412	0	0	0	0	0	0	412
	233	Brua	UF 38	20	245	0	0	0	0	0	0	245
	234	Brua	UF 39	21	235	0	0	0	0	0	0	235

	235	Baturi	UF 40	22	155	0	0	0	0	0	0	155
	236	Baturi	UF 41	23	75	0	0	0	0	0	0	75
	237	Tuedan	UF 42	24	182	0	0	0	0	0	0	182
	238	Junpan	UF 43	25	242	55	0	0	0	0	0	242
	239	Phinla	UF 44	26	330	22	0	0	0	0	0	330
	240	Punang	UF 45	27	280	0	0	0	0	0	0	280
		Total			2408	77	0	0	0	0	0	2408
		G Total			5528.6	83.85	0	0	0	0	0	5528.6
Moorang	241	Holdaring	C-186	90	265.07	0	0	0	0	0	0	265.07
	242	Ribba West	C-187	91	169.67	3.64	0	0	0	0	0	169.67
	243	Ribba Eest	C-188(a)	92 (a)	55.85	1.2	0	0	0	0	0	55.85
	244	Ribba East	C-188(b)	92 (b)	69.6		0	0	0	0	0	69.6
	245	Ralda	C-189(a)	93 (a)	54.63	0.8	0	0	0	0	0	54.63
	246	Ralda	C-189(b)	93 (b)	72.84	0.8	0	0	0	0	0	72.84
	247	Ralda	C-190(a)	94 (a)	68.4	0	0	0	0	0	0	68.4
	248	Ralda	C-190(b)	94 (b)	108.45	0	0	0	0	0	0	108.45
	249	Tidong-I	C-193	97	271.15	0	0	0	0	0	0	271.15
	250	Tidong-I	C-194	98	124.65	0	0	0	0	0	0	124.65
	251	Tidong-II	C-195	99	3.23	0	0	0	0	0	0	3.23
	252	Tidong-III	C-196	100	57.05	0	0	0	0	0	0	57.05
	253	Tidong-IV	C-197	101	41.68	0	0	0	0	0	0	41.68
	254	Chakra	C-216	120	31.16	0	0	0	0	0	0	31.16
	255	Lirang	C-217	121	82.15	0.4	0	0	0	0	0	82.15
	256	Shalmati -I	C-218	122	28.33	0.8	0	0	0	0	0	28.33
	257	Shalmati -II	C-219(a)	123 (a)	72.03	0	0	0	0	0	0	72.03
	258	Shalmati -II	C-219(b)	123 (b)	22.26	0.8	0	0	0	0	0	22.26
	259	Shalmati -III	C-220	124	17.81	0	0	0	0	0	0	17.81
	260	Rirang	C-221	125	83.36	0.8	0	0	0	0	0	83.36
	261	Rirang	C-222(a)	126 (a)	78.1	0	0	0	0	0	0	78.1
	262	Rirang	C-222 (b)	126 (b)	80.94	0	0	0	0	0	0	80.94
	263	Rirang	C-223(a)	127 (a)	36.83	0	0	0	0	0	0	36.83
	264	Kirarng	C-223 (b)	127 (b)	147.71	0	0	0	0	0	0	147.71
	265	Kirarng	C-224	128	106.43	0	0	0	0	0	0	106.43
	266	Kirarng	C-225	129	62.32	0	0	0	0	0	0	62.32
	267	Rarang-II	C-230	134	33.99	0	0	0	0	0	0	33.99
	268	Khorangi	C-231	135	92.27	0	0	0	0	0	0	92.27
	269	Khorangi	C-232(a)	136 (a)	126.67	0	0	0	0	0	0	126.67
	270	Khorangi	C-232(b)	136 (b)	65.96	0	0	0	0	0	0	65.96
		Total			2530.59	9.24	0	0	0	0	0	2530.59
Nichar	271	Kundlu Chaunda (Tikrang)	C-70 (b)	3 (c)	178.46	0	0	0	0	0	0	178.46
	272	Tranda Soldang	C-71 (a) I	4 (a)	125.45	0	0	0	0	0	0	125.45

	273	Bari Raida	C-74 (b)	7 (b)	230.67	0	0	0	0	0	0	230.67
	274	Bari Balpanchi	C-76 (b)	9 (b)	82.8	0	0	0	0	0	0	82.8
	275	Gutrang	C-79 (b)	12 (b)	191	0	0	0	0	0	0	191
	276	Nichar East (Kashpo)	C-83	16	64.75	0	0	0	0	0	0	64.75
	277	Des Kidang	C-126	32	180.5	0	0	0	0	0	0	180.5
	278	Mazgani	C-129	35	185.35	0	0	0	0	0	0	185.35
	279	Bari	NC-6	168	9.02	0	0	0	0	0	0	9.02
	280	Kangoos	NC-7	169	15.14	0	0	0	0	0	0	15.14
	281	Rango	NC-8	170	72.37	0	0	0	0	0	0	72.37
	282	Chott Kanda	NC-10	172	379.49	0	0	0	0	0	0	379.49
	283	Panvi Khas	NC-11	173	35.88	0	0	0	0	0	0	35.88
	284	Shalling	NC-13	175	483.33	0	0	0	0	0	0	483.33
	285	Kaksthal	NC-15	177	117.43	0	0	0	0	0	0	117.43
		Total			2351.64	0	0	0	0	0	0	2351.64
	286	Mazgani	UF 51	33	417	0	0	0	0	0	0	417
	287	Mazgani	UF 52	34	455	0	0	0	0	0	0	455
	288	Panvi	UF 53	35	640	0	0	0	0	0	0	640
	289	Panvi	UF 54	36	950	0	0	0	0	0	0	950
	290	Chhachi Dhar	UF 55	37	400	0	0	0	0	0	0	400
	291	Nichar East	UF 56	38	550	0	0	0	0	0	0	550
	292	Nichar East	UF 57	39	100	0	0	0	0	0	0	100
	293	Kandlu Chaunda	UF 58	40	150	0	0	0	0	0	0	150
	294	Kandlu Chaunda	UF 59	41	75	0	0	0	0	0	0	75
		Total			3737	0	0	0	0	0	0	3737
		G Total			6088.64	0	0	0	0	0	0	6088.64
Pooh	295	Rishi	C-198	102	34.4	0	0	0	0	0	0	34.4
	296	Dubling	C-199	103	34.4	0	0	0	0	0	0	34.4
	297	Siba-IV	C-200	104	32.27	0	0	0	0	0	0	32.27
	298	Siba-III	C-201	105	9.71	0	0	0	0	0	0	9.71
	299	Siba-II	C-202	106	9.71	0	0	0	0	0	0	9.71
	300	Siba-I	C-203	107	42.9	0	0	0	0	0	0	42.9
	301	Ropa-II	C-204	108	25.09	0	0	0	0	0	0	25.09
	302	Ropa-I	C-205	109	163.49	0	0	0	0	0	0	163.49
	303	Giaboung-III	C-206	110	17.4	0	0	0	0	0	0	17.4
	304	Giaboung-III	C-207	111	25.5	0	0	0	0	0	0	25.5
	305	Giaboung-I	C-208	112	168.65	0	0	0	0	0	0	168.65
	306	Talling	C-209	113	86.6	0	0	0	0	0	0	86.6
	307	Sunam	C-210	114	106.84	0	0	0	0	0	0	106.84
		Total			756.96	0	0	0	0	0	0	756.96
		G Total			21966.2	787.51	0	0	0	0	0	21966.2

GENERAL ABSTRACT OF FORESTS						
Sr. No.	Name of Range	Reserve Forest (RF)	Protected Forests			G. Total
			Old DPF's	New DPFs	UPFs	
1	Bhaba Nagar	0	28	0	12	40
2	Kalpa	0	72	0	3	75
3	Katgaon	0	6	0	7	13
4	Kilba	0	52	9	10	71
5	Malling	0	0	0	0	0
6	Moorang	0	36	0	0	36
7	Nichar	0	45	0	9	54
8	Pooh	0	18	0	0	18
	Total		257	9	41	307

Appendix-V						
Demarcated Protected Forest (showing new and old compartment No's) along with area in hac and allotment to difrent working circle						
a) List of Demarcated Protected Forest						
Range	Sr. No.	Name of forest	Old DPF No.s.	New DPF No.	Area in Ha.	Allotment
BHABA NAGAR	1	Kandlu-Chhonda (Chaura)	68(a)-I	1 (a)	43.70	DK WZ PB III
	2	Kandlu-Chhonda (Chaura)	68(a)-II	1 (b)	65.56	FS WC PB II
	3	Kandlu-Chhonda (Chaura)	68(b) -I	1 (c)	285.85	FS WC PB U
	4	Kandlu-Chhonda (Chaura)	68(b)-II	1 (d)	62.60	FS WC PB I
	5	Kundlu Chaunda (Chaura)	C-68 (b) III	1 (e)	24.28	REH. WC
	6	Kandlu-Chhonda (Chaura)	68(c)	1 (f)	167.13	DK WZ PB I
	7	Kundlu Chaunda (Chaura)	C-69 (a)	2 (a)	20.23	REH. WC
	8	Kandlu-Chhonda (Khuni)	C-69(b)	2 (b)	51.00	FS WC PB I
	9	Kandlu-Chhonda (Khuni)	69 (c)	2 (c)	69.6	DK WZ PB IV
	10	Bundo Kutang	C- 73	6	375.95	FS WC PB U
	11	Rupi Shorang II	C-98	30	27	REH. WC
	12	Rupi Shorang I	C-99	31	2.83	REH. WC
	13	Ramni	130(a)-I	36 (a)	85.93	FS WC PB I
	14	Ramni	130(a)-II	36 (b)	51.80	DK WZ PB I
	15	--do--	130(a)-III	36 (c)	97.00	DK WZ PB I
	16	--do--	130(b)	36 (d)	269.93	FS WC PB U
	17	Jani	131	37	113.30	DK WZ PB II
	18	Lisnam	132(a)	38 (a)	93.50	DK WZ PB III
	19	Lisnam	C-132 (b)	38 (b)	110.5	REH. WC
	20	Maneothi Shilani	NC-1	163	83.69	REH. WC
	21	Safurti Kuf	NC-2	164	58.64	REH. WC
	22	Chaura	NC-3	165	66.36	REH. WC
	23	Nigulsari	NC-4	166	40.21	REH. WC
	24	Thach	NC-5	167	51.86	REH. WC
	25	Ramni	NC-16	178	7.37	REH. WC
	26	Jani Kanda	NC-17	179	28.2	REH. WC
	27	Lisnam	NC-18	180	35.43	REH. WC
	28	Sholtu	NC-19	181	18.43	REH. WC
		Total			2407.88	

KALPA	1	Barang	C-171(a)	75 (a)	21.85	DK DZ PB I
	2	Barang	C-171(b)	75 (b)	29.14	DK DZ PB II
	3	Barang	C-172 (a)	76 (a)	38.45	REH. WC
	4	Barang	C-172(b)	76 (b)	36.42	DK DZ PB II
	5	Barang	C-173	77	13.76	DK DZ PB III
	6	Barang	C-174(a)	78 (a)	28.33	DK DZ PB III
	7	Barang	C-174 (b)	78 (b)	67.99	REH. WC
	8	Barang	C- 175 (a)	79 (a)	97.93	FS WC PB II
	9	Barang	C-175 (b)	79 (b)	53.42	DK DZ PB III
	10	Tangling	C-176	80	131.5	REH. WC
	11	Tangling	C-177	81	232.3	REH. WC
	12	Tangling	C-178	82	112.1	NWC
	13	Tangling	C-179	83	117.75	NWC
	14	Tangling	C-180	84	232.30	NWC
	15	Purbani	C-181(a)	85 (a)	69.20	REH. WC
	16	Purbani	C-181(b)	85 (b)	69.20	REH. WC
	17	Purbani	C-181(c)	85 (c)	105.60	REH. WC
	18	Purbani	C-182(a)	86 (a)	26.70	REH. WC
	19	Purbani	C-182(b)	86 (b)	21.85	REH. WC
	20	Purbani	C-183(a)	87 (a)	77.70	REH. WC
	21	Purbani	C-183(b)	87 (b)	12.55	REH. WC
	22	Purbani	C-184(a)	88 (a)	102.40	REH. WC
	23	Purbani	C-184(b)	88 (b)	63.13	REH. WC
	24	Purbani	C-184(c)	88 (c)	69.20	REH. WC
	25	Purbani	C-185	89	123.83	REH. WC
	26	Kashang-II	C-233	137	23.88	REH. WC
	27	Kashang-I	C-234(a)	138 (a)	87.00	REH. WC
	28	--do--	C-234(b)	138 (b)	79.72	REH. WC
	29	Kashang-I	C-234 ©	138 (c)	26.71	NWC
	30	Pangi-I	C-235	139	48.56	REH. WC
	31	Pangi-II	C-236	140	42.08	REH. WC
	32	Boktu	C-237	141	91.86	REH. WC
	33	Boktu	C- 238	142	66.37	DK DZ PB I
	34	Telangi	C-239	143	192.63	REH. WC
	35	Telangi	C- 240 (a)	144 (a)	74.46	DK DZ PB I
	36	Telangi	C-240 (b)	144 (b)	37.23	NWC
	37	Duni	C-241	145	89.03	NWC
	38	Chini	C242	146	162.68	NWC
	39	Chini	C- 243 (a)	147 (a)	16.2	DK DZ PB I
	40	Chini	C- 243 (b)	147 (b)	18.6	DK DZ PB II

	41	Rogi I	C- 244	148	17	DK DZ PB II
	42	Roghi II	C-245 (a)	149 (a)	25.5	REH. WC
	43	Roghi III	C-245 (b)	149 (b)	3.24	REH. WC
	44	Kastiarang	C-246	150	32.37	DK DZ PB II
	45	Kastiarang	C-247	151	206.39	REH. WC
	46	Runang	C-248 (a)	152 (a)	74.46	REH. WC
	47	Runang	C-248 (b)	152 (b)	63.53	DK DZ PB III
	48	Eula Miru I	C-249	153	23.07	REH. WC
	49	Eula Miru II	C-250	154	3.24	REH. WC
	50	Yulla-Miru-III	C-251	155	7.28	REH. WC
	51	Yulla-Miru-IV	C-252	156	38.04	REH. WC
	52	Yulla-Miru-V	C-253	157	16.19	REH. WC
	53	Urni-I	C-254	158	6.07	REH. WC
	54	Urni II	C-255 (a)	159 (a)	30.75	DK DZ PB I
	55	Urni II	C-255 (b)	159 (b)	76.08	DK DZ PB I
	56	Chagaon IV	C-256	160	35.61	REH. WC
	57	Chagaon III	C-257	161	17.4	DK DZ PB III
	58	Chagaon II	C-258 (a)	162 (a)	69.2	REH. WC
	59	Chagaon I	C-258 (b)	162 (b)	144.07	REH. WC
	60	Rang Runang	NC-21	183	97.57	REH. WC
	61	Putka	NC-23	185	114.96	FS WC PBU
	62	Goli	NC-24	186	113.18	REH. WC
	63	Telgancho	NC-25	187	58.61	REH. WC
	64	Gunshanang	NC-26	188	141.76	REH. WC
	65	Rangley	NC-27	189	81.68	REH. WC
	66	Tharu	NC-28	190	286.38	REH. WC
	67	Kashti	NC-29	191	121.98	REH. WC
	68	Uchaden	NC-30	192	31.87	REH. WC
	69	Bragdo	NC-31	193	36.99	REH. WC
	70	Shakamo	NC-32	194	30.53	REH. WC
	71	Uravaning	NC-33	195	43.93	REH. WC
	72	Rushanang	NC-34	196	220.59	REH. WC
		G Total DPF			5281.13	
KATGAON	1	Rushnang	C-87	20	196.27	REH. WC
	2	Rusnang	C-88	21	242.00	FSWC PB U
	3	Dutrang	C-89	22	124.65	REH. WC
	4	Kampunang	C-90	23	9.30	DK WZ PB I
	5	Yeti	C-91	24	510.7	REH. WC
	6	Saknathpa	C-92	25	150	REH. WC
		G Total DPF			1232.92	

KILBA	1	Punang	C-133	39	231.9	REH. WC
	2	Punang	C-134 a	40 (a)	66.75	DK WZ PB I
	3	Punang	C-134 b	40 (b)	48.95	DK WZ PB II
	4	Phinla-I	C-135	41	64.35	FS WC PB U
	5	Phinla-II	C-136 a	42 (a)	37.25	DK WZ PB IV
	6	Phinla	C-136 b	42 (b)	53.40	DK WZ PB III
	7	Junpan	C-137 (a)	43 (a)	34.4	REH. WC
	8	Junpn	C-137 b	43 (b)	60.30	DK WZ PB III
	9	Tikru - Wasankan	C-138 a	44 (a)	75.70	DK WZ PB III
	10	--do--	C-138 b	44 (b)	50.60	DK WZ PB III
	11	Tiuden	C-139 a	45 (a)	49.75	DK WZ PB III
	12	Tiuden	C-139 b	45 (b)	75.70	DK WZ PB II
	13	Tueden	C-139 ©	45 (c)	50.2	REH. WC
	14	Kilba	C-140	46	98.75	REH. WC
	15	Kanahi	C-141	47	115.75	REH. WC
	16	Kumkumi	C-142	48	68.40	DK DZ PB I
	17	Sapni	C-143	49	55.45	DK DZ PB II
	18	Sapni	C-144	50	17.80	DK DZ PB III
	19	Baturi	C-145	51	37.65	DK DZ PB III
	20	Baturi	C-146	52	36.00	DK DZ PB I
	21	Baturi	C-147	53	50.20	DK DZ PB I
	22	Baturi	C-148	54	39.65	DK DZ PB I
	23	Brua	C-149	55	17.40	DK DZ PB II
	24	Brua	C-150	56	65.95	REH. WC
	25	Shoang	C-151 (a)	57 (a)	129.9	REH. WC
	26	Shoang	C-151 (b)	57 (b)	147.3	REH. WC
	27	Chansu	C-152 (a)	58 (a)	97.5	REH. WC
	28	Chansu	C-152 (b)	58 (b)	75.7	REH. WC
	29	Chidu	C-153	59	144.88	FS WC PB U
	30	Limsanthang	C-154 (a)	60 (a)	39.65	DK DZ PB I
	31	Limsanthang	C-154 (b)	60 (b)	35.60	DK DZ PB II
	32	Limsanthang	C-154 (c)	60 (c)	40.87	DK DZ PB I
	33	Rukti Hurba	C-155	61	177.25	REH. WC
	34	Rukti Hurba	C-156	62	177.25	REH. WC
	35	Bassaring	C-157	63	234.72	DK DZ PB II
	36	Rakcham	C-160	64	2.43	REH. WC
	37	Rakcham	C-161	65	19.83	REH. WC
	38	Seringche	C-162 (a)	66 (a)	42.49	REH. WC
	39	Seringche	C-162 (b)	66 (b)	50.60	REH. WC
	40	Seringche	C-162 (c)	66 (c)	93.08	REH. WC

	41	Seringche	C-163	67	8.50	DK DZ PB III
	42	Pawanang I	C-164	68	2.83	REH. WC
	43	Pawanang II	C-165	69	78.1	REH. WC
	44	Wadang	C-166	70	119.38	REH. WC
	45	Ralli	C-167	71	260.60	DK DZ PB II
	46	Mebar	C-168	72	212.05	REH. WC
	47	Meber	C-169 a	73 (a)	21.04	DK DZ PB III
	48	Meber	C-169 b	73 (b)	24.68	DK DZ PB III
	49	Barang	C-170 a	74 (a)	55.04	DK DZ PB III
	50	Barang	C-170 b	74 (b)	23.88	DK DZ PB III
	51	Punang Kanda	NC-20	182	48.81	REH. WC
	52	Rally	NC-22	184	77.7	REH. WC
		G T otal DPF			3943.91	
	1	Tiuden Kilba		NDPF - 1	268.31	REH. WC
	2	Wadang		NDPF - 2	51.46	REH. WC
	3	Baturi Kanda		NDPF - 3	65.56	REH. WC
	4	Ananti Dhar		NDPF - 4	137.02	REH. WC
	5	Monorang		NDPF - 5	185.27	REH. WC
	6	Kamru Chanso		NDPF - 6	74.4	REH. WC
	7	Rutrang		NDPF - 7	12.18	REH. WC
	8	Punang Kanda		NDPF - 8	11.94	REH. WC
	9	Punang		NDPF - 9	165.31	REH. WC
		G T otal NDPF			971.45	
MOORANG	1	Holdaring	C-186	90	265.07	REH. WC
	2	Ribba West	C-187	91	169.67	REH. WC
	3	Ribba Eest	C-188(a)	92 (a)	55.85	REH. WC
	4	Ribba East	C-188(b)	92 (b)	69.60	REH. WC
	5	Ralda	C-189(a)	93 (a)	54.63	REH. WC
	6	Ralda	C-189(b)	93 (b)	72.84	REH. WC
	7	Ralda	C-190(a)	94 (a)	68.4	REH. WC
	8	Ralda	C-190(b)	94 (b)	108.45	REH. WC
	9	Rispa	C-191	95	172.4	NWC
	10	Rispa	C-192	96	70.82	NWC
	11	Tidong-I	C-193	97	271.15	REH. WC
	12	Tidong-I	C-194	98	124.65	REH. WC
	13	Tidong-II	C-195	99	3.23	REH. WC
	14	Tidong-III	C-196	100	57.05	REH. WC
	15	Tidong-IV	C-197	101	41.68	REH. WC
	16	Chakra	C-216	120	31.16	REH. WC
	17	Lirang	C-217	121	82.15	REH. WC

	18	Shalmati -I	C-218	122	28.33	REH. WC
	19	Shalmati -II	C-219(a)	123 (a)	72.03	REH. WC
	20	Shalmati -II	C-219(b)	123 (b)	22.26	REH. WC
	21	Shalmati -III	C-220	124	17.81	REH. WC
	22	Rirang	C-221	125	83.36	REH. WC
	23	Rirang	C-222(a)	126 (a)	78.10	REH. WC
	24	Rirang	C-222 (b)	126 (b)	80.94	REH. WC
	25	Rirang	C-223(a)	127 (a)	36.83	REH. WC
	26	Kirarng	C-223 (b)	127 (b)	147.71	REH. WC
	27	Kirarng	C-224	128	106.43	REH. WC
	28	Kirarng	C-225	129	62.32	REH. WC
	29	Jangi	C-226	130	209.22	NWC
	30	Korti-Akpa	C-227	131	467.82	NWC
	31	--do--	C-228	132	294.21	NWC
	32	Rarang-I	C-229	133	221.36	NWC
	33	Rarang-II	C-230	134	33.99	REH. WC
	34	Khorangi	C-231	135	92.27	REH. WC
	35	Khorangi	C-232(a)	136 (a)	126.67	REH. WC
	36	Khorangi	C-232(b)	136 (b)	65.96	REH. WC
		G T otal DPF			3966.42	
NICHAR	1	Kandlu-Chhonda	C- 70 (a) I	3 (a)	66.36	DK WZ PB II
	2	Kandlu-Chhonda (Tikrang)	C- 70 II	3(b)	82.15	FS WC PB U
	3	Kundlu Chaunda (Tikrang)	C-70 (b)	3 (c)	178.46	REH. WC
	4	Tranda Soldang	C-71 (a) I	4 (a)	125.45	REH. WC
	5	Tranda Soldang (Kutangang)	C- 71(a)-II	4 (b)	207.6	FS WC PB II
	6	Tranda Soldang (Kutangang)	C 71 (b) I	4 (c)	40	DK WZ PB II
	7	Tranda Soldang (Kutangang)	C- 71 (b) II	4 (d)	72.49	FS WC PB I
	8	Tranda Soldang (Kutangang)	C 71 (b) III	4 (e)	41.27	DK WZ PB I
	9	Tranda	C 72 (a)	5 (a)	55.85	DK WZ PB III
	10	Tranda	C 72 (b)	5 (b)	63.95	DK WZ PB IV
	11	Bari(Raida)	C-74(a)	7 (a)	52.60	FS WC PB II
	12	Bari Raida	C-74 (b)	7 (b)	230.67	REH. WC
	13	--do--	C-74©	7 (c)	375.95	FS WC PB I
	14	Bari	75 (a)	8 (a)	42.08	DK WZ PB I
	15	Bari	C-75(b)	8 (b)	167.54	FS WC PB I
	16	Bari (Balpanchi)	C-76(a)	9 (a)	47.35	FS WC PB I

	17	Bari Balpanchi	C-76 (b)	9 (b)	82.8	REH. WC
	18	--do--	C-76©	9 (c)	73.00	FS WC PB II
	19	Bari (Kot Dharang)	C-77	10	129.5	FS WC PB U
	20	Sungra	C-78	11	62.32	DK WZ PB II
	21	Gutrang	C -79(a)	12 (a)	102.80	FS WC PB I
	22	Gutrang	C-79 (b)	12 (b)	191	REH. WC
	23	Nichar (Sharang)	C-80	13	38.04	DK WZ PB II
	24	Nichar West	C-81	14	48.97	DK WZ PB II
	25	Nichar East (Bara Jungle	C-82	15	52.20	DK WZ PB II
	26	Nichar East (Kashpo)	C-83	16	64.75	REH. WC
	27	Chhachi Dhar	C-84	17	109.66	DK WZ PB I
	28	Chhnang	C-85	18	35.60	DK WZ PB III
	29	Panvi	C-86 (a)	19 (a)	84.98	DK WZ PB III
	30	--do--	C-86(b)	19 (b)	73.25	DK WZ PB II
	31	Des Kidang	C-126	32	180.5	REH. WC
	32	Dippi	C-127	33	122.20	DK WZ PB IV
	33	Kaksthal	C-128(a)	34 (a)	191.00	DK WZ PB IV
	34	--do--	C-128(b)	34 (b)	114.93	DK WZ PB IV
	35	Mazgani	C-129	35	185.35	REH. WC
	36	Bari	NC-6	168	9.02	REH. WC
	37	Kangoos	NC-7	169	15.14	REH. WC
	38	Rango	NC-8	170	72.37	REH. WC
	39	Somo	NC-9	171	95.67	FS WC PB II
	40	Chott Kanda	NC-10	172	379.49	REH. WC
	41	Panvi Khas	NC-11	173	35.88	REH. WC
	42	Fuktover	NC-12	174	272.99	FS WC PB II
	43	Shalling	NC-13	175	483.33	REH. WC
	44	Morang Kanda	NC14	176	305.57	FS WC PB U
	45	Kaksthal	NC-15	177	117.43	REH. WC
		G Total DPF			5579.51	
POOH	1	Rishi	C-198	102	34.40	REH. WC
	2	Dubling	C-199	103	34.40	REH. WC
	3	Siba-IV	C-200	104	32.27	REH. WC
	4	Siba-III	C-201	105	9.71	REH. WC
	5	Siba-II	C-202	106	9.71	REH. WC
	6	Siba-I	C-203	107	42.90	REH. WC
	7	Ropa-II	C-204	108	25.09	REH. WC
	8	Ropa-I	C-205	109	163.49	REH. WC
	9	Giaboung-III	C-206	110	17.40	REH. WC

	10	Giaboung-III	C-207	111	25.50	REH. WC
	11	Giaboung-I	C-208	112	168.65	REH. WC
	12	Talling	C-209	113	86.60	REH. WC
	13	Sunam	C-210	114	106.84	REH. WC
	14	Kanam	C-211	115	82.96	NWC
	15	Tabang	C-212	116	30.75	NWC
	16	Labrang	C-213	117	101.17	NWC
	17	Koila-pilu	C-214	118	178.87	NWC
	18	Kirmang	C-215	119	237.15	NWC
		G Total DPF			1387.86	

Appendix-VI						
Listed Un Demarcated Protected Forest (showing new and old compartment No's) along with area in hac and allotment to different working circle						
Range	Sr. No.	Name of forest	Old UPF No.s.	New UPF No.	Area in Ha.	Allotment
BHABA NAGAR	1	Rupi	UPF - 1	1	50	FS WC PB U
	2	Rupi	UPF 2	2	17.50	DK WZ PB I
	3	Rupi	UPF - 4	3	15	FS WC PB I
	4	Rupi	UPF 6	4	15.50	DK WZ PB I
	5	Shorang	UF -14	5	40.00	DK WZ PB II
	6	Shorang	UPF 15	6	90	REH. WC
	7	Shorang	UPF 16	7	35	REH. WC
	8	Lisnam	UF-46	28	387	FS WC PB U
	9	--do--	UF-47	29	305	FS WC PB U
	10	Janni	UF-48	30	400	FS WC PB U
	11	Ramni	UF-49	31	550	FS WC PB II
	12	Ramni	UPF 50	32	470	REH. WC
		Total			2375	
KALPA	1	Chini	UF 33	15	225	REH. WC
	2	Duni	UF 34	16	110	REH. WC
	3	Boktu	UF 35	17	110	REH. WC
		G Total UPF			445	
KATGAON	1	Saknathpa	UPF - 26	8	200	REH. WC
	2	Kampunng (Darchi)	UPF 27	9	200.00	FSWC PB U
	3	Kampunng (Darchi)	UPF 28	10	200.00	FSWC PB I
	4	Kampunng (Darchi)	UPF 29	11	350.00	FSWC PB II
	5	Dutrang	UPF - 30	12	150	REH. WC
	6	Dutrang	UPF - 31	13	420	REH. WC
	7	Rushmang	UPF 32	14	220.00	FSWC PB U
		Total			1740	
KILBA	1	Brua	UF 36	18	252	REH. WC
	2	Brua	UF 37	19	412	REH. WC
	3	Brua	UF 38	20	245	REH. WC
	4	Brua	UF 39	21	235	REH. WC
	5	Baturi	UF 40	22	155	REH. WC
	6	Baturi	UF 41	23	75	REH. WC
	7	Tuedan	UF 42	24	182	REH. WC
	8	Junpan	UF 43	25	242	REH. WC
	9	Phinla	UF 44	26	330	REH. WC

	10	Punang	UF 45	27	280	REH. WC
		Total			2408	
NICHAR	1	Mazgani	UF 51	33	417	REH. WC
	2	Mazgani	UF 52	34	455	REH. WC
	3	Panvi	UF 53	35	640	REH. WC
	4	Panvi	UF 54	36	950	REH. WC
	5	Chhachi Dhar	UF 55	37	400	REH. WC
	6	Nichar East	UF 56	38	550	REH. WC
	7	Nichar East	UF 57	39	100	REH. WC
	8	Kandlu Chaunda	UF 58	40	150	REH. WC
	9	Kandlu Chaunda	UF 59	41	75	REH. WC
		Total			3737	

General Abstract Showing the allotment of Forest to various working Circle																				
Name of Range	Forest Category	D/K Working Circle wet Zone					D/K Working Circle Dry Zone					F/S Working Circle				Neoza Working Circle		Protection Working Circle		G Total
		PBI	PB II	PB III	PB IV	Total	PBI	PB II	PB III	PB IV	Total	PBI	PB II	PB U	Total		Total		Total	
Bhaba Nagar	DPF	315.93	113.3	137.2	69.6	636.03	0	0	0	0	0	199.53	65.56	931.73	1196.82	0	0	575.03	575.03	2407.88
	UPF	33	40	0	0	73	0	0	0	0	0	15	550	1142	1707	0	0	595	595	2375
	Total	348.93	153.3	137.2	69.6	709.03	0	0	0	0	0	214.53	615.56	2073.73	2903.82	0	0	1170.03	1170.03	4782.88
																				0
Kalpa	DPF	0	0	0	0	0	285.71	133.53	176.44	0	595.68	0	97.93	114.96	212.89	777.8	777.8	3694.76	3694.76	5281.13
	UPF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	445	445	445
	Total	0	0	0	0	0	285.71	133.53	176.44	0	595.68	0	97.93	114.96	212.89	777.8	777.8	4139.76	4139.76	5726.13
																				0
Katgaon	DPF	9.3	0	0	0	9.3	0	0	0	0	0	0	0	242	242	0	0	981.62	981.62	1232.92
	UPF	0	0	0	0	0	0	0	0	0	0	200	350	420	970	0	0	770	770	1740
	Total	9.3	0	0	0	9.3	0	0	0	0	0	200	350	662	1212	0	0	1751.62	1751.62	2972.92
																				0
Kilba	DPF	66.75	124.65	289.75	37.25	518.4	274.77	603.77	188.59	0	1067.13	0	0	209.23	209.23	0	0	2149.15	2149.15	3943.91
	NDPF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	971.45	971.45	971.45
	UPF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		2408	2408	2408
	Total	66.75	124.65	289.75	37.25	518.4	274.77	603.77	188.59	0	1067.13	0	0	209.23	209.23	0	0	5528.6	5528.6	7323.36
																				0
Malling	DPF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	UPF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
																				0
Moorang	DPF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1435.83	1435.83	2530.59	2530.59	3966.42
	UPF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1435.83	1435.83	2530.59	2530.59	3966.42
																				0
Nichar	DPF	193.01	381.14	176.43	492.08	1242.66	0	0	0	0	0	766.13	701.86	517.22	1985.21	0	0	2351.64	2351.64	5579.51
	UPF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3737	3737	3737
	Total	193.01	381.14	176.43	492.08	1242.66	0	0	0	0	0	766.13	701.86	517.22	1985.21	0	0	6088.64	6088.64	9316.51
																				0
Pooh	DPF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	630.9	630.9	756.96	756.96	1387.86
	UPF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	630.9	630.9	756.96	756.96	1387.86
Total DPF		584.99	619.09	603.38	598.93	2406.39	560.48	737.3	365.03	0	1662.81	965.66	865.35	2015.14	3846.15	2844.53	2844.53	13039.8	13039.8	23799.63
Total NDPF		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	971.45	971.45
Total UPF		33	40	0	0	73	0	0	0	0	0	215	900	1562	2677	0	0	7955	7955	10705
G Total		617.99	659.09	603.38	598.93	2479.39	560.48	737.3	365.03	0	1662.81	1180.66	1765.35	3577.14	6523.15	2844.53	2844.53	20994.8	21966.2	35476.08

	Bhaba Nagar Range			Kalpa Range			Katgaon Range			Kilba Range				Moorang Range			Nichar Range		
Name of Working Circle	DPF	UPF	Total	DPF	UPF	Total	DPF	UPF	Total	DPF	UPF	NDPF	Total	DPF	UPF	Total	DPF	UPF	Total
D/ K Wet	636.03	73	709.03	0	0	0	9.3	0	9.3	518.4	0	0	518.4	0	0	0	1242.66	0	1242.66
D/ K DRY	0	0	0	595.68	0	595.68	0	0	0	1067.13	0	0	1067.13	0	0	0	0	0	0
F/ S WC	1196.82	1707	2903.82	212.89	0	212.89	242	970	1212	209.23	0	0	209.23	0	0	0	1985.21	0	1985.21
Neoza WC	0	0	0	777.8	0	777.8	0	0	0	0	0	0	0	1435.83	0	1435.83	0	0	0
Protection WC	575.03	595	1170.03	3694.76	445	4139.76	981.62	770	1751.62	2149.15	2408	971.45	5528.6	2530.59	0	2530.59	2351.64	3737	6088.64
Total	2407.88	2375	4782.88	5281.13	445	5726.13	1232.92	1740	2972.92	3943.91	2408	971.45	7323.36	3966.42	0	3966.42	5579.51	3737	9316.51

	Pooh Range			Total			G Total
Name of Working Circle	DPF	UPF	Total	DPF	NDPF	UPF	
D/ K Wet	0	0	0	2406.39	0	73	2479.39
D/ K DRY	0	0	0	1662.81	0	0	1662.81
F/ S WC	0	0	0	3846.15	0	2677	6523.15
Neoza WC	630.9	0	630.9	2844.53	0	0	2844.53
Protection WC	756.96	0	756.96	13039.75	971.45	7955	21966.2
Total	1387.86	0	1387.86	23799.63	971.45	10705	35476.08

Appendix - VIII			
Range wise list of Other forest land and Alpine pasture			
Name of Range	Sr. No	Name of Forest land / Alpine pasture	Area
Bhaba Nagar			
	1	Unlisted UPF	2517.17
	2	Unlisted UPF	12000
			14517.17
Kalpa	1	Unlisted UPF	48050
Katgaon	1	Unlisted UPF	7277.08
Kilba	1	Unlisted UPF	122050
	2	UPF-159 (Kalikotang)	3769.38
	3	UPF-160 (Bujlang)	873.64
	4	UPF-160 (Rakchham)	4007.74
			130700.76
Moorang	1	Unlisted UPF	99387.45
Malling	1	Unlisted UPF	73681
Nichar	1	Unlisted UPF	22050
Pooh	A Unlisted UPF	Unlisted UPF	55000
	B Pasture Land	Pooh (31/1)	306.7122
	2	Labrang (31/2)	15.3909
	3	Danmodey (31/3)	161.6414
	4	Doling Kanda (31/4)	108.8396
	5	Riging Kanda	732.3071
	6	Chakulang	11.3935
	7	Dubling	119.4171
	8	Dabbling	334.8848
	9	Rishi Kanda	872.1996
	10	Yangti Kanda	354.1526
	11	Dulsethang	852.6913
	12	Namgia Khas	395.5074
	13	Namgia Kanda	176.3743
	14	Tashigang	488.9927
	15	Khabo	571.778
	16	Chunsa Kanda	12.6157
			5480.12
		G Total all Ranges	456143.58

Plot Approach Form**Field Form No 1**

- 1) Plot Approach Form must be filled in while the journey is in progress.
- 2) While recording date it is essential to records month and year also.
1. FSI Zone (1) Northern Zone
2. Physiographic Zone (1) Western Himalayas
3. State and Code (02) HP
4. Division and Code
5. District and Code
6. Mapsheet No.
7. Grid Code
8. Crew leader (name)
9. Name of Camp
10. Time (hrs) at which left the camp
11. Distance covered
12. Time taken in journey by vehicle
13. Location of the places up to which journey was performed by vehicle (describe in brief)

Latitude**Longitude**

(Remark: The Latitude & Longitude of the location of the places up to which journey was performed by vehicle are to be recorded here.)

- | | | | |
|---|-----------------------------|---------------|---------------|
| 14. Conspicuous features observed during the Journey by vehicle (describe in brief) | Not to be filled up. | | |
| 15. Time (hrs.) at which started on foot | Plot 1 | Plot 2 | Plot 3 |
| 16. Distance covered on foot up to the Grid Centre (Km) | Plot 1 | Plot 2 | Plot 3 |

(Remark: The word “Direction and” is deleted from the above items.)

- | | | | |
|---|-----------------------------|---------------|---------------|
| 17. Conspicuous features observed during the Journey on foot (described in brief) | Not to be filled up. | | |
| 18. Time (hrs.) at which arrived at the reference point | Not to be filled up. | | |
| 19. Description of the reference point (described in details) | Not to be filled up. | | |
| 20. Compass bearing from reference point to the plot approached for commencing survey | Not to be filled up. | | |
| 21. Distance of the plot from reference point (mtr) | Not to be filled up. | | |
| 22. Time (hrs.) of arrival at the Plot | Plot 1 | Plot 2 | Plot 3 |
| 23. Time (hrs.) of departure from the Plot | Plot 1 | Plot 2 | Plot 3 |

24. Time (**hrs.**) at which returned to the camp

25. Compassing/Navigation done by

26. Distance measured by

27. Plot laid out by

28. Tree Enumeration done by

29. Height measurement taken by

30. B.T. and other measurement taken by

31. Bamboo enumeration done by

32. Bamboo weight taken by

33. Herbs/Shrubs/Rege. data collected by

34. Forest Floor/ Soil data collected by

35. Biomass data collected by

36. Reference in the field written by

37. Detail of the Reference

Reference Tree	Spp Code	Spp Name	Distance from Trees to Grid Centre	Bearing from Tree to Grid Centre
1.				
2.				

38. Distance & bearing of GPS to the Grid centre from the place upto where the crew approach. This time is to be filled up only if the status of the plot 2, 3, or 4

39. Remarks

Date:
Leader

Signature of the Crew

The diagrams A & B are not to be drawn.

Job No.	Survey code	Form Code	FSI Zone	Phy. Zone	State	District	Forest Division	Range	Name of Forest	Name of Block	Compartment	Working Circle	Mapsheet No.	Grid code	Latitude	Longitude	Legal Status	Land Use	Wild life protected area
1	2	3	4	5	6	7(2)	8 (2)	8 a	8 b	8c	8	8d	9 (6)	10 (4)	11 (7)	12 (7)	13 (1)	14 (2)	15 (1)

16	General Topography
17	Slope
18	Position on slope
19	Altitude
20	Aspect
21	Rockiness
22	Humus
23	Soil colour
24	Soil consistency
25	Soil texture
26	Coarse Fragments
27	Soil depth
28	Soil erosion
29	Origin of stand
30	Crop composition
31	Canopy layer or storey
32	Top height
33	Size class
34	Intensity of regeneration
35	Species
36	Injuries to crop <i>due to pest</i>
36 ^a	<i>Girdling & Illicit felling</i>
36 ^b	<i>Lopping for fodder</i>
37	Fire incidence
38	Grazing incidence
39	Presence of weeds
40	Presence of grass
41	Bamboo density
42	Bamboo quality
43	Bamboo flowering
44	Bamboo Regeneration
45	Plantation potential
46	Distance from road (km)
47	Distance from river/stream(m)
48	Plot status
49	Biotic influence
50	Natural calamity
51	Forest Type (as per Working Plan)

Date

.....

Signature of the Crew Leader

Name of the Crew

Leader.....

Note :- i) First Number in the row below the field headings represents the column number inside the bracket represent the column width.

ii) For Lat & Long second to recorded upto one decimal places, no need to put the decimal point.

Field Form

Field Form

Total No of Bamboo clumps	Total No. of trees
21 (3)	22 (3)

[illegible]

Name & Signature of the Crew

Appendix-X																		
Forest wise Enumeration Result of Deo/Kail Working Circle WZ PB I																		
Total Area: 617.99 Ha Enumeration: Grid System (Sample IDs 6 Nos)																		
Name of Range	Name of forest	Compartment No (old)	Compartment No (New)	Area (Ha)	Species Code	Species	Number/ volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Bhaba Nagar	Kandlu Chaunda	C-68 (c)	1 (f)	167.13	0241	Deodar	No.	0	0	0	1	0	5	2	1	0	0	9
							Voulme	0	0	0	1.84	0	18.4	9.62	6.09	0	0	35.95
					0926	Kail	No.	0	0	0	0	0	0	1	0	0	0	1
							Voulme	0	0	0	0	0	0	5.66	0	0	0	5.66
					0047	Ailanthus	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.01	0	0	0	0	0	0	0	0	0	0.01
					1038	Rhododendron	No.	0	1	0	0	0	0	0	0	0	0	1
							Voulme	0	0.07	0	0	0	0	0	0	0	0	0.07
					2000	Other B/L	No.	0	1	0	0	0	0	0	0	0	0	1
							Voulme	0	0.07	0	0	0	0	0	0	0	0	0.07
						Total	No.	1	2	0	1	0	5	3	1	0	0	13
						Total	Volume	0.01	0.14	0	1.84	0	18.4	15.28	6.09	0	0	41.76
	Ramni	C- 130 (a) iii	36 (c)	97	0241	Deodar	No.	3	4	1	3	3	0	0	0	0	0	14
							Voulme	0.18	1.12	0.85	5.52	8.49	0	0	0	0	0	16.16
					0926	Kail	No.	0	0	1	0	0	0	0	0	0	0	1
							Voulme	0	0	0.99	0	0	0	0	0	0	0	0.99
					0002	Fir	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.06	0	0	0	0	0	0	0	0	0	0.06
					0921	Spruce	No.	0	0	0	1	0	0	0	1	0	0	2
							Voulme	0	0	0	1.42	0	0	0	7.65	0	0	9.07
						Total	No.	4	4	2	4	3	0	0	1	0	0	18
						Total	Volume	0.24	1.12	1.84	6.94	8.49	0	0	7.65	0	0	26.28
	Ramni	C- 130 (a) ii	36 (b)	51.8	0926	Kail	No.	1	2	2	0	0	0	0	0	0	0	5
							Voulme	0.06	0.56	1.98	0	0	0	0	0	0	0	2.6
					0002	Fir	No.	45	14	4	4	0	0	0	0	0	0	67
							Voulme	2.7	3.92	3.96	6.8	0	0	0	0	0	0	17.38
					0921	Spruce	No.	2	1	1	0	0	0	0	0	0	0	4

							Voulme	0.12	0.28	0.71	0	0	0	0	0	0	0	1.11
						Total	No.	48	17	7	4	0	0	0	0	0	0	76
						Total	Volume	2.88	4.76	6.65	6.8	0	0	0	0	0	0	21.09
Katgaon	Kampunang	C-90	23	9.3	0241	Deodar	No.	0	0	0	0	0	0	0	0	0	0	0
							Voulme	0	0	0	0	0	0	0	0	0	0	0
					0926	Kail	No.	2	0	0	0	0	0	0	0	0	0	2
							Voulme	0.12	0	0	0	0	0	0	0	0	0	0.12
					0002	Fir	No.	0	0	0	0	0	0	0	0	0	0	0
							Voulme	0	0	0	0	0	0	0	0	0	0	0
					0921	Spruce	No.	0	0	0	1	1	3	2	1	1	1	10
							Voulme	0	0	0	1.42	2.55	12.75	12.46	7.65	9.91	9.91	56.65
					0965	Birdcherry	No.	0	0	1	0	0	0	0	0	0	0	1
							Voulme	0	0	0.23	0	0	0	0	0	0	0	0.23
						Total	No.	2	0	1	1	1	3	2	1	1	1	13
						Total	Volume	0.12	0	0.23	1.42	2.55	12.75	12.46	7.65	9.91	9.91	57
Kilba	Punang	C-134 (a)	40 (a)	66.75	0241	Deodar	No.	8	4	3	5	3	7	1	1	0	0	32
							Voulme	0.48	1.12	2.55	9.2	8.49	25.76	4.81	6.09	0	0	58.5
					0926	Kail	No.	0	0	2	0	0	0	0	0	0	0	2
							Voulme	0	0	1.98	0	0	0	0	0	0	0	1.98
					0002	Fir	No.	0	0	0	0	0	0	0	0	0	0	0
							Voulme	0	0	0	0	0	0	0	0	0	0	0
					0921	Spruce	No.	1	1	0	0	0	0	0	0	0	0	2
							Voulme	0.06	0.28	0	0	0	0	0	0	0	0	0.34
						Total	No.	9	5	5	5	3	7	1	1	0	0	36
						Total	Volume	0.54	1.4	4.53	9.2	8.49	25.76	4.81	6.09	0	0	60.82
Nichar	Chhachi Dhar	C-84	17	109.66	0241	Deodar	No.	3	2	1	3	2	0	1	0	0	1	13
							Voulme	0.18	0.56	0.85	5.52	5.66	0	4.81	0	0	6.9	24.48
					0926	Kail	No.	3	0	1	0	0	0	0	0	1	0	5
							Voulme	0.18	0	0.99	0	0	0	0	0	8.09	0	9.26
					0002	Fir	No.	0	0	0	0	0	0	0	0	0	0	0
							Voulme	0	0	0	0	0	0	0	0	0	0	0
					0921	Spruce	No.	8	3	3	2	0	1	0	0	0	0	17

							Voulme	0.48	0.84	2.13	2.84	0	4.25	0	0	0	0	10.54
					0038	Aesculus	No.	0	1	0	1	0	0	0	0	0	0	2
							Voulme	0	0.06	0	0.29	0	0	0	0	0	0	0.35
						Total	No.	14	6	5	6	2	1	1	0	1	1	37
						Total	Volume	0.84	1.46	3.97	8.65	5.66	4.25	4.81	0	8.09	6.9	44.63
						G Total	No.	78	34	20	21	9	16	7	4	2	2	193
						G Total	Volume	4.63	8.88	17.22	34.85	25.19	61.16	37.36	27.48	18	16.81	251.58
Forestwise Enumeration Result of Deo/Kail Working Circle WZ PB II																		
Total Area: 659.09 Ha Enumeration: Grid System (Sample IDs 6 Nos)																		
Name of Range	Name of forest	Compartment No		Area (Ha)		Species	Number/volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Bhaba Nagar	Janni	C-131	37	113.3	0241	Deodar	No.	0	0	0	3	5	7	1	1	0	0	17
							Voulme	0	0	0	5.52	14.15	25.76	4.81	6.09	0	0	56.33
						Total	No.	0	0	0	3	5	7	1	1	0	0	17
						Total	Volume	0	0	0	5.52	14.15	25.76	4.81	6.09	0	0	56.33
Kilba	Tiuden	C-139 (b)	45 (b)	75.7	0241	Deodar	No.	7	11	15	10	4	0	0	0	0	0	47
							Voulme	0.42	3.08	12.75	18.4	11.32	0	0	0	0	0	45.97
						Total	No.	7	11	15	10	4	0	0	0	0	0	47
						Total	Volume	0.42	3.08	12.75	18.4	11.32	0	0	0	0	0	45.97
Nichar	Kandlu Chaunda	C-70 (a) i	3 (a)	66.36	0241	Deodar	No.	1	4	0	4	2	6	3	0	0	0	20
							Voulme	0.06	1.12	0	7.36	5.66	22.08	14.43	0	0	0	50.71
					0019	Maple	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.01	0	0	0	0	0	0	0	0	0	0.01
						Total	No.	2	4	0	4	2	6	3	0	0	0	21
						Total	Volume	0.07	1.12	0	7.36	5.66	22.08	14.43	0	0	0	50.72
	Sungra	C-78	11	62.32	0241	Deodar	No.	39	5	0	0	0	1	0	0	1	0	46
							Voulme	2.34	1.4	0	0	0	3.68	0	0	6.9	0	14.32
					0926	Kail	No.	20	2	2	0	0	0	1	0	1	0	26
							Voulme	1.2	0.56	1.98	0	0	0	5.66	0	8.09	0	17.49
						Total	No.	59	7	2	0	0	1	1	0	2	0	72
						Total	Volume	3.54	1.96	1.98	0	0	3.68	5.66	0	14.99	0	31.81
	Nichar Sharang	C-80	13	38.04	0241	Deodar	No.	0	0	2	16	9	0	0	0	0	0	27

							Voulme	0	0	1.7	29.44	25.47	0	0	0	0	0	56.61
						Total	No.	0	0	2	16	9	0	0	0	0	0	27
						Total	Volume	0	0	1.7	29.44	25.47	0	0	0	0	0	56.61
	Panvi	C-86 (b)	19 (b)	73.25	0926	Kail	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.06	0	0	0	0	0	0	0	0	0	0.06
					0921	Spruce	No.	0	1	0	2	1	1	4	1	0	0	10
							Voulme	0	0.28	0	2.84	2.55	4.25	24.92	7.65	0	0	42.49
						Total	No.	1	1	0	2	1	1	4	1	0	0	11
						Total	Volume	0.06	0.28	0	2.84	2.55	4.25	24.92	7.65	0	0	42.55
						G Total	No.	69	23	19	35	21	15	9	2	2	0	195
						G Total	Volume	4.09	6.44	16.43	63.56	59.15	55.77	49.82	13.74	14.99	0	283.99

Forestwise Enumeration Result of Deo/Kail Working Circle WZ PB III

Total Area: 603.38 Ha						Enumeration: Grid System (Sample IDs 6 Nos)												
Name of Range	Name of forest	Compartment No		Area (Ha)		Species	Number/volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Bhaba Nagar	Lisnam	C-132 (a)	38 (a)	93.5	0241	Deodar	No.	2	6	3	6	8	4	3	1	0	0	33
							Voulme	0.12	1.68	2.55	11.04	22.64	14.72	14.43	6.09	0	0	73.27
					2000	Other B/L	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.01	0	0	0	0	0	0	0	0	0	0.01
						Total	No.	3	6	3	6	8	4	3	1	0	0	34
						Total	Volume	0.13	1.68	2.55	11.04	22.64	14.72	14.43	6.09	0	0	73.28
Kilba	Junpun	C-137 (b)	43 (b)	60.3	0241	Deodar	No.	7	11	15	10	3	1	0	0	0	0	47
							Voulme	0.42	3.08	12.75	18.4	8.49	3.68	0	0	0	0	46.82
						Total	No.	7	11	15	10	3	1	0	0	0	0	47
						Total	Volume	0.42	3.08	12.75	18.4	8.49	3.68	0	0	0	0	46.82
	Thkru-wasankan	C-138 (a)	44 (a)	75.7	0241	Deodar	No.	5	0	2	4	2	4	2	2	0	0	21
							Voulme	0.3	0	1.7	7.36	5.66	14.72	9.62	12.18	0	0	51.54
					0926	Kail	No.	0	0	0	0	2	1	0	0	0	0	3
							Voulme	0	0	0	0	6.22	4.25	0	0	0	0	10.47
					0651	Walnut	No.	0	0	0	0	0	1	0	0	0	0	1
							Voulme	0	0	0	0	0	0.57	0	0	0	0	0.57
						Total	No.	5	0	2	4	4	6	2	2	0	0	25

						Total	Volume	0.3	0	1.7	7.36	11.88	19.54	9.62	12.18	0	0	62.58
	Thkru-wasankan	C-138 (b)	44 (b)		0241	Deodar	No.	2	1	2	2	4	6	4	0	0	0	21
							Voulme	0.12	0.28	1.7	3.68	11.32	22.08	19.24	0	0	0	58.42
					0630	Brey	No.	5	1	1	0	0	0	0	0	0	0	7
							Voulme	2.2	0.71	1.08	0	0	0	0	0	0	0	3.99
						Total	No.	7	2	3	2	4	6	4	0	0	0	28
						Total	Volume	2.32	0.99	2.78	3.68	11.32	22.08	19.24	0	0	0	62.41
Nichar	Panvi	C-86 (a)	19 (a)	84.98	0241	Deodar	No.	0	0	1	2	0	0	0	0	0	0	3
							Voulme	0	0	0.85	3.68	0	0	0	0	0	0	4.53
					0926	Kail	No.	0	0	1	1	3	2	1	0	0	0	8
							Voulme	0	0	0.99	1.98	9.33	8.5	5.66	0	0	0	26.46
					0002	Fir	No.	0	1	0	0	0	0	0	0	0	0	1
							Voulme	0	0.28	0	0	0	0	0	0	0	0	0.28
					0921	Spruce	No.	0	0	0	0	0	0	1	0	0	0	1
							Voulme	0	0	0	0	0	0	6.23	0	0	0	6.23
						Total	No.	0	1	2	3	3	2	2	0	0	0	13
						Total	Volume	0	0.28	1.84	5.66	9.33	8.5	11.89	0	0	0	37.5
	Tranda	C-72 (a)	5 (a)	55.85	0241	Deodar	No.	0	1	10	12	5	0	1	1	0	0	30
							Voulme	0	0.28	8.5	22.08	14.15	0	4.81	6.09	0	0	55.91
					0965	Birdcherry	No.	0	1	0	0	0	0	0	0	0	0	1
							Voulme	0	0.07	0	0	0	0	0	0	0	0	0.07
						Total	No.	0	2	10	12	5	0	1	1	0	0	31
						Total	Volume	0	0.35	8.5	22.08	14.15	0	4.81	6.09	0	0	55.98
						G Total	No	22	22	35	37	27	19	12	4	0	0	178
							Volume	3.17	6.38	30.12	68.22	77.81	68.52	59.99	24.36	0	0	338.57

Forestwise Enumeration Result of Deo/Kail Working Circle WZ PB IV

Total Area: 598.93 Ha						Enumeration: Grid System (Sample IDs 3 Nos)												
Name of Range	Name of forest	Compartment No		Area (Ha)		Species	Number/volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Bhaba Nagar	Kandlu Chaunda khuni	C-69 (c)	2 (c)	69.6	0241	Deodar	No.	25	9	4	1	0	0	0	0	1	0	40
							Voulme	1.5	2.52	3.4	1.84	0	0	0	0	6.9	0	16.16

					0926	Kail	No.	4	2	1	1	0	0	0	0	0	0	8
							Voulme	0.24	0.56	0.99	1.98	0	0	0	0	0	0	3.77
					0921	Spruce	No.	3	2	0	0	0	0	0	0	0	0	5
							Voulme	0.18	0.56	0	0	0	0	0	0	0	0	0.74
						Total	No.	32	13	5	2	0	0	0	0	1	0	53
						Total	Volume	1.92	3.64	4.39	3.82	0	0	0	0	6.9	0	20.67
Nichar	Dippi	C-127	33	112.2	0241	Deodar	No.	0	0	0	0	1	0	0	0	0	0	1
							Voulme	0	0	0	0	2.83	0	0	0	0	0	2.83
					0926	Kail	No.	0	0	0	0	4	1	0	0	0	0	5
							Voulme	0	0	0	0	12.44	4.25	0	0	0	0	16.69
					0969	Prunus	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.01	0	0	0	0	0	0	0	0	0	0.01
						Total	No.	1	0	0	0	5	1	0	0	0	0	7
						Total	Volume	0.01	0	0	0	15.27	4.25	0	0	0	0	19.53
	Kaksthal	C-128 (b)	34 (b)	114.93	0241	Deodar	No.	0	0	1	0	4	2	1	0	0	0	8
							Voulme	0	0	0.85	0	11.32	7.36	4.81	0	0	0	24.34
					0002	Fir	No.	0	0	1	3	1	0	0	0	0	0	5
							Voulme	0	0	0.99	5.1	2.83	0	0	0	0	0	8.92
					0921	Spruce	No.	0	0	1	0	0	0	0	0	1	0	2
							Voulme	0	0	0.71	0	0	0	0	0	9.91	0	10.62
					0651	Walnut	No.	0	0	1	1	0	0	1	0	0	0	3
							Voulme	0	0	0.11	0.23	0	0	0.82	0	0	0	1.16
						Total	No.	0	0	4	4	5	2	2	0	1	0	18
						Total	Volume	0	0	2.66	5.33	14.15	7.36	5.63	0	9.91	0	45.04
						G Total	No.	33	13	9	6	10	3	2	0	2	0	78
							Volume	1.93	3.64	7.05	9.15	29.42	11.61	5.63	0	16.81	0	85.24

Forestwise Enumeration Result of Deo/Kail Working Circle DZ PB I

Total Area: 560.48 Ha Enumeration: Grid System (Sample IDs 5 Nos)																		
Name of Range	Name of Forest	Compartment No (old)	Compartment No (New)	Area (Ha)	Species Code	Species	Number/volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Kalpa	Telang	C-240 (a)	144 (a)	74.46	0241	Deodar	No.	3	12	12	6	0	2	0	0	0	0	35
							Volume	0.09	2.76	8.52	10.2	0	6.8	0	0	0	0	28.37
						Total	No.	3	12	12	6	0	2	0	0	0	0	35
						Total	Volume	0.09	2.76	8.52	10.2	0	6.8	0	0	0	0	28.37
	Urni II	C-255 (b)	159 (b)	76.08	0926	Kail	No.	1	2	1	0	1	0	0	0	0	0	5
							Volume	0.03	0.46	0.71	0	2.26	0	0	0	0	0	3.46
						Total	No.	1	2	1	0	1	0	0	0	0	0	5
						Total	Volume	0.03	0.46	0.71	0	2.26	0	0	0	0	0	3.46
	Urni II	C-255 (a)	159 (a)	30.75	0926	Kail	No.	1	0	1	1	0	1	0	0	0	0	4
							Volume	0.03	0	0.71	1.7	0	3.68	0	0	0	0	6.12
						Total	No.	1	0	1	1	0	1	0	0	0	0	4
						Total	Volume	0.03	0	0.71	1.7	0	3.68	0	0	0	0	6.12
Kilba	Kumkumi	C-142	48	68.4	0241	Deodar	No.	1	1	2	4	4	3	2	1	0	0	18
							Volume	0.03	0.23	1.42	6.8	10.2	10.2	8.5	4.81	0	0	42.19
						Total	No.	1	1	2	4	4	3	2	1	0	0	18
						Total	Volume	0.03	0.23	1.42	6.8	10.2	10.2	8.5	4.81	0	0	42.19
	Baturi	C-148	54	39.65	0241	Deodar	No.	0	0	0	1	1	2	0	0	0	1	5
							Volume	0	0	0	1.7	2.55	6.8	0	0	0	4.81	15.86
					1010	Ban Oak	No.	1	0	0	0	0	0	0	0	0	0	1
							Volume	0.44	0	0	0	0	0	0	0	0	0	0.44
					2000	Other B/L	No.	0	0	1	0	0	0	0	0	0	0	1
							Volume	0	0	0.23	0	0	0	0	0	0	0	0.23
						Total	No.	1	0	1	1	1	2	0	0	0	1	7
						Total	Volume	0.44	0	0.23	1.7	2.55	6.8	0	0	0	4.81	16.53
						G Total	No.	7	15	17	12	6	8	2	1	0	1	69
							Volume	0.62	3.45	11.59	20.4	15.01	27.48	8.5	4.81	0	4.81	96.67

Forestwise Enumeration Result of Deo/Kail Working Circle DZ PB II

Total Area: 737.30 Ha								Enumeration: Grid System (Sample IDs 8 Nos)										
Name of Range	Name of forest	Compartment No	Compartment No (New)	Area (Ha)	Species Code	Species	Number/volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Kalpa	Kastiarang	C-246	150	32.37	0241	Deodar	No.	5	11	15	8	1	2	0	0	0	0	42
							Voulme	0.15	2.53	10.65	13.6	2.55	6.8	0	0	0	0	36.28
						Total	No.	5	11	15	8	1	2	0	0	0	0	42
						Total	Volume	0.15	2.53	10.65	13.6	2.55	6.8	0	0	0	0	36.28
	Roghi I	C-244	148	17	0241	Deodar	No.	3	41	27	4	2	0	0	0	0	0	77
							Voulme	0.09	9.43	19.17	6.8	5.1	0	0	0	0	0	40.59
						Total	No.	3	41	27	4	2	0	0	0	0	0	77
						Total	Volume	0.09	9.43	19.17	6.8	5.1	0	0	0	0	0	40.59
	Chinni	C-243 (b)	147 (b)	18.6	0241	Deodar	No.	4	5	11	9	1	0	0	0	0	0	30
							Voulme	0.12	1.15	7.81	15.3	2.55	0	0	0	0	0	26.93
					0926	Kail	No.	0	0	2	0	0	0	0	0	0	0	2
							Voulme	0	0	1.42	0	0	0	0	0	0	0	1.42
						Total	No.	4	5	13	9	1	0	0	0	0	0	32
						Total	Volume	0.12	1.15	9.23	15.3	2.55	0	0	0	0	0	28.35
	Barang	C-172 (b)	76 (b)	36.42	0241	Deodar	No.	0	12	14	12	2	0	0	0	1	0	41
							Voulme	0	2.76	9.94	20.4	5.1	0	0	0	4.81	0	43.01
						Total	No.	0	12	14	12	2	0	0	0	1	0	41
						Total	Volume	0	2.76	9.94	20.4	5.1	0	0	0	4.81	0	43.01
Kilba	Limsanhang	C-154 (b)	60 (b)	35.6	0241	Deodar	No.	0	0	7	3	3	0	1	0	0	0	14
							Voulme	0	0	4.97	5.1	7.65	0	4.25	0	0	0	21.97
						Total	No.	0	0	7	3	3	0	1	0	0	0	14
						Total	Volume	0	0	4.97	5.1	7.65	0	4.25	0	0	0	21.97
	Bassaring	C-157	63	234.7 2	0241	Deodar	No.	10	8	16	2	1	0	0	0	0	0	37
							Voulme	0.3	1.84	11.36	3.4	2.55	0	0	0	0	0	19.45
					0926	Kail	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.03	0	0	0	0	0	0	0	0	0	0.03
					0921	Spruce	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.06	0	0	0	0	0	0	0	0	0	0.06

						Total	No.	12	8	16	2	1	0	0	0	0	0	39
						Total	Volume	0.39	1.84	11.36	3.4	2.55	0	0	0	0	0	19.54
	Sapni	C-143	49	55.45	0241	Deodar	No.	0	0	1	1	3	0	3	2	0	0	10
							Voulme	0	0	0.71	1.7	7.65	0	12.75	9.62	0	0	32.43
						Total	No.	0	0	1	1	3	0	3	2	0	0	10
						Total	Volume	0	0	0.71	1.7	7.65	0	12.75	9.62	0	0	32.43
	Ralli	C-167	71	260.6	0241	Deodar	No.	3	0	1	1	4	1	5	0	0	0	15
							Voulme	0.09	0	0.71	1.7	10.2	3.4	21.25	0	0	0	37.35
						Total	No.	3	0	1	1	4	1	5	0	0	0	15
						Total	Volume	0.09	0	0.71	1.7	10.2	3.4	21.25	0	0	0	37.35
						G Total	No.	27	77	94	40	17	3	9	2	1	0	270
							Volume	0.84	17.71	66.74	68	43.35	10.2	38.25	9.62	4.81	0	259.52

Forestwise Enumeration Result of Deo/Kail Working Circle DZ PB III

Total Area: 365.03 Ha						Enumeration: Grid System (Sample IDs 8 Nos)												
Name of Range	Name of forest	Compartment No		Area (Ha)		Species	Number/ volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Kalpa	Barang	C-173	77	13.76	0241	Deodar	No.	3	6	2	1	0	0	0	0	0	0	12
							Voulme	0.09	1.38	1.42	1.7	0	0	0	0	0	0	4.59
					0926	Kail	No.	0	1	1	0	1	0	0	0	0	0	3
							Voulme	0	0.23	0.71	0	2.26	0	0	0	0	0	3.2
					0921	Spruce	No.	5	1	5	1	2	0	0	0	0	0	14
							Voulme	0.3	0.28	3.55	1.42	5.1	0	0	0	0	0	10.65
						Total	No.	8	8	8	2	3	0	0	0	0	0	29
						Total	Volume	0.39	1.89	5.68	3.12	7.36	0	0	0	0	0	18.44
	Barang	C-175 (b)	79 (b)	53.42	0926	Kail	No.	0	0	1	0	0	0	0	0	0	0	1
							Voulme	0	0	0.71	0	0	0	0	0	0	0	0.71
					0002	Fir	No.	0	1	0	0	0	1	0	0	0	0	2
							Voulme	0	0.28	0	0	0	4.53	0	0	0	0	4.81
					0921	Spruce	No.	0	1	1	0	0	2	4	0	0	0	8
							Voulme	0	0.28	0.71	0	0	8.5	24.92	0	0	0	34.41
						Total	No.	0	2	2	0	0	3	4	0	0	0	11
						Total	Volume	0	0.56	1.42	0	0	13.03	24.92	0	0	0	39.93

	Runag	C-248 (b)	152 (b)	63.75				Nil										
Kilba	Sapni	C-144	50	17.8	0241	Deodar	No.	13	9	6	3	2	0	0	0	0	0	33
							Voulme	0.39	2.07	4.26	5.1	5.1	0	0	0	0	0	16.92
						Total	No.	13	9	6	3	2	0	0	0	0	0	33
						Total	Volume	0.39	2.07	4.26	5.1	5.1	0	0	0	0	0	16.92
	Sarinche	C-163	67	8.5	0241	Deodar	No.	0	0	1	1	2	6	0	0	0	0	10
							Voulme	0	0	0.71	1.7	5.1	20.4	0	0	0	0	27.91
						Total	No.	0	0	1	1	2	6	0	0	0	0	10
						Total	Volume	0	0	0.71	1.7	5.1	20.4	0	0	0	0	27.91
	Mebber	C-169 (a)	73 (a)	21.04	0241	Deodar	No.	1	5	11	2	2	0	0	0	0	0	21
							Voulme	0.03	1.15	7.81	3.4	5.1	0	0	0	0	0	17.49
					0926	Kail	No.	1	1	1	0	0	0	0	0	0	0	3
							Voulme	0.03	0.23	0.71	0	0	0	0	0	0	0	0.97
					0921	Spruce	No.	0	2	6	3	0	0	0	0	0	0	11
							Voulme	0	0.56	4.26	4.26	0	0	0	0	0	0	9.08
						Total	No.	2	8	18	5	2	0	0	0	0	0	35
						Total	Volume	0.06	1.94	12.78	7.66	5.1	0	0	0	0	0	27.54
	Barang	C-170 (a)	74 (a)	55.04	0241	Deodar	No.	5	15	14	10	5	1	0	0	0	0	50
							Voulme	0.15	3.45	9.94	17	12.75	3.4	0	0	0	0	46.69
					0926	Kail	No.	1	1	0	0	0	0	0	0	0	0	2
							Voulme	0.03	0.23	0	0	0	0	0	0	0	0	0.26
						Total	No.	6	16	14	10	5	1	0	0	0	0	52
						Total	Volume	0.18	3.68	9.94	17	12.75	3.4	0	0	0	0	46.95
	Rukti Hurba	C-156	62	151.3 5	0241	Deodar	No.	0	0	6	7	5	1	0	0	0	0	19
							Voulme	0	0	4.26	11.9	12.75	3.4	0	0	0	0	32.31
						Total	No.	0	0	6	7	5	1	0	0	0	0	19
						Total	Volume	0	0	4.26	11.9	12.75	3.4	0	0	0	0	32.31
						G Total	No.	29	43	55	28	19	11	4	0	0	0	189
							Volume	1.02	10.14	39.05	46.48	48.16	40.23	24.92	0	0	0	210

Forestwise Enumeration Result of Fir / Spruce Working Circle PB I

Total Area: 1180.66 Ha

Enumeration: Grid System (Sample IDs 6 Nos)

Name of Range	Name of forest	Compartment No (Old)	Compartment No (New)	Area (Ha)	Species Code	Species	Number/ volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Bhaba Nagar	Ramni	C-130 (a) i	36 (a)	85.93	0241	Deodar	No.	1	0	0	3	0	0	0	0	0	1	5
							Voulme	0.06	0	0	5.52	0	0	0	0	0	6.9	12.48
					0002	Fir	No.	2	1	2	2	1	0	0	0	0	0	8
							Voulme	0.12	0.28	1.98	3.4	2.83	0	0	0	0	0	8.61
					1006	Mohru Oak	No.	0	0	0	0	0	0	0	1	0	0	1
							Voulme	0	0	0	0	0	0	0	4.05	0	0	4.05
						Total	No.	3	1	2	5	1	0	0	1	0	1	14
						Total	Volume	0.18	0.28	1.98	8.92	2.83	0	0	4.05	0	6.9	25.14
	Kandlu Chaunda	C-69 (b)	2 (b)	51	0002	Fir	No.	2	3	3	1	4	1	1	2	0	0	17
							Voulme	0.12	0.84	2.97	1.7	11.32	4.53	6.51	15.3	0	0	43.29
					0651	Walnut	No.	0	0	2	4	2	1	0	0	0	0	9
							Voulme	0	0	0.22	0.92	0.74	0.57	0	0	0	0	2.45
					1162	Taxus	No.	2	0	0	0	1	0	0	0	0	0	3
							Voulme	0.02	0	0	0	0.47	0	0	0	0	0	0.49
						Total	No.	4	3	5	5	7	2	1	2	0	0	29
						Total	Volume	0.14	0.84	3.19	2.62	12.53	5.1	6.51	15.3	0	0	46.23
Nichar	Tranda Soldang (kutangang)	C-71 (b) II	4 (d)	72.49	0241	Deodar	No.	0	0	0	1	2	2	1	1	1	0	8
							Voulme	0	0	0	1.84	5.66	7.36	4.81	6.09	6.9	0	32.66
					0921	Spruce	No.	0	0	0	0	1	0	1	0	0	0	2
							Voulme	0	0	0	0	2.55	0	6.23	0	0	0	8.78
						Total	No.	0	0	0	1	3	2	2	1	1	0	10
						Total	Volume	0	0	0	1.84	8.21	7.36	11.04	6.09	6.9	0	41.44
	Bari Balpanchi	C-74 (c)	7 (c)	375.95	0921	Spruce	No.	0	0	0	0	0	0	0	0	2	2	4
							Voulme	0	0	0	0	0	0	0	0	19.82	19.82	39.64
					0651	Walnut	No.	0	0	0	1	0	0	0	0	0	0	1

							Voulme	0	0	0	0.23	0	0	0	0	0	0	0.23
					0019	Mapple	No.	3	0	0	0	0	0	0	0	0	0	3
							Voulme	0.03	0	0	0	0	0	0	0	0	0	0.03
						Total	No.	3	0	0	1	0	0	0	0	2	2	8
						Total	Volume	0.03	0	0	0.23	0	0	0	0	19.82	19.82	39.9
	Bari	C-75 (b)	8 (b)	167.5 4	0002	Fir	No.	0	1	2	0	0	1	2	0	0	1	7
							Voulme	0	0.28	1.98	0	0	4.53	13.02	0	0	9.91	29.72
					0921	Spruce	No.	0	0	0	0	0	0	0	0	0	3	3
							Voulme	0	0	0	0	0	0	0	0	0	29.73	29.73
					0965	Birdcherry	No.	1	0	1	0	0	0	0	0	0	0	2
							Voulme	0.01	0	0.16	0	0	0	0	0	0	0	0.17
						Total	No.	1	1	3	0	0	1	2	0	0	4	12
						Total	Volume	0.01	0.28	2.14	0	0	4.53	13.02	0	0	39.64	59.62
	Gutrang	C-79 (a)	12 (a)	102.8	0926	Kail	No.	34	9	0	0	0	0	0	0	0	0	43
							Voulme	2.04	2.52	0	0	0	0	0	0	0	0	4.56
					0002	Fir	No.	0	0	0	1	2	1	0	0	0	0	4
							Voulme	0	0	0	1.7	5.66	4.53	0	0	0	0	11.89
					0921	Spruce	No.	2	0	0	0	0	0	0	1	0	3	6
							Voulme	0.12	0	0	0	0	0	0	7.65	0	29.73	37.5
						Total	No.	36	9	0	1	2	1	0	1	0	3	53
						Total	Volume	2.16	2.52	0	1.7	5.66	4.53	0	7.65	0	29.73	53.95
						G Total	No.	47	14	10	13	13	6	5	5	3	10	126
							Volume	2.52	3.92	7.31	15.31	29.23	21.52	30.57	33.09	26.72	96.09	266.28
Forestwise Enumeration Result of Fir / Spruce Working Circle PB II																		
Total Area: 1765.35 Ha Enumeration: Grid System (Sample IDs 4 Nos)																		
Name of Range	Name of forest	Compartment No (Old)	Compartment No (New)	Area (Ha)	Species Code	Species	Number/volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Nichar	Sumo	NC-9	171	95.67	0241	Deodar	No.	0	0	0	0	0	0	0	0	1	0	1
							Voulme	0	0	0	0	0	0	0	0	6.9	0	6.9
					0926	Kail	No.	0	2	1	2	4	3	1	0	0	0	13
							Voulme	0	0.56	0.99	3.96	12.44	12.75	5.66	0	0	0	36.36

						Total	No.	0	2	1	2	4	3	1	0	1	0	14
						Total	Volume	0	0.56	0.99	3.96	12.44	12.75	5.66	0	6.9	0	43.26
	Bari Raida	C-74 (a)	7 (a)	52.6	0002	Fir	No.	0	0	0	2	0	0	0	2	2	1	7
							Voulme	0	0	0	3.4	0	0	0	15.3	19.82	9.91	48.43
					0921	Spruce	No.	0	0	0	0	0	0	0	0	0	1	1
							Voulme	0	0	0	0	0	0	0	0	0	9.91	9.91
					0019	Maple	No.	0	1	1	0	0	0	0	0	0	0	2
							Voulme	0	0.03	0.11	0	0	0	0	0	0	0	0.14
						Total	No.	0	1	1	2	0	0	0	2	2	2	10
						Total	Volume	0	0.03	0.11	3.4	0	0	0	15.3	19.82	19.82	58.48
	Bari Balpanchi	C-76 (c)	9 (c)	76.73	0926	Kail	No.	0	0	0	0	1	2	1	0	0	0	4
							Voulme	0	0	0	0	3.11	8.5	5.66	0	0	0	17.27
					0002	Fir	No.	7	7	5	1	5	0	0	0	0	0	25
							Voulme	0.42	1.96	4.95	1.7	14.15	0	0	0	0	0	23.18
					0965	Birdcherry	No.	0	0	1	0	0	0	0	0	0	0	1
							Voulme	0	0	0.23	0	0	0	0	0	0	0	0.23
						Total	No.	7	7	6	1	6	2	1	0	0	0	30
						Total	Volume	0.42	1.96	5.18	1.7	17.26	8.5	5.66	0	0	0	40.68
	Tranda Soldang (kutangang)	C-71 (a) II	4 (b)	207.6	0002	Fir	No.	0	0	0	0	0	0	0	0	0	1	1
							Voulme	0	0	0	0	0	0	0	0	0	9.91	9.91
					1162	Taxus	No.	0	5	5	3	1	0	0	0	0	0	14
							Voulme	0	0.3	0.8	0.87	0.47	0	0	0	0	0	2.44
					0019	Maple	No.	0	0	0	0	0	0	0	1	0	0	1
							Voulme	0	0	0	0	0	0	0	1.13	0	0	1.13
					0965	Birdcherry	No.	0	0	1	1	0	3	0	0	0	0	5
							Voulme	0	0	0.23	0.44	0	3.24	0	0	0	0	3.91
					0651	Walnut	No.	0	0	0	0	0	0	1	1	0	0	2
							Voulme	0	0	0	0	0	0	0.82	1.13	0	0	1.95
						Total	No.	0	5	6	4	1	3	1	2	0	1	23
						Total	Volume	0	0.3	1.03	1.31	0.47	3.24	0.82	2.26	0	9.91	19.34
						G Total	No.	7	15	14	9	11	8	3	4	3	3	77

							Volume	0.42	2.85	7.31	10.37	30.17	24.49	12.14	17.56	26.72	29.73	161.76
Forestwise Enumeration Result of Fir / Spruce Working Circle PB U																		
Total Area: 3577.14 Ha							Enumeration: Grid System (Sample IDs 6 Nos)											
Name of Range	Name of forest	Compartment No (Old)	Compartment No (New)	Area (Ha)	Species Code	Species	Number/volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Bhaba Nagar	Ramni	C130 (b)	36 (d)	269.93	0002	Fir	No.	2	0	0	0	0	0	1	3	0	1	7
							Voulme	0.12	0	0	0	0	0	6.51	22.95	0	9.91	39.49
					1162	Taxus	No.	1	6	4	1	0	0	0	0	0	0	12
							Voulme	0.01	0.36	0.64	0.29	0	0	0	0	0	0	1.3
					0019	Maple	No.	5	3	0	1	0	0	0	0	0	0	9
							Voulme	0.05	0.09	0	0.23	0	0	0	0	0	0	0.37
						Total	No.	8	9	4	2	0	0	1	3	0	1	28
						Total	Volume	0.18	0.45	0.64	0.52	0	0	6.51	22.95	0	9.91	41.16
	Bundu Kutang	C-73	6	375.95														
				(Plot - 1)	0921	Spruce	No.	0	0	0	1	0	0	3	1	0	4	9
							Voulme	0	0	0	1.42	0	0	18.69	7.65	0	39.64	67.4
				(Plot - 2)	0061	Kunish	No.	0	0	0	6	1	0	2	0	0	0	9
							Voulme	0	0	0	1.38	0.37	0	1.64	0	0	0	3.39
						Total	No.	0	0	0	7	1	0	5	1	0	4	18
						Total	Volume	0	0	0	2.8	0.37	0	20.33	7.65	0	39.64	70.79
Katgaon	Rushnang	C-88	21	242	0002	Fir	No.	0	0	0	0	1	2	0	0	0	2	5
							Voulme	0	0	0	0	2.83	9.06	0	0	0	19.82	31.71
					0651	Walnut	No.	0	1	0	1	1	0	0	0	0	0	3
							Voulme	0	0.03	0	0.23	0.37	0	0	0	0	0	0.63
					2000	Other B/L	No.	0	0	1	0	0	3	1	1	0	0	6
							Voulme	0	0	0.23	0	0	3.24	1.54	2.08	0	0	7.09
						Total	No.	0	1	1	1	2	5	1	1	0	2	14
						Total	Volume	0	0.03	0.23	0.23	3.2	12.3	1.54	2.08	0	19.82	39.43
Kilba	Phinla-I	C-135	41	64.35	0241	Deodar	No.	0	0	0	2	4	10	2	1	0	0	19
							Voulme	0	0	0	3.68	11.32	36.8	9.62	6.09	0	0	67.51

					0926	Kail	No.	0	0	1	0	0	0	0	0	0	0	1
							Voulme	0	0	0.99	0	0	0	0	0	0	0	0.99
					0921	Spruce	No.	0	1	0	0	0	0	0	0	0	0	1
							Voulme	0	0.28	0	0	0	0	0	0	0	0	0.28
						Total	No.	0	1	1	2	4	10	2	1	0	0	21
						Total	Volume	0	0.28	0.99	3.68	11.32	36.8	9.62	6.09	0	0	68.78
	Chedu	C-153	59	144.8 8	0241	Deodar	No.	8	8	7	3	2	0	0	0	0	0	28
							Voulme	0.48	2.24	5.95	5.52	5.66	0	0	0	0	0	19.85
					0926	Kail	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.06	0	0	0	0	0	0	0	0	0	0.06
						Total	No.	9	8	7	3	2	0	0	0	0	0	29
						Total	Volume	0.54	2.24	5.95	5.52	5.66	0	0	0	0	0	19.91
Nichar	Bari (kot dharang)	C-77	10	129.5	0241	Deodar	No.	1	4	8	0	4	0	0	0	0	0	17
							Voulme	0.06	1.12	6.8	0	11.32	0	0	0	0	0	19.3
					0002	Fir	No.	2	2	3	0	0	0	0	0	0	0	7
							Voulme	0.12	0.56	2.97	0	0	0	0	0	0	0	3.65
					0921	Spruce	No.	1	0	1	0	0	0	0	0	0	0	2
							Voulme	0.06	0	0.71	0	0	0	0	0	0	0	0.77
					0965	Bird Cherry	No.	0	0	0	0	1	0	0	0	0	0	1
							Voulme	0	0	0	0	0.71	0	0	0	0	0	0.71
					0651	Walnut	No.	0	2	2	1	0	0	0	0	0	0	5
							Voulme	0	0.06	0.22	0.23	0	0	0	0	0	0	0.51
					0992	Kainth	No.	0	0	0	1	0	0	0	0	0	0	1
							Voulme	0	0	0	0.44	0	0	0	0	0	0	0.44
						Total	No.	4	8	14	2	5	0	0	0	0	0	33
						Total	Volume	0.24	1.74	10.7	0.67	12.03	0	0	0	0	0	25.38
						G Total	No.	21	27	27	17	14	15	9	6	0	7	143
							Volume	0.96	4.74	18.51	13.42	32.58	49.1	38	38.77	0	69.37	265.45

Forest wise Enumeration Result of Neoza Working Circle

Total Area: 2844.53 Ha

Enumeration: Grid System (Sample IDs 13 Nos)

Name of Range	Name of forest	Compartment No (Old)	Compartment No (New)	Area (Ha)	Species Code	Species	Number/ volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Kalpa	Tangling	C-178	82	112.1	0241	Deodar	No.	0	0	0	0	0	0	0	0	1	0	1
							Voulme	0	0	0	0	0	0	0	0	4.81	0	4.81
					0927	Chilgoza	No.	1	2	0	0	2	2	3	0	0	0	10
							Voulme	0.018	0.3	0	0	2.5	2.5	3.75	0	0	0	9.068
						Total	No.	1	2	0	0	2	2	3	0	1	0	11
						Total	Volume	0.018	0.3	0	0	2.5	2.5	3.75	0	4.81	0	13.878
	Duni	C-241	145	89.03	0241	Deodar	No.	5	2	0	0	2	2	1	2	2	0	16
							Voulme	0.15	0.46	0	0	5.1	6.8	4.25	9.62	9.62	0	36
					0926	Kail	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.03	0	0	0	0	0	0	0	0	0	0.03
					0927	Chilgoza	No.	2	0	0	1	0	0	0	0	0	0	3
							Voulme	0.036	0	0	0.87	0	0	0	0	0	0	0.906
						Total	No.	8	2	0	1	2	2	1	2	2	0	20
						Total	Volume	0.216	0.46	0	0.87	5.1	6.8	4.25	9.62	9.62	0	36.936
	Chini	C-242	146	162.68	0241	Deodar	No.	2	1	4	5	1	1	1	0	0	0	15
							Voulme	0.06	0.23	2.84	8.5	2.55	3.4	4.25	0	0	0	21.83
					0927	Chilgoza	No.	3	4	1	2	0	0	0	0	0	0	10
							Voulme	0.054	0.6	0.42	1.74	0	0	0	0	0	0	2.814
						Total	No.	5	5	5	7	1	1	1	0	0	0	25
						Total	Volume	0.114	0.83	3.26	10.24	2.55	3.4	4.25	0	0	0	24.644
Pooh	Kanam	C-211	115	82.96	0241	Deodar	No.	0	0	0	1	0	0	0	0	0	0	1
							Voulme	0	0	0	1.7	0	0	0	0	0	0	1.7
					0927	Chilgoza	No.	0	0	1	0	1	0	0	0	0	0	2
							Voulme	0	0	0.42	0	1.25	0	0	0	0	0	1.67
						Total	No.	0	0	1	1	1	0	0	0	0	0	3
						Total	Volume	0	0	0.42	1.7	1.25	0	0	0	0	0	3.37

	Tabang	C-212	116	30.75	0927	Chilgoza	No.	0	1	0	0	0	0	0	0	0	0	1
							Voulme	0	0.15	0	0	0	0	0	0	0	0	0.15
						Total	No.	0	1	0	0	0	0	0	0	0	0	1
						Total	Volume	0	0.15	0	0	0	0	0	0	0	0	0.15
	Labrang	C-213	117	101.17	0241	Deodar	No.	0	0	0	0	0	0	0	1	0	0	1
							Voulme	0	0	0	0	0	0	0	4.81	0	0	4.81
						Total	No.	0	0	0	0	0	0	0	1	0	0	1
						Total	Volume	0	0	0	0	0	0	0	4.81	0	0	4.81
	Koila-pilu	C-214	118	178.87	0241	Deodar	No.	0	0	0	0	0	0	0	0	1	0	1
							Voulme	0	0	0	0	0	0	0	0	4.81	0	4.81
					0927	Chilgoza	No.	0	0	1	0	0	0	0	0	0	0	1
							Voulme	0	0	0.42	0	0	0	0	0	0	0	0.42
						Total	No.	0	0	1	0	0	0	0	0	1	0	2
						Total	Volume	0	0	0.42	0	0	0	0	0	4.81	0	5.23
Moorang	Rispa	C-191	95	172.4	0241	Deodar	No.	10	2	5	4	2	1	0	0	3	3	30
							Voulme	0.3	0.46	3.55	6.8	5.1	3.4	0	0	14.43	14.43	48.47
					0926	Kail	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.03	0	0	0	0	0	0	0	0	0	0.03
						Total	No.	11	2	5	4	2	1	0	0	3	3	31
						Total	Volume	0.33	0.46	3.55	6.8	5.1	3.4	0	0	14.43	14.43	48.5
	Rispa	C-192	96	70.82	0241	Deodar	No.	0	3	1	0	0	0	0	0	0	1	5
							Voulme	0	0.69	0.71	0	0	0	0	0	0	4.81	6.21
					0927	Chilgoza	No.	4	6	1	0	2	0	0	0	0	0	13
							Voulme	0.072	0.9	0.42	0	2.5	0	0	0	0	0	3.892
						Total	No.	4	9	2	0	2	0	0	0	0	1	18
						Total	Volume	0.072	1.59	1.13	0	2.5	0	0	0	0	4.81	10.102
	Jangi	C-226	130	209.22	0241	Deodar	No.	1	2	5	0	1	2	0	1	2	0	14
							Voulme	0.03	0.46	3.55	0	2.55	6.8	0	4.81	9.62	0	27.82
					0927	Chilgoza	No.	1	1	0	2	1	0	1	0	0	0	6
							Voulme	0.018	0.15	0	1.74	1.25	0	1.25	0	0	0	4.408
						Total	No.	2	3	5	2	2	2	1	1	2	0	20
						Total	Volume	0.048	0.61	3.55	1.74	3.8	6.8	1.25	4.81	9.62	0	32.228

	Korti - Akpa	C-228	132	294.21	0927	Chilgoza	No.	7	2	4	2	0	0	0	2	1	0	18
							Voulme	0.126	0.3	1.68	1.74	0	0	0	2.5	1.25	0	7.596
						Total	No.	7	2	4	2	0	0	0	2	1	0	18
						Total	Volume	0.126	0.3	1.68	1.74	0	0	0	2.5	1.25	0	7.596
	Rarang-I	C-229	133	221.36	0241	Deodar	No.	1	0	0	2	0	0	0	0	0	2	5
							Voulme	0.03	0	0	3.4	0	0	0	0	0	9.62	13.05
					0927	Chilgoza	No.	2	4	0	3	3	2	1	0	0	0	15
							Voulme	0.036	0.6	0	2.61	3.75	2.5	1.25	0	0	0	10.746
						Total	No.	3	4	0	5	3	2	1	0	0	2	20
						Total	Volume	0.066	0.6	0	6.01	3.75	2.5	1.25	0	0	9.62	23.796
						G Total	No.	41	30	23	22	15	10	7	6	10	6	170
						G Total	Volume	0.99	5.3	14.01	29.1	26.55	25.4	14.75	21.74	44.54	28.86	211.24

Forestwise Enumeration Result of Rehabilitation Working Circle

Total Area: 21966.20 Ha

Enumeration: Grid System (Sample IDs 79 Nos)

Name of Range	Name of forest	Compart ment No (Old)	Compa rtment No (New)	Area (Ha)	Species Code	Species	Number/ volume	10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
Bhaba Nagar	Maneothi Shilani	NC-1	163	83.69	0921	Spruce	No.	0	1	0	0	0	0	0	0	0	0	1
							Voulme	0	0.28	0	0	0	0	0	0	0	0	0.28
				Part -I	0019	Maple	No.	0	0	1	0	2	0	0	0	0	0	3
							Voulme	0	0	0.11	0	0.74	0	0	0	0	0	0.85
					1010	Ban Oak	No.	0	0	0	0	0	1	2	0	0	0	3
							Voulme	0	0	0	0	0	2.65	6.58	0	0	0	9.23
					1038	Rhododendron	No.	0	0	0	0	0	0	0	0	0	0	0
							Voulme	0	0.07	0	0	0	0	0	0	0	0	0.07
					2000	Other B/L	No.	0	0	0	1	0	0	0	0	0	0	1
							Voulme	0	0	0	0.44	0	0	0	0	0	0	0.44
						Total	No.	0	1	1	1	2	1	2	0	0	0	8
						Total	Volume	0	0.35	0.11	0.44	0.74	2.65	6.58	0	0	0	10.87
				Part -II	0241	Deodar	No.	1	3	2	0	0	0	0	0	0	0	6
							Voulme	0.06	0.84	1.7	0	0	0	0	0	0	0	2.6
					0926	Kail	No.	1	1	0	0	0	0	0	0	0	0	2
							Voulme	0.06	0.28	0	0	0	0	0	0	0	0	0.34
					1010	Ban Oak	No.	0	0	0	0	0	2	1	0	0	2	5
							Voulme	0	0	0	0	0	5.3	3.29	0	0	9.86	18.45
						Total	No.	2	4	2	0	0	2	1	0	0	2	13
						Total	Volume	0.12	1.12	1.7	0	0	5.3	3.29	0	0	9.86	21.39
	Sasurti Kaufor	NC-2	164	58.64	0929	Chil	No.	0	4	4	6	2	0	0	0	0	0	16
							Voulme	0	1.312	3.1	8.868	4.94	0	0	0	0	0	18.22
						Total	No.	0	4	4	6	2	0	0	0	0	0	16
						Total	Volume	0	1.312	3.1	8.868	4.94	0	0	0	0	0	18.22
	Chaura	NC-3	165	66.36	0929	Chil	No.	0	2	3	6	1	2	4	0	0	0	18
							Voulme	0	0.656	2.325	8.868	2.47	7.578	21.864	0	0	0	43.761

						Total	No.	0	2	3	6	1	2	4	0	0	0	18
						Total	Volume	0	0.656	2.325	8.868	2.47	7.578	21.864	0	0	0	43.761
	Nigulsari	NC-4	166	40.21	0929	Chil	No.	0	0	3	1	0	4	2	1	0	0	11
							Voulme	0	0	2.325	1.478	0	15.156	10.932	7.531	0	0	37.422
						Total	No.	0	0	3	1	0	4	2	1	0	0	11
						Total	Volume	0	0	2.325	1.478	0	15.156	10.932	7.531	0	0	37.422
	Thach	NC-5	167	51.86	0929	Chil	No.	5	4	0	0	0	0	2	1	0	0	12
							Voulme	0.445	1.312	0	0	0	0	10.932	7.531	0	0	20.22
						Total	No.	5	4	0	0	0	0	2	1	0	0	12
						Total	Volume	0.445	1.312	0	0	0	0	10.932	7.531	0	0	20.22
	Janni Kanda	Nc-17	179	28.2	0002	Fir	No.	11	9	4	3	1	1	0	0	0	0	29
							Voulme	0.66	2.52	3.96	5.1	2.83	4.53	0	0	0	0	19.6
					0921	Spruce	No.	1	0	1	0	0	0	2	0	0	0	4
							Voulme	0.06	0	0.71	0	0	0	12.46	0	0	0	13.23
					1162	Taxus	No.	4	0	0	0	0	0	0	0	0	0	4
							Voulme	0.04	0	0	0	0	0	0	0	0	0	0.04
					0153	Betula	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.01	0	0	0	0	0	0	0	0	0	0.01
					0019	Mapple	No.	0	1	3	0	1	0	0	0	0	0	5
							Voulme	0	0.03	0.33	0	0.37	0	0	0	0	0	0.73
						Total	No.	17	10	8	3	2	1	2	0	0	0	43
						Total	Volume	0.77	2.55	5	5.1	3.2	4.53	12.46	0	0	0	33.61
	Sholtu	NC-19	181	18.43	0927	Chilgoza	No.	5	0	0	0	0	0	0	0	0	0	5
							Voulme	0.09	0	0	0	0	0	0	0	0	0	0.09
					1010	Ban Oak	No.	4	1	0	0	0	0	0	0	0	0	5
							Voulme	1.76	0.71	0	0	0	0	0	0	0	0	2.47
					0500	Fraxinus	No.	2	1	1	1	0	0	0	0	0	0	5
							Voulme	0.02	0.07	0.23	0.44	0	0	0	0	0	0	0.76
						Total	No.	11	2	1	1	0	0	0	0	0	0	15
						Total	Volume	1.87	0.78	0.23	0.44	0	0	0	0	0	0	3.32
	Rupi Shorang - I	C-99	31	2.83	0241	Deodar	No.	2	3	7	2	1	0	0	1	0	0	16
				Plot -I			Voulme	0.12	0.84	5.95	3.68	2.83	0	0	6.09	0	0	19.51

					0926	Kail	No.	0	0	0	0	1	1	0	1	0	0	3
							Voulme	0	0	0	0	3.11	4.25	0	6.09	0	0	13.45
						Total	No.	2	3	7	2	2	1	0	2	0	0	19
						Total	Volume	0.12	0.84	5.95	3.68	5.94	4.25	0	12.18	0	0	32.96
				Plot -II	0241	Deodar	No.	0	1	0	0	0	0	0	0	0	0	1
							Voulme	0	0.28	0	0	0	0	0	0	0	0	0.28
					0002	Fir	No.	0	0	1	4	1	0	3	0	2	0	11
							Voulme	0	0	0.99	6.8	2.83	0	19.53	0	19.82	0	49.97
					0651	Walnut	No.	0	0	0	0	0	0	0	0	0	2	2
							Voulme	0	0	0	0	0	0	0	0	0	3.8	3.8
					2000	Other B/L	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.01	0	0	0	0	0	0	0	0	0	0.01
						Total	No.	1	1	1	4	1	0	3	0	2	2	15
						Total	Volume	0.01	0.28	0.99	6.8	2.83	0	19.53	0	19.82	3.8	54.06
				Plot III	0002	Fir	No.	0	0	0	0	0	0	4	2	0	4	10
							Voulme	0	0	0	0	0	0	26.04	15.3	0	39.64	80.98
					0921	Spruce	No.	0	0	0	0	0	0	0	0	0	1	1
							Voulme	0	0	0	0	0	0	0	0	0	9.91	9.91
					0019	Mapple	No.	0	1	0	0	0	0	0	0	0	0	1
							Voulme	0	0.03	0	0	0	0	0	0	0	0	0.03
						Total	No.	0	1	0	0	0	0	4	2	0	5	12
						Total	Volume	0	0.03	0	0	0	0	26.04	15.3	0	49.55	90.92
	Lisnam	C-132 (b)	38 (b)	110.5	0241	Deodar	No.	0	0	1	4	5	6	2	0	0	0	18
							Voulme	0	0	0.85	7.36	14.15	22.08	9.62	0	0	0	54.06
						Total	No.	0	0	1	4	5	6	2	0	0	0	18
						Total	Volume	0	0	0.85	7.36	14.15	22.08	9.62	0	0	0	54.06
						G Total	No.	38	32	31	28	15	17	22	6	2	9	200
							Volume	3.335	9.23	22.58	43.034	34.27	61.544	121.248	42.542	19.82	63.21	420.813
Kalpa	Barang	C-174 (b)	78 (b)	67.99	0241	Deodar	No.	3	1	4	4	3	1	0	0	0	0	16
							Voulme	0.09	0.23	2.84	6.8	7.65	3.4	0	0	0	0	21.01
						Total	No.	3	1	4	4	3	1	0	0	0	0	16
						Total	Volume	0.09	0.23	2.84	6.8	7.65	3.4	0	0	0	0	21.01

	Tangling	C-176	80	131.5	0241	Deodar	No.	0	0	0	0	0	2	0	1	0	0	3
							Voulme	0	0	0	0	0	6.8	0	4.81	0	0	11.61
					0927	Chilgoza	No.	1	2	4	3	0	0	0	0	0	0	10
							Voulme	0.018	0.3	1.68	2.61	0	0	0	0	0	0	4.608
					0630	Brey	No.	7	7	3	0	0	0	0	0	0	0	17
							Voulme	3.08	4.97	3.24	0	0	0	0	0	0	0	11.29
						Total	No.	8	9	7	3	0	2	0	1	0	0	30
						Total	Volume	3.098	5.27	4.92	2.61	0	6.8	0	4.81	0	0	27.508
	Tangling	C-177	81	232.3	0927	Chilgoza	No.	1	0	1	0	1	0	0	1	0	0	4
							Voulme	0.018	0	0.42	0	1.25	0	0	1.25	0	0	2.938
					0630	Brey	No.	17	7	6	1	0	0	0	0	0	0	31
							Voulme	7.48	4.97	6.48	1.54	0	0	0	0	0	0	20.47
					0500	Fraxinus	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.01	0	0	0	0	0	0	0	0	0	0.01
						Total	No.	19	7	7	1	1	0	0	1	0	0	36
						Total	Volume	7.508	4.97	6.9	1.54	1.25	0	0	1.25	0	0	23.418
	Purbani	C-181 (c)	85 (c)	105.6	0241	Deodar	No.	0	0	1	0	0	1	1	2	0	0	5
							Voulme	0	0	0.71	0	0	3.4	4.25	9.62	0	0	17.98
					0927	Chilgoza	No.	0	2	4	5	1	0	1	0	1	0	14
							Voulme	0	0.3	1.68	4.35	1.25	0	1.25	0	1.25	0	10.08
						Total	No.	0	2	5	5	1	1	2	2	1	0	19
						Total	Volume	0	0.3	2.39	4.35	1.25	3.4	5.5	9.62	1.25	0	28.06
	Pangi I	C-235	139	48.56	0241	Deodar	No.	0	0	0	0	2	0	0	2	0	0	4
							Voulme	0	0	0	0	5.1	0	0	9.62	0	0	14.72
					0927	Chilgoza	No.	2	2	0	0	0	0	0	0	0	0	4
							Voulme	0.036	0.3	0	0	0	0	0	0	0	0	0.336
						Total	No.	2	2	0	0	2	0	0	2	0	0	8
						Total	Volume	0.036	0.3	0	0	5.1	0	0	9.62	0	0	15.056
	Kashang -I	C-234 (a)	138 (a)	87	0002	Fir	No.	0	0	3	2	3	1	1	0	0	4	14
							Voulme	0	0	2.97	3.4	8.49	4.53	6.51	0	0	39.64	65.54
					0019	Mapple	No.	0	0	0	0	2	0	0	0	0	0	2
							Voulme	0	0	0	0	0.74	0	0	0	0	0	0.74

					0153	Betula	No.	0	1	1	2	0	0	0	0	0	0	4
							Voulme	0	0.06	0.16	0.58	0	0	0	0	0	0	0.8
						Total	No.	0	1	4	4	5	1	1	0	0	4	20
						Total	Volume	0	0.06	3.13	3.98	9.23	4.53	6.51	0	0	39.64	67.08
	Kashang -I	C-234 (b)	138 (b)	79.72	0241	Deodar	No.	1	3	3	3	3	3	1	0	0	1	18
							Voulme	0.03	0.69	2.13	5.1	7.65	10.2	4.25	0	0	4.81	34.86
					0926	Kail	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.03	0	0	0	0	0	0	0	0	0	0.03
						Total	No.	2	3	3	3	3	3	1	0	0	1	19
						Total	Volume	0.06	0.69	2.13	5.1	7.65	10.2	4.25	0	0	4.81	34.89
	Bokto	C-237	141	91.86	0241	Deodar	No.	0	1	0	2	1	2	1	0	0	0	7
							Voulme	0	0.23	0	3.4	2.55	6.8	4.25	0	0	0	17.23
						Total	No.	0	1	0	2	1	2	1	0	0	0	7
						Total	Volume	0	0.23	0	3.4	2.55	6.8	4.25	0	0	0	17.23
	Telang	C-239	143	192.63	0241	Deodar	No.	1	6	9	5	2	1	0	0	0	0	24
							Voulme	0.03	1.38	6.39	8.5	5.1	3.4	0	0	0	0	24.8
					0927	Chilgoza	No.	1	2	0	0	0	0	0	0	0	0	3
							Voulme	0.018	0.3	0	0	0	0	0	0	0	0	0.318
						Total	No.	2	8	9	5	2	1	0	0	0	0	27
						Total	Volume	0.048	1.68	6.39	8.5	5.1	3.4	0	0	0	0	25.118
	Roghi-II	C-245 (a)	149 (a)	25.5	0241	Deodar	No.	0	0	2	2	3	0	4	2	0	1	14
							Voulme	0	0	1.42	3.4	7.65	0	17	9.62	0	4.81	43.9
					0927	Chilgoza	No.	0	0	2	0	0	0	0	0	0	0	2
							Voulme	0	0	0.84	0	0	0	0	0	0	0	0.84
						Total	No.	0	0	4	2	3	0	4	2	0	1	16
						Total	Volume	0	0	2.26	3.4	7.65	0	17	9.62	0	4.81	44.74
	Kastiarang	C-247	151	206.39	0241	Deodar	No.	0	4	8	4	2	1	0	0	0	0	19
							Voulme	0	0.92	5.68	6.8	5.1	3.4	0	0	0	0	21.9
						Total	No.	0	4	8	4	2	1	0	0	0	0	19
						Total	Volume	0	0.92	5.68	6.8	5.1	3.4	0	0	0	0	21.9
	Runang	C-248 (a)	152 (a)	74.46	0241	Deodar	No.	1	1	3	4	4	2	0	0	1	0	16
							Voulme	0.03	0.23	2.13	6.8	10.2	6.8	0	0	4.81	0	31

					0926	Kail	No.	0	2	3	3	5	0	0	0	0	0	13
							Voulme	0	0.46	2.13	5.1	11.3	0	0	0	0	0	18.99
						Total	No.	1	3	6	7	9	2	0	0	1	0	29
						Total	Volume	0.03	0.69	4.26	11.9	21.5	6.8	0	0	4.81	0	49.99
	Yulla - Meru - III	C-251	155	7.28	0241	Deodar	No.	2	0	0	0	0	0	0	0	0	1	3
							Voulme	0.06	0	0	0	0	0	0	0	0	4.81	4.87
					0927	Chilgoza	No.	9	2	2	8	0	0	0	0	0	0	21
							Voulme	0.162	0.3	0.84	6.96	0	0	0	0	0	0	8.262
						Total	No.	11	2	2	8	0	0	0	0	0	1	24
						Total	Volume	0.222	0.3	0.84	6.96	0	0	0	0	0	4.81	13.132
	Yulla - Meru - IV	C-252	156	38.04	0926	Kail	No.	4	1	0	0	0	0	0	0	0	0	5
							Voulme	0.12	0.23	0	0	0	0	0	0	0	0	0.35
					1162	Taxus	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.01	0	0	0	0	0	0	0	0	0	0.01
					0019	Mapple	No.	7	5	2	2	0	0	0	0	0	0	16
							Voulme	0.07	0.15	0.22	0.46	0	0	0	0	0	0	0.9
						Total	No.	12	6	2	2	0	0	0	0	0	0	22
						Total	Volume	0.2	0.38	0.22	0.46	0	0	0	0	0	0	1.26
	Yulla - Meru - V	C-253	157	16.19	0241	Deodar	No.	4	12	11	3	0	1	0	0	0	0	31
							Voulme	0.12	2.76	7.81	5.1	0	3.4	0	0	0	0	19.19
					0926	Kail	No.	3	6	0	1	0	0	0	0	0	0	10
							Voulme	0.09	1.38	0	1.7	0	0	0	0	0	0	3.17
					0002	Fir	No.	0	1	0	0	0	0	0	0	0	0	1
							Voulme	0	0.28	0	0	0	0	0	0	0	0	0.28
					0921	Spruce	No.	0	1	3	0	0	0	0	0	0	0	4
							Voulme	0	0.28	2.13	0	0	0	0	0	0	0	2.41
						Total	No.	7	20	14	4	0	1	0	0	0	0	46
						Total	Volume	0.21	4.7	9.94	6.8	0	3.4	0	0	0	0	25.05
	Chagaon IV	C-256	160	35.61	0926	Kail	No.	3	4	0	0	1	0	0	0	0	0	8
							Voulme	0.09	0.92	0	0	2.26	0	0	0	0	0	3.27
						Total	No.	3	4	0	0	1	0	0	0	0	0	8

						Total	Volume	0.09	0.92	0	0	2.26	0	0	0	0	0	3.27
	Chagaon -II	C-258 (a)	162 (a)	69.2	0241	Deodar	No.	0	3	7	0	2	0	0	0	0	0	12
							Voulme	0	0.69	4.97	0	5.1	0	0	0	0	0	10.76
						Total	No.	0	3	7	0	2	0	0	0	0	0	12
						Total	Volume	0	0.69	4.97	0	5.1	0	0	0	0	0	10.76
	Chagaon - I	C-258 (b)	162 (b)	144.07	0241	Deodar	No.	0	1	11	0	3	0	0	0	0	0	15
							Voulme	0	0.23	7.81	0	7.65	0	0	0	0	0	15.69
					0926	Kail	No.	0	0	8	1	5	0	0	0	0	0	14
							Voulme	0	0	5.68	1.7	11.3	0	0	0	0	0	18.68
						Total	No.	0	1	19	1	8	0	0	0	0	0	29
						Total	Volume	0	0.23	13.49	1.7	18.95	0	0	0	0	0	34.37
	Goli	NC-24	186	113.18	0926	Kail	No.	1	1	4	3	1	1	0	0	0	0	11
							Voulme	0.03	0.23	2.84	5.1	2.26	3.68	0	0	0	0	14.14
						Total	No.	1	1	4	3	1	1	0	0	0	0	11
						Total	Volume	0.03	0.23	2.84	5.1	2.26	3.68	0	0	0	0	14.14
	Ganchanch o	NC- 25	187	58.61	0241	Deodar	No.	1	0	0	0	0	1	0	0	0	0	2
							Voulme	0.03	0	0	0	0	3.4	0	0	0	0	3.43
					0926	Kail	No.	2	2	0	0	0	1	0	0	0	0	5
							Voulme	0.06	0.46	0	0	0	3.68	0	0	0	0	4.2
						Total	No.	3	2	0	0	0	2	0	0	0	0	7
						Total	Volume	0.09	0.46	0	0	0	7.08	0	0	0	0	7.63
	Gunshan g	NC - 26	188	141.76	0241	Deodar	No.	0	0	0	0	0	0	2	0	0	0	2
							Voulme	0	0	0	0	0	0	8.5	0	0	0	8.5
					0630	Brey	No.	3	3	5	5	3	0	0	0	0	0	19
							Voulme	1.32	2.13	5.4	7.7	6.24	0	0	0	0	0	22.79
					0500	Fraxinus	No.	0	2	0	0	0	0	0	0	0	0	2
							Voulme	0	0.14	0	0	0	0	0	0	0	0	0.14
						Total	No.	3	5	5	5	3	0	2	0	0	0	23
						Total	Volume	1.32	2.27	5.4	7.7	6.24	0	8.5	0	0	0	31.43
	Tharu	NC - 28	190	286.38	0926	Kail	No.	2	0	2	0	1	0	0	0	0	0	5
							Voulme	0.06	0	1.42	0	2.26	0	0	0	0	0	3.74
					0921	Spruce	No.	0	3	1	3	1	0	1	0	0	2	11

							Voulme	0	0.84	0.71	4.26	2.55	0	6.23	0	0	19.82	34.41
					1162	Taxus	No.	2	0	0	0	0	0	0	0	0	0	2
							Voulme	0.02	0	0	0	0	0	0	0	0	0	0.02
						Total	No.	4	3	3	3	2	0	1	0	0	2	18
						Total	Volume	0.08	0.84	2.13	4.26	4.81	0	6.23	0	0	19.82	38.17
	Rushanang	NC-34	196	220.59	0926	Kail	No.	0	6	0	1	5	0	0	0	0	0	12
							Voulme	0	1.38	0	1.7	11.3	0	0	0	0	0	14.38
						Total	No.	0	6	0	1	5	0	0	0	0	0	12
						Total	Volume	0	1.38	0	1.7	11.3	0	0	0	0	0	14.38
						G Total	No.	81	94	113	67	54	18	12	8	2	9	458
							Volume	13.11	27.74	80.73	93.06	124.95	62.89	52.24	34.92	6.06	73.89	569.59
								81	94	113	67	54	18	12	8	2	9	458
Katgaon	Rushnang	C-87	20	196.27	0926	Kail	No.	3	3	2	0	0	1	0	0	0	0	9
							Voulme	0.18	0.84	1.98	0	0	4.25	0	0	0	0	7.25
						Total	No.	3	3	2	0	0	1	0	0	0	0	9
						Total	Volume	0.18	0.84	1.98	0	0	4.25	0	0	0	0	7.25
	Dutrang	C-89	22	124.65	0019	Mapple	No.	1	2	1	0	1	0	0	0	0	0	5
							Voulme	0.01	0.06	0.11	0	0.37	0	0	0	0	0	0.55
					0965	Bird Cherry	No.	1	1	1	1	0	0	0	0	0	0	4
							Voulme	0.01	0.07	0.23	0.44	0	0	0	0	0	0	0.75
					0651	Walnut	No.	0	0	0	0	1	0	0	0	0	0	1
							Voulme	0	0	0	0	0.37	0	0	0	0	0	0.37
					2000	Other B/L	No.	0	2	2	2	1	0	0	0	0	0	7
							Voulme	0	0.14	0.46	0.88	0.71	0	0	0	0	0	2.19
						Total	No.	2	5	4	3	3	0	0	0	0	0	17
						Total	Volume	0.02	0.27	0.8	1.32	1.45	0	0	0	0	0	3.86
	Yeti	C-91	24	510.7	0241	Deodar	No.	0	0	0	0	0	1	0	0	0	0	1
							Voulme	0	0	0	0	0	3.68	0	0	0	0	3.68
					0926	Kail	No.	0	0	0	1	0	0	0	0	0	0	1
							Voulme	0	0	0	1.98	0	0	0	0	0	0	1.98
						Total	No.	0	0	0	1	0	1	0	0	0	0	2
						Total	Volume	0	0	0	1.98	0	3.68	0	0	0	0	5.66

	Sak - Nathpa	C-92	25	150	0926	Kail	No.	0	0	0	0	0	0	0	1	0	0	1
							Voulme	0	0	0	0	0	0	0	6.09	0	0	6.09
					2000	Other B/L	No.	0	0	3	0	0	0	0	0	0	0	3
							Voulme	0	0	0.69	0	0	0	0	0	0	0	0.69
						Total	No.	0	0	3	0	0	0	0	1	0	0	4
						Total	Volume	0	0	0.69	0	0	0	0	6.09	0	0	6.78
						G Total	No.	5	8	9	4	3	2	0	1	0	0	32
							Volume	0.2	1.11	3.47	3.3	1.45	7.93	0	6.09	0	0	23.55
Kilba	Punang	C-133	39	231.9	0241	Deodar	No.	6	5	3	2	2	2	3	1	0	0	24
							Voulme	0.18	1.15	2.13	3.4	5.1	6.8	12.75	4.81	0	0	36.32
					0926	Kail	No.	0	0	0	0	0	1	0	0	0	0	1
							Voulme	0	0	0	0	0	3.68	0	0	0	0	3.68
						Total	No.	6	5	3	2	2	3	3	1	0	0	25
						Total	Volume	0.18	1.15	2.13	3.4	5.1	10.48	12.75	4.81	0	0	40
	Kilba	C-140	46	98.75	0241	Deodar	No.	4	5	4	2	0	0	0	0	0	0	15
							Voulme	0.12	1.15	2.84	3.4	0	0	0	0	0	0	7.51
					0927	Chilgoza	No.	0	0	1	0	0	0	0	0	0	0	1
							Voulme	0	0	0.42	0	0	0	0	0	0	0	0.42
					1010	Ban Oak	No.	14	7	1	0	0	0	0	0	0	0	22
							Voulme	6.16	4.97	1.08	0	0	0	0	0	0	0	12.21
						Total	No.	18	12	6	2	0	0	0	0	0	0	38
						Total	Volume	6.28	6.12	4.34	3.4	0	0	0	0	0	0	20.14
	Kanahi	C-141	47	115.75	0241	Deodar	No.	0	0	5	9	10	2	1	0	0	0	27
							Voulme	0	0	3.55	15.3	25.5	6.8	4.25	0	0	0	55.4
						Total	No.	0	0	5	9	10	2	1	0	0	0	27
						Total	Volume	0	0	3.55	15.3	25.5	6.8	4.25	0	0	0	55.4
	Brua	C-150	56	65.95	0241	Deodar	No.	0	0	3	0	0	1	0	2	0	1	7
							Voulme	0	0	2.13	0	0	3.4	0	9.62	0	4.81	19.96
						Total	No.	0	0	3	0	0	1	0	2	0	1	7
						Total	Volume	0	0	2.13	0	0	3.4	0	9.62	0	4.81	19.96
	Shoang	C-151(b)	57 (b)	147.3	0241	Deodar	No.	1	0	0	1	0	0	3	1	0	0	6
							Voulme	0.03	0	0	1.7	0	0	12.75	4.81	0	0	19.29

						Total	No.	1	0	0	1	0	0	3	1	0	0	6
						Total	Volume	0.03	0	0	1.7	0	0	12.75	4.81	0	0	19.29
	Chasu	C-152 (a)	58 (a)	97.5	0241	Deodar	No.	0	3	3	4	1	0	0	0	0	0	11
							Voulme	0	0.69	2.13	6.8	2.55	0	0	0	0	0	12.17
						Total	No.	0	3	3	4	1	0	0	0	0	0	11
						Total	Volume	0	0.69	2.13	6.8	2.55	0	0	0	0	0	12.17
	Chasu	C-152 (b)	58 (b)	75.7	0926	Kail	No.	0	6	8	4	0	0	1	0	0	0	19
							Voulme	0	1.38	5.68	6.8	0	0	5.1	0	0	0	18.96
						Total	No.	0	6	8	4	0	0	1	0	0	0	19
						Total	Volume	0	1.38	5.68	6.8	0	0	5.1	0	0	0	18.96
	Rukti Hurba	C-155	61	177.25	0241	Deodar	No.	0	3	4	7	5	1	1	2	0	0	23
							Voulme	0	0.69	2.84	11.9	12.75	3.4	4.25	9.62	0	0	45.45
					0921	Spruce	No.	0	1	1	0	0	0	0	0	0	0	2
							Voulme	0	0.28	0.71	0	0	0	0	0	0	0	0.99
						Total	No.	0	4	5	7	5	1	1	2	0	0	25
						Total	Volume	0	0.97	3.55	11.9	12.75	3.4	4.25	9.62	0	0	46.44
	Rakcham	C-160	64	2.43	0241	Deodar	No.	2	3	2	4	0	0	0	0	0	0	11
							Voulme	0.06	0.69	1.42	6.8	0	0	0	0	0	0	8.97
					0926	Kail	No.	0	0	0	0	1	0	0	0	0	0	1
							Voulme	0	0	0	0	2.26	0	0	0	0	0	2.26
						Total	No.	2	3	2	4	1	0	0	0	0	0	12
						Total	Volume	0.06	0.69	1.42	6.8	2.26	0	0	0	0	0	11.23
	Rakcham	C-161	65	19.83			NIL											
	Seringche	C-162 (b)	66 (b)	50.60	0241	Deodar	No.	1	0	0	0	1	1	1	0	0	0	4
							Voulme	0.03	0	0	0	2.55	3.4	4.25	0	0	0	10.23
					0926	Kail	No.	0	0	0	0	0	0	0	1	0	0	1
							Voulme	0	0	0	0	0	0	0	5.1	0	0	5.1
					0019	Mapple	No.	1	1	0	0	0	0	0	0	0	0	2
							Voulme	0.01	0.03	0	0	0	0	0	0	0	0	0.04
					2000	Other B/L	No.	0	2	0	0	0	0	0	0	0	0	2
							Voulme	0	0.14	0	0	0	0	0	0	0	0	0.14
						Total	No.	2	3	0	0	1	1	1	1	0	0	9

						Total	Volume	0.04	0.17	0	0	2.55	3.4	4.25	5.1	0	0	15.51
	Seringche	C-162 (c)	66 (c)	93.08	0241	Deodar	No.	0	0	0	0	0	1	1	0	0	3	5
							Voulme	0	0	0	0	0	3.4	4.25	0	0	14.43	22.08
						Total	No.	0	0	0	0	0	1	1	0	0	3	5
						Total	Volume	0	0	0	0	0	3.4	4.25	0	0	14.43	22.08
	Pawanang - II	C-165	69	78.1	0927	Chilgoza	No.	0	0	0	0	0	1	0	0	1	0	2
							Voulme	0	0	0	0	0	1.25	0	0	1.25	0	2.5
					1006	Mohru Oak	No.	0	4	0	0	1	0	0	0	0	0	5
							Voulme	0	2.84	0	0	2.08	0	0	0	0	0	4.92
						Total	No.	0	4	0	0	1	1	0	0	1	0	7
						Total	Volume	0	2.84	0	0	2.08	1.25	0	0	1.25	0	7.42
	Wadang	C-166	70	119.38	0241	Deodar	No.	1	0	1	8	2	1	1	1	0	0	15
							Voulme	0.03	0	0.71	13.6	5.1	3.4	4.25	4.81	0	0	31.9
						Total	No.	1	0	1	8	2	1	1	1	0	0	15
						Total	Volume	0.03	0	0.71	13.6	5.1	3.4	4.25	4.81	0	0	31.9
	Mebar	C-168	72	212.05	0241	Deodar	No.	4	2	4	0	1	0	0	1	1	2	15
							Voulme	0.12	0.46	2.84	0	2.55	0	0	4.81	4.81	9.62	25.21
						Total	No.	4	2	4	0	1	0	0	1	1	2	15
						Total	Volume	0.12	0.46	2.84	0	2.55	0	0	4.81	4.81	9.62	25.21
						G total	No.	34	42	40	41	24	11	12	9	2	6	221
							Volume	6.74	14.47	28.48	69.7	60.44	35.53	51.85	43.58	6.06	28.86	345.71
Moorang	Ribba West	C-187	91	169.67	0241	Deodar	No.	0	0	2	3	2	1	3	1	0	0	12
							Voulme	0	0	1.42	5.1	5.1	3.4	12.75	4.81	0	0	32.58
					0927	Chilgoza	No.	0	1	5	1	1	2	1	0	0	0	11
							Voulme	0	0.15	2.1	0.87	1.25	2.5	1.25	0	0	0	8.12
						Total	No.	0	1	7	4	3	3	4	1	0	0	23
						Total	Volume	0	0.15	3.52	5.97	6.35	5.9	14	4.81	0	0	40.7
	Ribba Eest	C-188(a)	92 (a)	55.85	0241	Deodar	No.	1	2	1	1	0	0	1	0	0	0	6
							Voulme	0.03	0.46	0.71	1.7	0	0	4.25	0	0	0	7.15
					0061	Alnus	No.	0	0	0	0	2	0	2	0	0	0	4
							Voulme	0	0	0	0	0.74	0	1.64	0	0	0	2.38
						Total	No.	1	2	1	1	2	0	3	0	0	0	10

						Total	Volume	0.03	0.46	0.71	1.7	0.74	0	5.89	0	0	0	9.53
	Ralda	C-189(a)	93 (a)	54.63	0241	Deodar	No.	0	0	3	0	1	0	1	1	1	1	8
							Voulme	0	0	2.13	0	2.55	0	4.25	4.81	4.81	4.81	23.36
						Total	No.	0	0	3	0	1	0	1	1	1	1	8
						Total	Volume	0	0	2.13	0	2.55	0	4.25	4.81	4.81	4.81	23.36
	Ralda	C-190(b)	94 (b)	108.45	0241	Deodar	No.	2	5	5	9	4	2	1	0	0	0	28
							Voulme	0.06	1.15	3.55	15.3	10.2	6.8	4.25	0	0	0	41.31
					0927	Chilgoza	No.	0	0	2	0	0	0	0	0	0	0	2
							Voulme	0	0	0.84	0	0	0	0	0	0	0	0.84
						Total	No.	2	5	7	9	4	2	1	0	0	0	30
						Total	Volume	0.06	1.15	4.39	15.3	10.2	6.8	4.25	0	0	0	42.15
	Tidong-I	C-193	97	271.15	0241	Deodar	No.	6	3	2	0	0	1	0	0	0	1	13
							Voulme	0.18	0.69	1.42	0	0	3.4	0	0	0	4.81	10.5
					0927	Chilgoza	No.	2	1	1	0	0	0	0	0	1	0	5
							Voulme	0.036	0.15	0.42	0	0	0	0	0	1.25	0	1.856
						Total	No.	8	4	3	0	0	1	0	0	1	1	18
						Total	Volume	0.216	0.84	1.84	0	0	3.4	0	0	1.25	4.81	12.356
	Tidong-I	C-194	98	124.65	0241	Deodar	No.	1	2	0	2	0	1	0	0	2	0	8
							Voulme	0.03	0.46	0	3.4	0	3.4	0	0	9.62	0	16.91
					0927	Chilgoza	No.	0	3	1	4	0	1	1	0	0	0	10
							Voulme	0	0.45	0.42	3.48	0	1.25	1.25	0	0	0	6.85
						Total	No.	1	5	1	6	0	2	1	0	2	0	18
						Total	Volume	0.03	0.91	0.42	6.88	0	4.65	1.25	0	9.62	0	23.76
	Tidong-II	C-195	99	3.23	0241	Deodar	No.	0	0	0	0	0	0	0	0	1	0	1
							Voulme	0	0	0	0	0	0	0	0	4.81	0	4.81
					0927	Chilgoza	No.	0	1	3	5	3	2	0	2	0	0	16
							Voulme	0	0.15	1.26	4.35	3.75	2.5	0	2.5	0	0	14.51
						Total	No.	0	1	3	5	3	2	0	2	1	0	17
						Total	Volume	0	0.15	1.26	4.35	3.75	2.5	0	2.5	4.81	0	19.32
	Tidong-III	C-196	100	57.05	0241	Deodar	No.	0	0	0	0	0	1	0	0	0	0	1
							Voulme	0	0	0	0	0	3.4	0	0	0	0	3.4
					0927	Chilgoza	No.	8	12	4	0	1	1	0	0	0	0	26

							Voulme	0.144	1.8	1.68	0	1.25	1.25	0	0	0	0	6.124
						Total	No.	8	12	4	0	1	2	0	0	0	0	27
						Total	Volume	0.144	1.8	1.68	0	1.25	4.65	0	0	0	0	9.524
	Lirang	C-217	121	82.15	0241	Deodar	No.	0	0	0	0	0	1	1	0	1	1	4
							Voulme	0	0	0	0	0	3.4	4.25	0	4.81	4.81	17.27
					0927	Chilgoza	No.	1	0	0	0	0	1	0	0	0	0	2
							Voulme	0.018	0	0	0	0	1.25	0	0	0	0	1.268
						Total	No.	1	0	0	0	0	2	1	0	1	1	6
						Total	Volume	0.018	0	0	0	0	4.65	4.25	0	4.81	4.81	18.538
	Shalmati -II	C-219(b)	123 (b)	22.26	0241	Deodar	No.	0	0	0	1	0	1	1	1	0	0	4
							Voulme	0	0	0	1.7	0	3.4	4.25	4.81	0	0	14.16
					0926	Kail	No.	0	1	0	0	1	2	1	1	0	0	6
							Voulme	0	0.23	0	0	2.26	7.36	5.1	5.1	0	0	20.05
					0652	Juniper	No.	0	1	1	0	0	0	0	0	0	0	2
							Voulme	0	0.07	0.23	0	0	0	0	0	0	0	0.3
						Total	No.	0	2	1	1	1	3	2	2	0	0	12
						Total	Volume	0	0.3	0.23	1.7	2.26	10.76	9.35	9.91	0	0	34.51
	Rirang	C-222 (b)	126 (b)	80.94	0241	Deodar	No.	0	0	3	4	1	0	0	0	1	1	10
							Voulme	0	0	2.13	6.8	2.55	0	0	0	4.81	4.81	21.1
					0927	Chilgoza	No.	2	1	3	1	0	0	0	0	0	0	7
							Voulme	0.036	0.15	1.26	0.87	0	0	0	0	0	0	2.316
						Total	No.	2	1	6	5	1	0	0	0	1	1	17
						Total	Volume	0.036	0.15	3.39	7.67	2.55	0	0	0	4.81	4.81	23.416
	Rarang-II	C-230	134	33.99	0927	Chilgoza	No.	0	0	2	0	1	0	0	0	1	0	4
							Voulme	0	0	0.84	0	1.25	0	0	0	1.25	0	3.34
						Total	No.	0	0	2	0	1	0	0	0	1	0	4
						Total	Volume	0	0	0.84	0	1.25	0	0	0	1.25	0	3.34
						G total	No.	23	33	38	31	17	17	13	6	8	4	190
							Volume	0.534	5.91	20.41	43.57	30.9	43.31	43.24	22.03	31.36	19.24	260.504
Nichar	Kundlu Chaunda (Tikrang)	C-70 (b)	3 (c)	178.46	0241	Deodar	No.	0	3	3	5	4	1	0	0	0	0	16
							Voulme	0	0.84	2.55	9.2	11.32	3.68	0	0	0	0	27.59

					0019	Mapple	No.	2	3	1	0	0	0	0	0	0	0	6
							Voulme	0.02	0.09	0.11	0	0	0	0	0	0	0	0.22
					0038	HC Nut	No.	1	1	1	0	1	0	0	0	0	0	4
							Voulme	0.01	0.06	0.16	0	0.46	0	0	0	0	0	0.69
					1017	Kharshu	No.	4	0	0	0	0	0	0	0	0	0	4
							Voulme	1.76	0	0	0	0	0	0	0	0	0	1.76
					2000	other B/L	No.	1	0	0	0	0	0	0	0	0	0	1
							Voulme	0.01	0	0	0	0	0	0	0	0	0	0.01
						Total	No.	8	7	5	5	5	1	0	0	0	0	31
						Total	Volume	1.8	0.99	2.82	9.2	11.78	3.68	0	0	0	0	30.27
	Tranda Soldang	C-71 (a) I	4 (a)	125.45	0002	Fir	No.	0	0	0	0	0	2	0	2	1	2	7
							Voulme	0	0	0	0	0	9.06	0	15.3	9.91	19.82	54.09
					1162	Taxus	No.	0	0	1	0	0	0	0	0	0	0	1
							Voulme	0	0	0.16	0	0	0	0	0	0	0	0.16
					0019	Mapple	No.	0	2	1	0	3	0	0	0	0	0	6
							Voulme	0	0.06	0.11	0	1.11	0	0	0	0	0	1.28
						Total	No.	0	2	2	0	3	2	0	2	1	2	14
						Total	Volume	0	0.06	0.27	0	1.11	9.06	0	15.3	9.91	19.82	55.53
	Nichar East (Kashpo)	C-83	16	64.75	0241	Deodar	No.	0	0	0	1	2	7	4	0	0	0	14
							Voulme	0	0	0	1.84	5.66	25.76	19.24	0	0	0	52.5
						Total	No.	0	0	0	1	2	7	4	0	0	0	14
						Total	Volume	0	0	0	1.84	5.66	25.76	19.24	0	0	0	52.5
	Mazgani	C-129	35	185.35	0241	Deodar	No.	0	1	1	5	4	4	0	0	0	0	15
							Voulme	0	0.28	0.85	9.2	11.32	14.72	0	0	0	0	36.37
						Total	No.	0	1	1	5	4	4	0	0	0	0	15
						Total	Volume	0	0.28	0.85	9.2	11.32	14.72	0	0	0	0	36.37
	Chott Kanda	NC-10	172	379.49	0241	Deodar	No.	0	0	0	1	0	0	0	1	0	0	2
							Voulme	0	0	0	1.84	0	0	0	6.09	0	0	7.93
					0651	Walnut	No.	0	1	3	0	3	1	1	1	0	1	11
							Voulme	0	0.03	0.33	0	1.11	0.57	0.82	1.13	0	1.9	5.89
						Total	No.	0	1	3	1	3	1	1	2	0	1	13
						Total	Volume	0	0.03	0.33	1.84	1.11	0.57	0.82	7.22	0	1.9	13.82

						G total	No	8	11	11	12	17	15	5	4	1	3	87
							Volume	1.8	1.36	4.27	22.08	30.98	53.79	20.06	22.52	9.91	21.72	188.49
Pooh	Siba-IV	C-200	104	32.27			Nil											
	Siba-III	C-201	105	9.71			Nil											
	Siba-II	C-202	106	9.71	0926	Kail	No.	0	1	0	0	0	0	0	0	0	0	1
							Voulme	0	0.23	0	0	0	0	0	0	0	0	0.23
						Total	No.	0	1	0	0	0	0	0	0	0	0	1
						Total	Volume	0	0.23	0	0	0	0	0	0	0	0	0.23
	Siba-I	C-203	107	42.90	0927	Chilgoza	No.	0	0	1	0	0	0	0	0	0	0	1
							Voulme	0	0	0.42	0	0	0	0	0	0	0	0.42
						Total	No.	0	0	1	0	0	0	0	0	0	0	1
						Total	Volume	0	0	0.42	0	0	0	0	0	0	0	0.42
	Ropa-II	C-204	108	25.09	0927	Chilgoza	No.	0	0	0	1	0	0	0	0	0	0	1
							Voulme	0	0	0	0.87	0	0	0	0	0	0	0.87
						Total	No.	0	0	0	1	0	0	0	0	0	0	1
						Total	Volume	0	0	0	0.87	0	0	0	0	0	0	0.87
	Ropa-I	C-205	109	163.49			Nil											
					0241	Deodar	No.	0	0	1	0	0	0	0	0	0	0	1
	Giaboung-III	C-206	110	17.40			Voulme	0	0	0.71	0	0	0	0	0	0	0	0.71
	Giaboung-III	C-207	111	25.50	0927	Chilgoza	No.	0	0	0	1	0	0	0	0	0	0	1
							Voulme	0	0	0	0.87	0	0	0	0	0	0	0.87
						Total	No.	0	0	1	1	0	0	0	0	0	0	2
						Total	Volume	0	0	0.71	0.87	0	0	0	0	0	0	1.58
	Giaboung-I	C-208	112	168.65	0927	Chilgoza	No.	0	0	0	0	1	0	0	0	0	0	1
							Voulme	0	0	0	0	1.25	0	0	0	0	0	1.25
						Total	No.	0	0	0	0	1	0	0	0	0	0	1
						Total	Volume	0	0	0	0	1.25	0	0	0	0	0	1.25
	Talling	C-209	113	86.60	0241	Deodar	No.	0	0	1	0	0	0	0	0	0	0	1
							Voulme	0	0	0.71	0	0	0	0	0	0	0	0.71
						Total	No.	0	0	1	0	0	0	0	0	0	0	1
						Total	Volume	0	0	0.71	0	0	0	0	0	0	0	0.71
	Sunam	C-210	114	106.84	0927	Chilgoza	No.	0	1	0	0	0	0	0	0	0	0	1

							Voulme	0	0.15	0	0	0	0	0	0	0	0	0	0.15
						Total	No.	0	1	0	0	0	0	0	0	0	0	0	1
						Total	Volume	0	0.15	0	0	0	0	0	0	0	0	0	0.15
						G total	No.	0	2	3	2	1	0	0	0	0	0	0	8
							Volume	0	0.38	1.84	1.74	1.25	0	0	0	0	0	0	5.21
						G Total	No.	189	222	245	185	131	80	64	34	15	31	1196	
							Volume	25.72	60.20	161.78	276.48	284.24	264.99	288.64	171.68	73.21	206.92	1813.87	

PB-I (Area = 617.99)

Species wise No. and Volume in cubic mtrs. (Estimated / Extrapolated growing stock) for Wet Zone Deo / Kail Working Circle

Sr. No	Species Code	Species		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
1	0241	Deodar	Number	14420	10300	5150	12360	8240	12360	4120	2060	0	1030	70039
			Volume	865.19	2883.95	4377.43	22742.03	23318.82	45484.06	19816.88	12545.2	0	7106.89	139140.45
2	0926	Kail	Number	6180	2060	6180	0	0	0	1030	0	1030	0	16480
			Volume	370.79	576.79	6118.1	0	0	0	5829.71	0	8332.57	0	21227.96
3	0002	Fir	Number	47379	14420	4120	4120	0	0	0	0	0	0	70039
			Volume	2842.75	4037.53	4078.73	7003.89	0	0	0	0	0	0	17962.91
4	0921	Spruce	Number	11330	5150	4120	4120	1030	4120	2060	2060	1030	1030	36049
			Volume	679.79	1441.98	2925.15	5850.31	2626.46	17509.72	12833.59	15758.75	10207.13	10207.13	80040
5	0965	Birdcherry	Number	0	0	1,030	0	0	0	0	0	0	0	1,030
			Volume	0	0	236.9	0	0	0	0	0	0	0	236.9
6	0038	Aescules	Number	0	1030	0	1030	0	0	0	0	0	0	2060
			Volume	0	61.8	0	298.7	0	0	0	0	0	0	360.49
7	0047	Ailanthus	Number	1030	0	0	0	0	0	0	0	0	0	1030
			Volume	10.3	0	0	0	0	0	0	0	0	0	10.3
8	1038	Rhododendron	Number	0	1030	0	0	0	0	0	0	0	0	1030
			Volume	0	72.1	0	0	0	0	0	0	0	0	72.1
9	2000	Other B/L	Number	0	1030	0	0	0	0	0	0	0	0	1030
			Volume	0	72.1	0	0	0	0	0	0	0	0	72.1
			Number	80339	35019	20600	21630	9270	16480	7210	4120	2060	2060	198787
		G Total	Volume	4768.82	9146.25	17736.31	35894.92	25945.28	62993.78	38480.18	28303.94	18539.7	17314.02	259123.21

PB-II (Area = 659.09)

Sr. No	Species code	Species		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
1	0241	Deodar	Number	51629	21970	18674	36250	21970	15379	4394	1098	1098	0	172462
			Volume	3097.72	6151.51	15873.08	66699.91	62174.16	56593.86	21134.82	6689.76	7579.54	0	245994.36
2	0926	Kail	Number	23068	2197	2197	0	0	0	1098	0	1098	0	29659
			Volume	1384.09	615.15	2175	0	0	0	6217.42	0	8886.73	0	19278.38
3	0002	Fir	Number	0	0	0	0	0	0	0	0	0	0	0

			Volume	0	0	0	0	0	0	0	0	0	0	0
4	0921	Spruce	Number	0	1098	0	2197	1098	1098	4394	1098	0	0	10985
			Volume	0	307.58	0	3119.69	2801.13	4668.55	27374.2	8403.4	0	0	46674.56
5	00019	Mapple	Number	1098	0	0	0	0	0	0	0	0	0	1098
			Volume	10.98	0	0	0	0	0	0	0	0	0	10.98
6	0038	Aescules	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
7	0047	Ailanthus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
8	1038	Rhododendron	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
9	2000	Other B/L	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
			Number	75795	25265	20871	38447	23068	16477	9886	2197	2197	0	214204
		G Total	Volume	4492.8	7074.23	18048.08	69819.6	64975.29	61262.42	54726.44	15093.16	16466.27	0	311958.28

PB-III (Area = 603.38)

Sr. No	Species code	Species		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
1	0241	Deodar	Number	16090	19107	33186	36203	22124	15085	10056	4023	0	0	155873
			Volume	965.41	5349.97	28208.02	66613.15	62610.73	55510.96	48370.96	24497.23	0	0	292126.43
2	0926	Kail	Number	0	0	1006	1006	5028	3017	1006	0	0	0	11062
			Volume	0	0	995.58	1991.15	15637.6	12821.83	5691.88	0	0	0	37138.04
3	0002	Fir	Number	0	1006	0	0	0	0	0	0	0	0	1006
			Volume	0	281.58	0	0	0	0	0	0	0	0	281.58
4	0921	Spruce	Number	0	0	0	0	0	0	1006	0	0	0	1006
			Volume	0	0	0	0	0	0	6265.1	0	0	0	6265.1
5	0019	Maple	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
6	0038	Aescules	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
7	0047	Ailanthus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
8	1038	Rhododendron	Number	0	0	0	0	0	0	0	0	0	0	0

			Volume	0	0	0	0	0	0	0	0	0	0	0
9	0651	Walnut	Number	0	0	0	0	0	1006	0	0	0	0	1006
			Volume	0	0	0	0	0	573	0	0	0	0	573
10	0630	Bray	Number	5028	1006	1006	0	0	0	0	0	0	0	7039
			Volume	2212	714	1086	0	0	0	0	0	0	0	4012
11	0965	Bird Cherry	Number	0	1006	0	0	0	0	0	0	0	0	1006
			Volume	0	70	0	0	0	0	0	0	0	0	70
12	2000	Other B/L	Number	1006	0	0	0	0	0	0	0	0	0	1006
			Volume	10	0	0	0	0	0	0	0	0	0	10
			Number	22124	22124	35197	37208	27152	19107	12068	4023	0	0	179003
		G Total	Volume	3187.86	6415.94	30289.68	68604.31	78248.33	68906	60327.94	24497.23	0	0	340477.28
PB-IV (Area = 598.93)														
Sr. No	Species code	Species		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
1	0241	Deodar	Number	49911	17968	9982	1996	9982	3993	1996	0	1996	0	97825
			Volume	2995	5031	8485	3673	28250	14694	9603	0	13775	0	86505
2	0926	Kail	Number	7986	3993	1996	1996	7986	1996	0	0	0	0	25954
			Volume	479	1118	1976	3953	24836	8485	0	0	0	0	40847
3	0002	Fir	Number	0	0	1996	5989	1996	0	0	0	0	0	9982
			Volume	0	0	1976	10182	5650	0	0	0	0	0	17808
4	0921	Spruce	Number	5989	3993	1996	0	0	0	0	0	1996	0	13975
			Volume	359	1118	1417	0	0	0	0	0	19785	0	22679
5	0019	Maple	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
6	0038	Aescules	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
7	0047	Ailanthus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
8	1038	Rhododendron	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
9	0651	Walnut	Number	0	0	1996	1996	0	0	1996	0	0	0	5989
			Volume	0	0	220	459	0	0	1637	0	0	0	2316
10	0630	Prunus	Number	1996	0	0	0	0	0	0	0	0	0	1996

			Volume	20	0	0	0	0	0	0	0	0	0	20
11	0965	Bird Cherry	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
12	2000	Other B/L	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
			Number	65882	25954	17968	11979	19964	5989	3993	0	3993	0	155722
		G Total	Volume	3853.12	7267.02	14074.86	18267.37	58735.07	23178.59	11239.92	0	33560.04	0	170175.98

Species wise No. and Volume . (Estimated / Extrapolated growing stock) for Dry Zone Deo / Kail Working Circle PB-I (Area = 560.48)

Sr. no.	Species Code	Species		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
1	0241	Deodar	Number	4484	14572	15693	12331	5605	7847	2242	1121	0	1121	65016
			Volume	134.52	3351.67	11142.34	20961.95	14292.24	26678.85	9528.16	5391.82	0	5391.82	96873.36
2	0926	Kail	Number	2242	2242	2242	1121	1121	1121	0	0	0	0	10089
			Volume	67.26	515.64	1591.76	1905.63	2533.37	4125.13	0	0	0	0	10738.8
3	0002	Fir	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
4	0921	Spruce	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
5	0019	Maple	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
6	0038	Aescules	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
7	0047	Ailanthus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
8	1038	Rhododendron	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
9	0651	Walnut	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
10	0969	Prunus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
11	0965	Bird Cherry	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
12	1010	Ban Oak	Number	1121	0	0	0	0	0	0	0	0	0	1121
			Volume	493.22	0	0	0	0	0	0	0	0	0	493.22
13	2000	Other B/L	Number	0	0	1121	0	0	0	0	0	0	0	1121
			Volume	0	0	257.82	0	0	0	0	0	0	0	257.82
			Number	7847	16814	19056	13452	6726	8968	2242	1121	0	1121	77347
		G Total	Volume	694.9952	3867.312	12991.93	22867.584	16825.61	30803.98	9528.16	5391.818	0	5391.818	108363.2
PB-II (Area = 737.30)														

Sr. No.	Species Code	Species		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
1	0241	Deodar	Number	23041	70965	84790	36865	15668	2765	8295	1843	922	0	245152
			Volume	691.22	16321.98	60200.55	62670.5	39952.44	9400.58	35252.16	8866.03	4433.02	0	237788.47
2	0926	Kail	Number	922	0	1843	0	0	0	0	0	0	0	2765
			Volume	27.65	0	1308.71	0	0	0	0	0	0	0	1336.36
3	0002	Fir	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
4	0921	Spruce	Number	922	0	0	0	0	0	0	0	0	0	922
			Volume	55.3	0	0	0	0	0	0	0	0	0	55.3
5	0019	Maple	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
6	0038	Aescules	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
7	0047	Ailanthus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
8	1038	Rhododendron	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
9	0651	Walnut	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
10	0969	Prunus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
11	0965	Bird Cherry	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
12	1010	Ban Oak	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
13	2000	Other B/L	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
			Number	24884	70965	86633	36865	15668	2765	8295	1843	922	0	248839
		G Total	Volume	774.17	16321.98	61509.25	62670.5	39952.44	9400.58	35252.16	8866.03	4433.02	0	239180.12
PB-III (Area = 365.03)														
Sr. no.	Species Code	Species		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total

1	0241	Deodar	Number	10038	15970	18252	10951	7301	3650	0	0	0	0	66162
			Volume	301.15	3673.11	12958.57	18616.53	18616.53	12411.02	0	0	0	0	66576.91
2	0926	Kail	Number	913	1369	1369	0	456	0	0	0	0	0	4107
			Volume	27.38	314.84	971.89	0	1031.21	0	0	0	0	0	2345.32
3	0002	Fir	Number	0	456	0	0	0	456	0	0	0	0	913
			Volume	0	127.76	0	0	0	2066.98	0	0	0	0	2194.74
4	0921	Spruce	Number	2281	1825	5475	1825	913	913	1825	0	0	0	15057
			Volume	136.89	511.04	3887.57	2591.71	2327.07	3878.44	11370.68	0	0	0	24703.41
5	0019	Maple	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
6	0038	Aescules	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
7	0047	Ailanthus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
8	1038	Rhododendron	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
9	0651	Walnut	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
10	0969	Prunus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
11	0965	Bird Cherry	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
12	1010	Ban Oak	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
13	2000	Other B/L	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
			Number	13232	19620	25096	12776	8669	5019	1825	0	0	0	86238
		G Total	Volume	465.41	4626.76	17818.03	21208.24	21974.81	18356.45	11370.68	0	0	0	95820.38

Species wise No. and Volume . (Estimated / extrapolated growing stock) for Fir Spruce Working Circle

PB-I (Area = 1180.66)														
Sr. No.	Species code	Species		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
1	0241	Deodar	Number	1968	0	0	7871	3936	3936	1968	1968	1968	1968	25581
			Volume	118.07	0	0	14482.76	11137.56	14482.76	9464.96	11983.7	13577.59	13577.59	88824.99
2	0926	Kail	Number	66904	17710	0	0	0	0	0	0	0	0	84614
			Volume	4014.24	4958.77	0	0	0	0	0	0	0	0	8973.02
3	0002	Fir	Number	7871	9839	13774	7871	13774	5903	5903	3936	0	1968	70840
			Volume	472.26	2754.87	13636.62	13380.81	38981.46	26741.95	38430.48	30106.83	0	19500.57	184005.86
4	0921	Spruce	Number	3936	0	0	0	1968	0	1968	1968	3936	15742	29517
			Volume	236.13	0	0	0	5017.81	0	12259.19	15053.42	39001.14	156004.54	227572.22
5	1162	Taxus	Number	3936	0	0	0	1968	0	0	0	0	0	5903
			Volume	39.36	0	0	0	924.85	0	0	0	0	0	964.21
6	1006	Mohru	Number	0	0	0	0	0	0	0	1968	0	0	1968
			Volume	0	0	0	0	0	0	0	7969.46	0	0	7969.46
7	0019	Maple	Number	5903	0	0	0	0	0	0	0	0	0	5903
			Volume	59.03	0	0	0	0	0	0	0	0	0	59.03
8	0038	Aescules	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
9	0047	Ailanthus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
10	1038	Rhododendron	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
11	0651	Walnut	Number	0	0	3936	9839	3936	1968	0	0	0	0	19678
			Volume	0	0	432.91	2262.93	1456.15	1121.63	0	0	0	0	5273.61
12	0969	Prunus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
13	0965	Bird Cherry	Number	1968	0	1968	0	0	0	0	0	0	0	3936
			Volume	19.68	0	452.59	0	0	0	0	0	0	0	472.26
14	2000	Other B/L	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0

			Number	92485	20465	19678	25581	25581	11807	9839	9839	5903	19678	247939
		G Total	Volume	4958.77	7713.65	14522.12	30126.51	57517.82	42346.34	60154.63	65113.4	52578.73	189082.7	524114.65
PB-II (Area = 1765.35)														
Sr. No.	Species code	Species		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
1	0241	Deodar	Number	0	0	0	0	0	0	0	0	4413	0	4413
			Volume	0	0	0	0	0	0	0	0	30452.29	0	30452.29
2	0926	Kail	Number	0	8827	4413	8827	22067	22067	8827	0	0	0	75027
			Volume	0	2471.49	4369.24	17476.965	68627.98	93784.22	49959.405	0	0	0	236689.3
3	0002	Fir	Number	30894	30894	22067	13240	22067	0	0	8827	8827	8827	145641
			Volume	1853.62	8650.22	21846.21	22508.21	62449.26	0	0	67524.64	87473.09	87473.09	359778.33
4	0921	Spruce	Number	0	0	0	0	0	0	0	0	0	4413	4413
			Volume	0	0	0	0	0	0	0	0	0	43736.55	43736.55
5	1162	Taxus	Number	0	22067	22067	13240	4413	0	0	0	0	0	61787
			Volume	0	1324.01	3530.7	3839.64	2074.29	0	0	0	0	0	10768.64
6	1006	Mohru	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
7	0019	Maple	Number	0	4413	4413	0	0	0	0	4413	0	0	13240
			Volume	0	132.4	485.47	0	0	0	0	4987.11	0	0	5604.99
8	0038	Aescules	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
9	0047	Ailanthus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
10	1038	Rhododendron	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
11	0651	Walnut	Number	0	0	0	0	0	0	4413	4413	0	0	8827
			Volume	0	0	0	0	0	0	3618.97	4987.11	0	0	8606.08
12	0969	Prunus	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
13	0965	Bird Cherry	Number	0	0	8827	4413	0	13240	0	0	0	0	26480
			Volume	0	0	2030.15	1941.89	0	14299.34	0	0	0	0	18271.37
14	2000	Other B/L	Number	0	0	0	0	0	0	0	0	0	0	0

			Volume	0	0	0	0	0	0	0	0	0	0	0
			Number	30894	66201	61787	39720	48547	35307	13240	17654	13240	13240	339830
		G Total	Volume	1853.62	12578.12	32261.77	45766.7	133151.52	108083.55	53578.37	77498.87	117925.38	131209.64	713907.54
PB-U (Area = 3577.14)														
Sr. No.	Species code	Species		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
1	0241	Deodar	Number	53657	71543	89429	29810	59619	59619	11924	5962	0	0	381562
			Volume	3219.43	20031.984	76014.225	54849.48	168721.77	219397.92	57353.48	36307.97	0	0	635896.25
2	0926	Kail	Number	5962	0	5962	0	0	0	0	0	0	0	11924
			Volume	357.71	0	5902.281	0	0	0	0	0	0	0	6260
3	0002	Fir	Number	23848	11924	17886	0	5962	11924	5962	17886	0	17886	113276
			Volume	1430.86	3338.66	17706.84	0	16872.18	54014.81	38811.97	136825.61	0	177247.29	446248.22
4	0921	Spruce	Number	5962	5962	5962	5962	0	0	17886	5962	0	23848	71543
			Volume	357.71	1669.332	4232.949	8465.898	0	0	111427.91	45608.54	0	236329.72	408092.06
5	1162	Taxus	Number	5962	35771	23848	5962	0	0	0	0	0	0	71543
			Volume	59.62	2146.284	3815.616	1728.951	0	0	0	0	0	0	7750.47
6	1006	Mohru	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
7	0019	Maple	Number	29810	17886	0	5962	0	0	0	0	0	0	53657
			Volume	298.1	536.571	0	1371.237	0	0	0	0	0	0	2205.9
8	0038	Aescules	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
9	0061	Kunish	Number	0	0	0	35771	5962	0	11924	0	0	0	53657
			Volume	0	0	0	8227.422	2205.903	0	9777.516	0	0	0	20210.84
10	1038	Rhododendron	Number	0	0	0	0	0	0	0	0	0	0	0
			Volume	0	0	0	0	0	0	0	0	0	0	0
11	0651	Walnut	Number	0	17886	11924	11924	5962	0	0	0	0	0	47695
			Volume	0	536.571	1311.62	2742.47	2205.9	0	0	0	0	0	6796.57
12	0992	Kainth	Number	0	0	0	5962	0	0	0	0	0	0	5962
			Volume	0	0	0	2623.236	0	0	0	0	0	0	2623.24
13	0965	Bird Cherry	Number	0	0	0	0	5962	0	0	0	0	0	5962
			Volume	0	0	0	0	4232.949	0	0	0	0	0	4232.95

14	2000	Other B/L	Number	0	0	5962	0	0	17886	5962	5962	0	0	35771
			Volume	0	0	1371.237	0	0	19316.556	9181.326	12400.752	0	0	42269.87
			Number	125200	160971	160971	101352	83467	89429	53657	35771	0	41733	852552
		G Total	Volume	5723.42	28259.41	110354.77	80008.7	194238.7	292729.29	226552.2	231142.86	0	413577	1582586.4

Appendix - XVIII													
Species wise No. and Volume in cubic mtrs. (Estimated / extrapolated growing stock) for Neoza Working Circle (Area = 2844.53)													
Species Code	Species		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
0241	Deodar	Number	45038	23704	35557	28445	14223	14223	4741	9482	21334	14223	210969
		Volume	1351.15	5452.02	25245.2	48357.01	36267.76	48357.01	20148.75	45607.3	102616.42	68410.95	401813.57
0926	Kail	Number	4741	0	0	0	0	0	0	0	0	0	4741
		Volume	142.23	0	0	0	0	0	0	0	0	0	142.23
0927	Chilgoza	Number	47409	47409	18964	23704	21334	9482	11852	4741	2370	0	187265
		Volume	853.36	7111.33	7964.68	20622.84	26667.47	11852.21	14815.26	5926.1	2963.05	0	98776.3
	G Total	Number	97188	71113	54520	52150	35557	23704	16593	14223	23704	14223	402975
		Volume	2346.74	12563.34	33209.89	68979.85	62935.23	60209.22	34964.01	51533.4	105579.47	68410.95	500732.1

Appendix - XIX

Species wise No. and Volume in cubic mtrs. (Estimated / extrapolated growing stock) for Protection Working Circle (21966.20 ha.)															
Sr. No.	Species Code	Botanical Name	Common / Local Names		10-20 V	20-30 IV	30-40 III	40-50 IIA	50-60 IIB	60-70 IA	70-80 IB	80-90 IC	90-100 ID	100 over IE	Total
1	0241	Cedrus deodara	Deodar	Number	8448.538	30977.97	39426.51	50691.23	45058.87	53507.41	16897.08	5632.359	0	0	250640
				Volume	506.9123	8673.833	33512.54	93271.86	127516.6	196907.3	81274.94	34301.07	0	0	575965
				Number	118279.5	183051.7	298515	236559.1	154889.9	90117.74	78853.03	50691.23	22529.44	36610.33	1270097
				Volume	3548.386	42101.88	211945.7	402150.4	394969.2	306400.3	335125.4	243824.8	108366.6	176095.7	2224528
2	0926	Pinus wallichiana	Kail	Number	11264.72	11264.72	5632.359	2816.179	2816.179	5632.359	0	5632.359	0	0	45058.87
				Volume	675.8831	3154.121	5576.035	5576.035	8758.318	23937.53	0	34301.07	0	0	81978.98
				Number	45058.46	84484.62	70403.85	36610	56323.08	14080.77	5632.308	5632.308	0	0	318225.4
				Volume	1351.766	19431.64	49987.19	62237.57	127291.3	51817.7	28725.03	28725.03	0	0	369567.2
3	0002	Abies pindrow	Fir	Number	30977.97	28161.79	22529.44	25345.62	14080.9	11264.72	22529.44	11264.72	8448.538	28161.79	202764.9
				Volume	1858.678	7885.303	22304.14	43087.55	39848.94	51029.17	146666.6	86175.09	83725.02	279083.4	761663.9
4	0921	Picea smithiana	Spruce	Number	2816.179	16897.08	16897.08	8448.538	2816.179	0	8448.538	0	0	8448.538	64772.13
				Volume	168.9708	4731.182	11996.92	11996.92	7181.258	0	52634.39	0	0	83725.02	172434.7
5	0929	Pinus roxburghii	Chil	Number	14080.9	28161.79	28161.79	36610.33	8448.538	16897.08	22529.44	5632.359	0	0	160522.2
				Volume	1253.2	9237.069	21825.39	54110.07	20867.89	64023.02	123145.9	42417.3	0	0	336879.8
6	0927	Pinus gerardiana	Chilgoza	Number	90117.74	84485.38	101382.5	81669.21	25345.62	22529.44	8448.538	8448.538	11264.72	0	433691.6
				Volume	1622.119	12672.81	42580.63	71052.21	31682.02	28161.79	10560.67	10560.67	14080.9	0	222973.8
7	1162	Taxus baccata	Taxus	Number	19713.26	0	2816.179	0	0	0	0	0	0	0	22529.44
				Volume	197.1326	0	450.5887	0	0	0	0	0	0	0	647.7213
8	0153	Betula alnoides	Betula	Number	2816.179	2816.179	2816.179	5632.359	0	0	0	0	0	0	14080.9
				Volume	28.16179	168.9708	450.5887	1633.384	0	0	0	0	0	0	2281.105
8	1010	Quercus incana	Ban oak	Number	50691.23	22529.44	2816.179	0	0	8448.538	8448.538	0	0	5632.359	98566.28
				Volume	22304.14	15995.9	3041.474	0	0	22388.63	27795.69	0	0	27767.53	119293.4
9	1006	Quercus dilatata / floribunda	Mohru Oak	Number	0	11264.72	0	0	2816.179	0	0	0	0	0	14080.9
				Volume	0	7997.95	0	0	5857.653	0	0	0	0	0	13855.6
10	1017	Quercus semecarpifolia	Kharshu Oak	Number	11264.72	0	0	0	0	0	0	0	0	0	11264.72
				Volume	4956.476	0	0	0	0	0	0	0	0	0	4956.476
11	0652	Juniperus macropoda	Juniper	Number	0	2816.179	2816.179	0	0	0	0	0	0	0	5632.359
				Volume	0	197.1326	647.7213	0	0	0	0	0	0	0	844.8538

12	0651	Juglans regia	Walnut	Number	0	2816.179	8448.538	0	11264.72	2816.179	2816.179	2816.179	0	8448.538	39426.51
				Volume	0	84.48538	929.3392	0	4167.946	1605.222	2309.267	3182.283	0	16052.22	28330.77
13	0038	Aesculus indica	HC Nut	Number	2816.179	2816.179	2816.179	0	2816.179	0	0	0	0	0	11264.72
				Volume	28.16179	168.9708	450.5887	0	1295.443	0	0	0	0	0	1943.164
14	0061	Alnus nitida	Alnus	Number	0	0	0	0	5632.359	0	5632.359	0	0	0	11264.72
				Volume	0	0	0	0	2083.973	0	4618.534	0	0	0	6702.507
15	0630	Illex dipyrena	Bray	Number	76036.85	47875.05	39426.51	16897.08	8448.538	0	0	0	0	0	188684
				Volume	33456.21	33991.29	42580.63	26021.5	17572.96	0	0	0	0	0	153622.6
16	1038	Rhododendron aeboreum	Rhododendron	Number	0	2816.179	0	0	0	0	0	0	0	0	2816.179
				Volume	0	197.1326	0	0	0	0	0	0	0	0	197.1326
17	0019	Acer acuminatum	Maple	Number	30977.97	42242.69	25345.62	5632.359	25345.62	0	0	0	0	0	129544.3
				Volume	309.7797	1267.281	2788.018	1295.443	9377.878	0	0	0	0	0	15038.4
18	0965	Prunus cornata	Bird cherry	Number	2816.179	2816.179	2816.179	2816.179	0	0	0	0	0	0	11264.72
				Volume	28.16179	197.1326	647.7213	1239.119	0	0	0	0	0	0	2112.135
19	0500	Fraxinus Species	Fraxinus	Number	8448.538	8448.538	2816.179	2816.179	0	0	0	0	0	0	22529.44
				Volume	84.48538	591.3977	647.7213	1239.119	0	0	0	0	0	0	2562.723
20	2000	Identified and Uncoded Tree	Other B/L	Number	5632.359	11264.72	14080.9	8448.538	2816.179	0	0	0	0	0	42242.69
				Volume	56.32359	788.5303	3238.606	3717.357	1999.487	0	0	0	0	0	9800.305
			G Total	Number	532257.5	628007.3	689963.3	520992.9	368919	225294.2	180235.4	95750.05	42242.69	87301.56	3370964
				Volume	72434.95	169534	455601.5	778628.6	800470.9	746270.7	812856.4	483487.3	206172.5	582723.9	5108181

STATEMENT OF PAST YIELD REMOVED

Deodar Kail (Wet Zone) Working Circle

Year	Species	PB-I			PB- II			PB-III			PB-IV		
		Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit
1999-2000	Deodar	775	112.79	-662.21	65	1392.21	1327.21	450	202.62	-247.38	1300	25.47	-1274.53
	Kail	445	1184.8	739.8	0	167.71	167.71	40	27.33	-12.67	200	0	-200
	Spruce	570	267	-303	0	0	0	70	0	-70	700	0	-700
	Fir	710	557.61	-152.39	0	0	0	25	0	-25	550	0	-550
	Total	2500	2122.2	-377.8	65	1559.92	1494.92	585	229.95	-355.05	2750	25.47	-2724.53
2000-2001	Deodar	775	74.73	-700.27	65	1667.28	1602.28	450	135.12	-314.88	1300	410.04	-889.96
	Kail	445	9.34	-435.66	0	164.32	164.32	40	16.7	-23.3	200	125.58	-74.42
	Spruce	570	0	-570	0	61.42	61.42	70	0	-70	700	95.32	-604.68
	Fir	710	0	-710	0	3.8	3.8	25	0	-25	550	1330.17	780.17
	Total	2500	84.07	-2415.93	65	1896.82	1831.82	585	151.82	-433.18	2750	1961.11	-788.89
2001-02	Deodar	775	144.59	-630.41	65	578.84	513.84	450	783.17	333.17	1300	52.35	-1247.65
	Kail	445	22.35	-422.65	0	17.54	17.54	40	142.66	102.66	200	37.35	-162.65
	Spruce	570	4.25	-565.75	0	4.25	4.25	70	271.54	201.54	700	0	-700
	Fir	710	0	-710	0	0	0	25	707.33	682.33	550	0	-550
	Total	2500	171.19	-2328.81	65	600.63	535.63	585	1904.7	1319.7	2750	89.7	-2660.3
2002-03	Deodar	775	105.6	-669.4	65	837.81	772.81	450	352.38	-97.62	1300	200.96	-1099.04
	Kail	445	39.25	-405.75	0	40.75	40.75	40	35.37	-4.63	200	37.48	-162.52
	Spruce	570	0	-570	0	32.31	32.31	70	2.55	-67.45	700	0	-700
	Fir	710	0	-710	0	5.66	5.66	25	0	-25	550	0	-550
	BL	0	0	0	0	0	0	0	11.23	11.23	0	0	0
	Total	2500	144.85	-2355.15	65	916.53	851.53	585	401.53	-183.47	2750	238.44	-2511.56
2003-04	Deodar	775	14.43	-760.57	65	333.81	268.81	450	23.78	-426.22	1300	9.62	-1290.38
	Kail	445	5.24	-439.76	0	19.09	19.09	40	4.25	-35.75	200	0	-200
	Spruce	570	0	-570	0	0	0	70	0	-70	700	0	-700
	Fir	710	0	-710	0	0	0	25	0	-25	550	0	-550

	BL	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2500	19.67	-2480.33	65	352.9	287.9	585	28.03	-556.97	2750	9.62	-2740.38
2004-05	Deodar	775	165.08	-609.92	65	546.61	481.61	450	468.44	18.44	1300	18.11	-1281.89
	Kail	445	172.62	-272.38	0	19.09	19.09	40	1393.97	1353.97	200	5.66	-194.34
	Spruce	570	125.66	-444.34	0	0	0	70	138.18	68.18	700	0	-700
	Fir	710	514.61	-195.39	0	0	0	25	1135.64	1110.64	550	0	-550
	BL	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2500	977.97	-1522.03	65	565.7	500.7	585	3136.23	2551.23	2750	23.77	-2726.23
2005-06	Deodar	775	111.77	-663.23	65	649.62	584.62	450	89.42	-360.58	1300	18.96	-1281.04
	Kail	445	14.72	-430.28	0	49.13	49.13	40	28.3	-11.7	200	4.25	-195.75
	Spruce	570	0	-570	0	0	0	70	0	-70	700	0	-700
	Fir	710	0	-710	0	0	0	25	0	-25	550	0	-550
	BL	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2500	126.49	-2373.51	65	698.75	633.75	585	117.72	-467.28	2750	23.21	-2726.79
2006-07	Deodar	775	9.62	-765.38	65	488.22	423.22	450	61.69	-388.31	1300	0	-1300
	Kail	445	0	-445	0	152.39	152.39	40	9.91	-30.09	200	0	-200
	Spruce	570	0	-570	0	107.73	107.73	70	0	-70	700	0	-700
	Fir	710	0	-710	0	1448.21	1448.21	25	0	-25	550	0	-550
	BL	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2500	9.62	-2490.38	65	2196.55	2131.55	585	71.6	-513.4	2750	0	-2750
2007-08	Deodar	775	41.4	-733.6	65	0	-65	450	0	-450	1300	0	-1300
	Kail	445	0	-445	0	0	0	40	0	-40	200	0	-200
	Spruce	570	0	-570	0	0	0	70	0	-70	700	0	-700
	Fir	710	0	-710	0	0	0	25	0	-25	550	0	-550
	BL	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2500	41.4	-2458.6	65	0	-65	585	0	-585	2750	0	-2750
2008-09	Deodar	775	86.19	-688.81	65	0	-65	450	0	-450	1300	0	-1300
	Kail	445	71.61	-373.39	0	0	0	40	0	-40	200	0	-200
	Spruce	570	43.65	-526.35	0	0	0	70	0	-70	700	0	-700
	Fir	710	12.74	-697.26	0	0	0	25	0	-25	550	0	-550
	BL	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2500	214.19	-2285.81	65	0	-65	585	0	-585	2750	0	-2750

2009-10	Deodar	775	0	-775	65	31.25	-33.75	450	0	-450	1300	0	-1300
	Kail	445	0	-445	0	8.09	8.09	40	0	-40	200	0	-200
	Spruce	570	0	-570	0	0	0	70	0	-70	700	0	-700
	Fir	710	0	-710	0	0	0	25	0	-25	550	0	-550
	BL	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2500	0	-2500	65	39.34	-25.66	585	0	-585	2750	0	-2750
2010-11	Deodar	775	26.64	-748.36	65	606.45	541.45	450	115.23	-334.77	1300	77.99	-1222.01
	Kail	445	23.63	-421.37	0	48.03	48.03	40	0	-40	200	18.97	-181.03
	Spruce	570	0.77	-569.23	0	17.43	17.43	70	4.68	-65.32	700	5	-695
	Fir	710	0.94	-709.06	0	0	0	25	0	-25	550	0	-550
	BL	0	0	0	0	0	0	0	0	0	0	1.76	1.76
	Total	2500	51.98	-2448.02	65	671.91	606.91	585	119.91	-465.09	2750	103.72	-2646.28
2011-12	Deodar	775	561.67	-213.33	65	2447.22	2382.22	450	352.31	-97.69	1300	48.63	-1251.37
	Kail	445	308.74	-136.26	0	107.34	107.34	40	35.21	-4.79	200	37.09	-162.91
	Spruce	570	164.48	-405.52	0	135.38	135.38	70	5.67	-64.33	700	104	-596
	Fir	710	0	-710	0	0	0	25	0	-25	550	0	-550
	BL	0	51.17	51.17	0	5.44	5.44	0	0.07	0.07	0	1.96	1.96
	Total	2500	1086.06	-1413.94	65	2695.38	2630.38	585	393.26	-191.74	2750	191.68	-2558.32
2012-13	Deodar	775	41.61	-733.39	65	0	-65	450	0	-450	1300	0	-1300
	Kail	445	0	-445	0	0	0	40	0	-40	200	0	-200
	Spruce	570	0	-570	0	0	0	70	0	-70	700	0	-700
	Fir	710	0	-710	0	0	0	25	0	-25	550	0	-550
	BL	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2500	41.61	-2458.39	65	0	-65	585	0	-585	2750	0	-2750
2013-14	Deodar	775	0	-775	65	228.8	163.8	450	19.59	-430.41	1300	109.86	-1190.14
	Kail	445	0	-445	0	71.96	71.96	40	13.74	-26.26	200	79.24	-120.76
	Spruce	570	0	-570	0	134.97	134.97	70	4.53	-65.47	700	90.28	-609.72
	Fir	710	0	-710	0	517.89	517.89	25	0	-25	550	305.12	-244.88
	BL	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2500	0	-2500	65	953.62	888.62	585	37.86	-547.14	2750	584.5	-2165.5
2014-15	Deodar	775	0	-775	65	0	-65	450	0	-450	1300	0	-1300
	Kail	445	0	-445	0	0	0	40	0	-40	200	0	-200

	Spruce	570	0	-570	0	0	0	70	0	-70	700	0	-700
	Fir	710	0	-710	0	0	0	25	0	-25	550	0	-550
	BL	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2500	0	-2500	65	0	-65	585	0	-585	2750	0	-2750

A Grand Total For the Plan Period (1999-2000 to 2014-15)

Species	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit
1	2	3	4	5	6	7	8	9	10	11	12	13
PB-I				PB-II			PB-III			PB-IV		
Deodar	12400	1496.12	-10903.9	1040	9808.12	8768.12	7200	2603.75	-4596.25	20800	971.99	-19828
Kail	7120	1852.3	-5267.7	0	865.44	865.44	640	1707.44	1067.44	3200	345.62	-2854.38
Spruce	9120	605.81	-8514.19	0	493.49	493.49	1120	427.15	-692.85	11200	294.6	-10905.4
Fir	11360	1085.9	-10274.1	0	1975.56	1975.56	400	1842.97	1442.97	8800	1635.29	-7164.71
Total	40000	5040.13	-34959.9	1040	13142.61	12102.61	9360	6581.31	-2778.69	44000	3247.5	-40752.5

STATEMENT OF PAST YIELD REMOVED

Deodar Kail (Dry Zone) Working Circle

Year	Species	PB-I			PB- II			PB-III			PB-IV		
		Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit
1999-2000	Deodar	285	559.3	274.3	170	128.35	-41.65	200	22.1	-177.9	0	0	0
	Kail	85	94.69	9.69	20	13.17	-6.83	60	11.04	-48.96	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	0	-60	0	0	0
	Total	500	653.99	153.99	200	141.52	-58.48	320	33.14	-286.86	0	0	0
2000-2001	Deodar	285	839.18	554.18	170	277.1	107.1	200	156.26	-43.74	0	0	0
	Kail	85	168.03	83.03	20	12.46	-7.54	60	13.88	-46.12	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	0	-60	0	0	0
	Total	500	1007.21	507.21	200	289.56	89.56	320	170.14	-149.86	0	0	0
2001-02	Deodar	285	242.25	-42.75	170	120.7	-49.3	200	180.2	-19.8	0	0	0
	Kail	85	33.96	-51.04	20	0	-20	60	2.26	-57.74	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	4.25	-55.75	0	0	0
	Total	500	276.21	-223.79	200	120.7	-79.3	320	186.71	-133.29	0	0	0
2002-03	Deodar	285	287.3	2.3	170	84.15	-85.85	200	145.35	-54.65	0	0	0
	Kail	85	98.26	13.26	20	0	-20	60	21.52	-38.48	0	0	0
	Spruce & Fir	130	13.03	-116.97	10	0	-10	60	4.25	-55.75	0	0	0
	Total	500	398.59	-101.41	200	84.15	-115.85	320	171.12	-148.88	0	0	0
2003-04	Deodar	285	454.18	169.18	170	113.05	-56.95	200	188.7	-11.3	0	0	0
	Kail	85	82.12	-2.88	20	7.36	-12.64	60	18.4	-41.6	0	0	0
	Spruce & Fir	130	4.25	-125.75	10	2.55	-7.45	60	0	-60	0	0	0
	Total	500	540.55	40.55	200	122.96	-77.04	320	207.1	-112.9	0	0	0
2004-05	Deodar	285	335.75	50.75	170	0	-170	200	192.95	-7.05	0	0	0
	Kail	85	41.32	-43.68	20	0	-20	60	9.62	-50.38	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	0	-60	0	0	0
	Total	500	377.07	-122.93	200	0	-200	320	202.57	-117.43	0	0	0

2005-06	Deodar	285	505.61	220.61	170	113.05	-56.95	200	239.7	39.7	0	0	0
	Kail	85	135.84	50.84	20	7.36	-12.64	60	14.72	-45.28	0	0	0
	Spruce & Fir	130	13.03	-116.97	10	0	-10	60	25.5	-34.5	0	0	0
	Total	500	654.48	154.48	200	120.41	-79.59	320	279.92	-40.08	0	0	0
2006-07	Deodar	285	363.2	78.2	170	39.1	-130.9	200	54.4	-145.6	0	0	0
	Kail	85	26.3	-58.7	20	7.36	-12.64	60	7.36	-52.64	0	0	0
	Spruce & Fir	130	0	-130	10	0.71	-9.29	60	14.73	-45.27	0	0	0
	Total	500	389.5	-110.5	200	47.17	-152.83	320	76.49	-243.51	0	0	0
2007-08	Deodar	285	0	-285	170	0	-170	200	0	-200	0	0	0
	Kail	85	0	-85	20	0	-20	60	0	-60	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	0	-60	0	0	0
	Total	500	0	-500	200	0	-200	320	0	-320	0	0	0
2008-09	Deodar	285	0	-285	170	0	-170	200	0	-200	0	0	0
	Kail	85	0	85	20	0	-20	60	0	-60	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	0	-60	0	0	0
	Total	500	0	-500	200	0	-200	320	0	-320	0	0	0
2009-10	Deodar	285	0	-285	170	0	-170	200	0	-200	0	0	0
	Kail	85	0	-85	20	0	-20	60	0	-60	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	0	-60	0	0	0
	Total	500	0	-500	200	0	-200	320	0	-320	0	0	0
2010-11	Deodar	285	0	-285	170	0	-170	200	0	-200	0	0	0
	Kail	85	0	-85	20	0	-20	60	0	-60	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	0	-60	0	0	0
	Total	500	0	-500	200	0	-200	320	0	-320	0	0	0
2011-12	Deodar	285	43.35	-241.65	170	0	-170	200	0	-200	0	0	0
	Kail	85	0	-85	20	0	-20	60	0	-60	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	0	-60	0	0	0
	Total	500	43.35	-456.65	200	0	-200	320	0	-320	0	0	0
2012-13	Deodar	285	68	-217	170	0	-170	200	0	-200	0	0	0
	Kail	85	0	-85	20	0	-20	60	0	-60	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	0	-60	0	0	0
	Total	500	68	-432	200	0	-200	320	0	-320	0	0	0

2013-14	Deodar	285	21.81	-263.19	170	21.81	-148.19	200	19.59	-180.41	0	0	0
	Kail	85	0	-85	20	0	-20	60	13.74	-46.26	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	4.53	-55.47	0	0	0
	Total	500	21.81	-478.19	200	21.81	-178.19	320	37.86	-282.14	0	0	0
2014-15	Deodar	285	185.3	-99.7	170	149.6	-20.4	200	149.6	-50.4	0	0	0
	Kail	85	124.23	39.23	20	5.94	-14.06	60	2.26	-57.74	0	0	0
	Spruce & Fir	130	0	-130	10	0	-10	60	0	-60	0	0	0
	Total	500	309.53	-190.47	200	155.54	-44.46	320	151.86	-168.14	0	0	0

B Grand Total For the Plan Period (1999-2000 to 2014-15)

Species	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit
PB-I				PB-II			PB-III			PB-IV		
Deodar	4560	3905.23	-654.77	2720	1046.91	-1673.09	3200	1348.85	-1851.15	0	0	0
Kail	1360	804.75	-385.25	320	53.65	-266.35	960	114.8	-845.2	0	0	0
Spruce & Fir	2080	30.31	-2049.69	160	3.26	-156.74	960	53.26	-906.74	0	0	0
Total	8000	4740.29	-3089.71	3200	1103.82	-2096.18	5120	1516.91	-3603.09	0	0	0

Appendix-XXII										
STATEMENT OF PAST YIELD REMOVED										
Fir Spruce Working Circle										
		PB-I			PB- II			PB-U		
Year	Species	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit
1999-2000	Deodar	200	0	-200	0	109.1	109.1	200	7.36	-192.64
	Kail	200	0	-200	0	183.99	183.99	50	21.25	-28.75
	Spruce	750	0	-750	100	0	-100	850	0	-850
	Fir	3350	0	-3350	100	0	-100	1100	0	-1100
	BL	0	0	0	0	0	0	0	0	0
	Total	4500	0	-4500	200	293.09	93.09	2200	28.61	-2171.39
2000-2001	Deodar	200	18.82	-181.18	0	163.85	163.85	200	27.59	-172.41
	Kail	200	50.95	-149.05	0	273.53	273.53	50	4.71	-45.29
	Spruce	750	0	-750	100	0	-100	850	2.55	-847.45
	Fir	3350	0	-3350	100	0	-100	1100	0	-1100
	BL	0	0	0	0	0	0	0	0	0
	Total	4500	69.77	-4430.23	200	437.38	237.38	2200	34.85	-2165.15
2001-02	Deodar	200	9.62	-190.38	0	9.62	9.62	200	4.81	-195.19
	Kail	200	82.11	-117.89	0	8.48	8.48	50	293.5	243.5
	Spruce	750	0	-750	100	0	-100	850	0	-850
	Fir	3350	0	-3350	100	0	-100	1100	4048.75	2948.75
	BL	0	0	0	0	0	0	0	0	0
	Total	4500	91.73	-4408.27	200	18.1	-181.9	2200	4347.06	2147.06
2002-03	Deodar	200	4.81	-195.19	0	122.8	122.8	200	11.61	-188.39
	Kail	200	15.13	-184.87	0	41.04	41.04	50	18.95	-31.05
	Spruce	750	0	-750	100	7.1	-92.9	850	4.25	-845.75
	Fir	3350	0	-3350	100	0	-100	1100	0	-1100

	BL	0	0	0	0	0	0	0	0	0
	Total	4500	19.94	-4480.06	200	170.94	-29.06	2200	34.81	-2165.19
2003-04	Deodar	200	21.04	-178.96	0	31.41	31.41	200	32.57	-167.43
	Kail	200	144.86	-55.14	0	21.8	21.8	50	7.36	-42.64
	Spruce	750	47.32	-702.68	100	0	-100	850	9.06	-840.94
	Fir	3350	893.19	-2456.81	100	0	-100	1100	0	-1100
	BL	0	0	0	0	0	0	0	0	0
	Total	4500	1106.41	-3393.59	200	53.21	-146.79	2200	48.99	-2151.01
2004-05	Deodar	200	44.43	-155.57	0	75.27	75.27	200	42.16	-157.84
	Kail	200	49.78	-150.22	0	57.74	57.74	50	0	-50
	Spruce	750	0	-750	100	0	-100	850	0	-850
	Fir	3350	0	-3350	100	0	-100	1100	0	-1100
	BL	0	0	0	0	0	0	0	0	0
	Total	4500	94.21	-4405.79	200	133.01	-66.99	2200	42.16	-2157.84
2005-06	Deodar	200	59.15	-140.85	0	36.22	36.22	200	9.62	-190.38
	Kail	200	84.05	-115.95	0	56.33	56.33	50	287.26	237.26
	Spruce	750	7.65	-742.35	100	0	-100	850	1112.83	262.83
	Fir	3350	0	-3350	100	0	-100	1100	949.52	-150.48
	BL	0	0	0	0	0	0	0	0	0
	Total	4500	150.85	-4349.15	200	92.55	-107.45	2200	2359.23	159.23
2006-07	Deodar	200	9.62	-190.38	0	9.62	9.62	200	0	-200
	Kail	200	25.46	-174.54	0	14.16	14.16	50	0	-50
	Spruce	750	0	-750	100	0	-100	850	0	-850
	Fir	3350	0	-3350	100	0	-100	1100	0	-1100
	BL									
	Total	4500	35.08	-4464.92	200	23.78	-176.22	2200	0	-2200
2007-08	Deodar	200	0	-200	0	0	0	200	0	-200
	Kail	200	0	-200	0	0	0	50	0	-50
	Spruce	750	0	-750	100	0	-100	850	0	-850
	Fir	3350	0	-3350	100	0	-100	1100	0	-1100

	BL	0	0	0	0	0	0	0	0	0
	Total	4500	0	-4500	200	0	-200	2200	0	-2200
2008-09	Deodar	200	391.27	191.27	0	3.68	3.68	200	0	-200
	Kail	200	786.33	586.33	0	0	0	50	0	-50
	Spruce	750	713.83	-36.17	100	43.89	-56.11	850	0	-850
	Fir	3350	1887.75	-1462.25	100	708.77	608.77	1100	0	-1100
	BL	0	0	0	0	0	0	0	0	0
	Total	4500	3779.18	-720.82	200	756.34	556.34	2200	0	-2200
2009-10	Deodar	200	133.18	-66.82	0	342.84	342.84	200	0	-200
	Kail	200	242.89	42.89	0	500.57	500.57	50	0	-50
	Spruce	750	1581.65	831.65	100	350.2	250.2	850	0	-850
	Fir	3350	5933.72	2583.72	100	0	-100	1100	0	-1100
	BL	0	0	0	0	0	0	0	0	0
	Total	4500	7891.44	3391.44	200	1193.61	993.61	2200	0	-2200
2010-11	Deodar	200	30.13	-169.87	0	175.45	175.45	200	0	-200
	Kail	200	44.59	-155.41	0	1.98	1.98	50	0	-50
	Spruce	750	2.55	-747.45	100	0.28	-99.72	850	0	-850
	Fir	3350	0	-3350	100	0	-100	1100	0	-1100
	BL	0	1.46	1.46	0	9.22	9.22	0	0	0
	Total	4500	78.73	-4421.27	200	186.93	-13.07	2200	0	-2200
2011-12	Deodar	200	234.28	34.28	0	218.65	218.65	200	0.28	-199.72
	Kail	200	327.05	127.05	0	62.45	62.45	50	91.24	41.24
	Spruce	750	28.35	-721.65	100	31.13	-68.87	850	0	-850
	Fir	3350	0	-3350	100	0	-100	1100	0	-1100
	BL		7.73	7.73		18.601	18.601		10.61	10.61
	Total	4500	597.41	-3902.59	200	330.831	130.831	2200	102.13	-2097.87
2012-13	Deodar	200	0	-200	0	91.17	91.17	200	0	-200
	Kail	200	0	-200	0	455.85	455.85	50	0	-50
	Spruce	750	0	-750	100	0.62	-99.38	850	0	-850
	Fir	3350	0	-3350	100	0	-100	1100	0	-1100

	BL	0	0	0	0	0	0	0	0	0
	Total	4500	0	-4500	200	547.64	347.64	2200	0	-2200
2013-14	Deodar	200	0	-200	0	0	0	200	0	-200
	Kail	200	0	-200	0	0	0	50	0	-50
	Spruce	750	0	-750	100	0	-100	850	0	-850
	Fir	3350	0	-3350	100	0	-100	1100	0	-1100
	BL	0	0	0	0	0	0	0	0	
	Total	4500	0	-4500	200	0	-200	2200	0	-2200
2014-15	Deodar	200	27.31	-172.69	0	45.56	45.56	200	54.48	-145.52
	Kail	200	3.11	-196.89	0	2.97	2.97	50	0	-50
	Spruce	750	0	-750	100	0	-100	850	0	-850
	Fir	3350	0	-3350	100	0	-100	1100	0	-1100
	BL	0	0	0	0	0	0	0	0	0
	Total	4500	30.42	-4469.58	200	48.53	-151.47	2200	54.48	-2145.52

C Grand Total For the Plan Period (1999-2000 to 2014-15)

Species	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit
1	2	3	4	5	6	7	8	9	10
PB-I				PB-II			PB-U		
Deodar	3200	983.66	-2216.34	0	1435.24	1435.24	3200	190.48	-3009.52
Kail	3200	1856.31	-1343.69	0	1680.89	1680.89	800	724.27	-75.73
Spruce	12000	2381.35	-9618.65	1600	433.22	-1166.78	13600	1128.69	-12471.3
Fir	53600	8714.66	-44885.3	1600	708.77	-891.23	17600	4998.27	-12601.7
BL	0	9.19	9.19	0	27.821	27.821	0	10.61	10.61
Total	72000	13945.17	-58054.8	3200	4285.941	1085.941	35200	7052.32	-28147.7

Appendix- XXIII				
STATEMENT OF PAST YIELD REMOVED				
Neoza Working Circle				
Year	Species	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit
1999-2000	Deodar	0	209.95	209.95
	Kail	0	3.96	3.96
	Spruce	0	0	0
	Neoza	0	0	0
	Total	0	213.91	213.91
2000-2001	Deodar	0	0	0
	Kail	0	0	0
	Spruce	0	0	0
	Neoza	0	0	0
	Total	0	0	0
2001-02	Deodar	0	55.25	55.25
	Kail	0	22.6	22.6
	Spruce	0	0	0
	Neoza	0	0	0
	Total	0	77.85	77.85
2002-03	Deodar	0	0	0
	Kail	0	0	0
	Spruce	0	0	0
	Neoza	0	0	0
	Total	0	0	0
2003-04	Deodar	0	218.45	218.45
	Kail	0	3.68	3.68
	Spruce	0	0	0
	Neoza	0	0	0
	Total	0	222.13	222.13
2004-05	Deodar	0	103.7	103.7
	Kail	0	0	0
	Spruce	0	0	0
	Neoza	0	0	0
	Total	0	103.7	103.7
2005-06	Deodar	0	148.75	148.75
	Kail	0	24.22	24.22
	Spruce	0	2.55	2.55
	Neoza	0	0	0
	Total	0	175.52	175.52
2006-07	Deodar	0	100.3	100.3
	Kail	0	0	0
	Spruce	0	0	0

	Neozar	0	1.25	1.25
	Total	0	101.55	101.55
2007-08	Deodar	0	0	0
	Kail	0	0	0
	Spruce	0	0	0
	Neozar	0	0	0
	Total	0	0	0
2008-09	Deodar	0	0	0
	Kail	0	0	0
	Spruce	0	0	0
	Neozar	0	0	0
	Total	0	0	0
2009-10	Deodar	0	0	0
	Kail	0	0	0
	Spruce	0	0	0
	Neozar	0	0	0
	Total	0	0	0
2010-11	Deodar	0	0	0
	Kail	0	0	0
	Spruce	0	0	0
	Neozar	0	0	0
	Total	0	0	0
2011-12	Deodar	0	0	0
	Kail	0	0	0
	Spruce	0	0	0
	Neozar	0	0	0
	Total	0	0	0
2012-13	Deodar	0	0	0
	Kail	0	0	0
	Spruce	0	0	0
	Neozar	0	0	0
	Total	0	0	0
2013-14	Deodar	0	7.65	7.65
	Kail	0	0	0
	Spruce	0	0	0
	Neozar	0	0	0
	Total	0	7.65	7.65
2014-15	Deodar	0	0	0
	Kail	0	0	0
	Spruce	0	0	0
	Neozar	0	0	0
	Total	0	0	0

D Grand Total For the Plan Period (1999-2000 to 2014-15)			
Species	Prescribed annual yield in M³	Yield removed in M³	Excess / Deficit
Deodar	0	844.05	844.05
Kail	0	54.46	54.46
Spruce	0	2.55	2.55
Neoza	0	1.25	1.25
Total	0	902.31	902.31

Appendix- XXIV				
STATEMENT OF PAST YIELD REMOVED				
Protection Working Circle				
Year	Species	Prescribed annual yield in M ³	Yield removed in M ³	Excess / Deficit
1999-2000	Deodar	0	1021.56	1021.56
	Kail	0	153.53	153.53
	Spruce	0	0	0
	Neoza	0	0	0
	Fir	0	0	0
	Chil	0	0	0
	BL	0	0	0
	Total	0	1175.09	1175.09
2000-2001	Deodar	0	1277.27	1277.27
	Kail	0	123.42	123.42
	Spruce	0	0	0
	Neoza	0	0	0
	Fir	0	0	0
	Chil	0	0	0
	BL	0	0	0
	Total	0	1400.69	1400.69
2001-02	Deodar	0	772.41	772.41
	Kail	0	1046.99	1046.99
	Spruce	0	145.76	145.76
	Neoza	0	12.54	12.54
	Fir	0	550.93	550.93
	Chil	0	0	0
	BL	0	0	0
	Total	0	2528.63	2528.63
2002-03	Deodar	0	1309.27	1309.27
	Kail	0	492.46	492.46
	Spruce	0	240.67	240.67
	Neoza	0	0	0
	Fir	0	0	0
	Chil	0	0	0
	BL	0	0	0
	Total	0	2042.4	2042.4
2003-04	Deodar	0	906.75	906.75
	Kail	0	298.35	298.35
	Spruce	0	380.13	380.13

	Neoza	0	0	0
	Fir	0	910.4	910.4
	Chil	0	0	0
	BL	0	0	0
	Total	0	2495.63	2495.63
2004-05	Deodar	0	861.9	861.9
	Kail	0	88.6	88.6
	Spruce	0	0	0
	Neoza	0	0	0
	Fir	0	0	0
	Chil	0	0	0
	BL	0	0	0
	Total	0	950.5	950.5
2005-06	Deodar	0	1122.85	1122.85
	Kail	0	676.06	676.06
	Spruce	0	97.22	97.22
	Neoza	0	0	0
	Fir	0	20.64	20.64
	Chil	0	0	0
	BL	0	0	0
	Total	0	1916.77	1916.77
2006-07	Deodar	0	781.85	781.85
	Kail	0	73.19	73.19
	Spruce	0	33.01	33.01
	Neoza	0	0	0
	Fir	0	587.5	587.5
	Chil	0	0	0
	BL	0	0	0
	Total	0	1475.55	1475.55
2007-08	Deodar	0	0	0
	Kail	0	0	0
	Spruce	0	0	0
	Neoza	0	0	0
	Fir	0	0	0
	Chil	0	0	0
	BL	0	0	0
	Total	0	0	0
2008-09	Deodar	0	0	0
	Kail	0	0	0
	Spruce	0	0	0
	Neoza	0	0	0

	Fir	0	0	0
	Chil	0	0	0
	BL	0	0	0
	Total	0	0	0
2009-10	Deodar	0	0	0
	Kail	0	117.36	117.36
	Spruce	0	27.39	27.39
	Neoza	0	0	0
	Fir	0	104.63	104.63
	Chil	0	0	0
	BL	0	0	0
	Total	0	249.38	249.38
2010-11	Deodar	0	81.73	81.73
	Kail	0	1.27	1.27
	Spruce	0	0	0
	Neoza	0	0	0
	Fir	0	0	0
	Chil	0	0	0
	BL	0	0	0
	Total	0	83	83
2011-12	Deodar	0	1232.63	1232.63
	Kail	0	201.93	201.93
	Spruce	0	1.42	1.42
	Neoza	0	0	0
	Fir	0	2.5	2.5
	Chil	0	150	150
	BL	0	20.69	20.69
	Total	0	1609.17	1609.17
2012-13	Deodar	0	55.35	55.35
	Kail	0	139.02	139.02
	Spruce	0	52.45	52.45
	Neoza	0	0	0
	Fir	0	438.97	438.97
	Chil	0	0	0
	BL	0	0	0
	Total	0	685.79	685.79
2013-14	Deodar	0	43.07	43.07
	Kail	0	0	0
	Spruce	0	0	0
	Neoza	0	36.428	36.428
	Fir	0	0	0

	Chil	0	0	0
	BL	0	2.34	2.34
	Total	0	81.838	81.838
2014-15	Deodar	0	86.58	86.58
	Kail	0	0	0
	Spruce	0	0	0
	Neoza	0	0	0
	Fir	0	0	0
	Chil	0	0	0
	BL	0	0	0
	Total	0	86.58	86.58

E Grand Total For the Plan Period (1999-2000 to 2014-15)			
Species	Prescribed annual yield in M³	Yield removed in M³	Excess / Deficit
Deodar	0	9553.22	9553.22
Kail	0	3412.18	3412.18
Spruce	0	978.05	978.05
Neoza	0	48.968	48.968
Fir	0	2615.57	2615.57
Chil	0	150	150
BL	0	23.03	23.03
Total	0	16781.02	16781.02

**HIMACHAL PRADESH DEPARTMENT
NOTIFICATION**

**No. Ft 29-241/BB/49.
1952**

Dated Shimla-1 the 25th February,

In exercise of the powers conferred by section 29 of the Indian Forest Act, (XVI of 1927) as applied to H.P. read with the Government of India, Ministry of State Notification No. 146-J dated 6 th December 1950 of the Chief Commissioner, H.P. is pleased to declare the provision of Chapter IV of the Act applicable to the forest lands or waste land in H. P. which are the property of Government or over which the Government have proprietary right to the whole or any part of the produce of which the government is entitled as recorded in the Forest Settlement or land revenue settlement or land revenue records of the integrated state, otherwise, except to the following area:-

1. Rantu, Saliana, Chambi, Kupar, Kalala and Tomru of Kotkhai Illaqa and Nagkelu of Kotgarh illaqua declared as reserved forests in the Punjab Government no 175, dated the 15th April, 1885.
2. Chamba state forests declared reserve forests vide Chamba Darbar,s Notification No. W 46-43 dated the 10th November, 1943.
3. Sirmor state forest declared reserve forests in sirmor darbar,s Notification:-
 1. No. 1 dated the 17th Jaith, 1958 Baikrami
 2. No. 2 dated the 23rd Chait, 1991 Baikrami
 3. No.14 dated the 17th Sawan, 1990 Baikrami
 4. No. 38 dated the 27-12-1992 Baikrami
 5. No. Nil dated the 1st Chait, 1937 Baikrami
 6. No. Nil dated the 1st Chait, 1947 Baikrami
 7. No.II dated the 2nd Poh 1949 Baikrami
 8. No. I dated the 17th Jaith, 1952 Baikrami
 9. No. Nil dated the 11 Bhadon, 1982 Baikrami

2. This notification apply to all lands in old Mandi state containing the growth except such lands as have been excluded in the Forest Settlement as cultivated or as in the malgajari of private person.

By Order
CCF & Secretary (Forest Deptt.)
To the Chief Commissioner, H.P. Admn.

**Government of Himachal Pradesh
Department of Forest.**

**FFE- B- F (5) 2/2002- Pt. IV- Loose Dated: Shimla-2, the 17-07-14.
Notification**

The Governor, Himachal Pradesh in exercise of the powers, vested in her, under sub-para (1) of Para 5 of Schedule V appended to the Constitution of India is pleased to direct that the Forest Conservation Act. 1980 shall not apply to the Scheduled Areas of the State of Himachal Pradesh for a period of two years subject to the fulfillment of the following conditions.

- i The area does not fall in National Park / Sanctuary / Conservation Reserve / Community reserve / Forest / Demarcated Protected Forest.
- ii There is no tree standing on the land proposed to be allotted as Nautor.
- iii The area is situated at a minimum distance of five kilometer (ground distance) from national Park/ Sanctuary/ Conservation Reserve/ Community Reserve.
- iv The area is situated at a minimum distance of one kilometer (ground distance) from Perenial / Natural Water Source.
- v The Nautor so granted is utilized only for bonafide domestic purpose and is not utilized for any commercial activity.
- vi The Nautor is not granted to any such person who is involved in any kind of forest offence, Including, encroachment on forest land.

**By. Order
Tarun Shridhar
Principal Secretary (Forest) to the
Government of Himachal Pradesh.
17-07-14. Copy**

**Endst No. as above dated, Shimla-2
forwarded for information & necessary action to:-**

1. Private Secretary to Governor, Himachal Pradesh.
2. Private Secretary to Chief Minister, Himachal Pradesh.
3. Private Secretary to Forest Minister, Himachal Pradesh.
4. Private Secretary to chief Secretary, Himachal Pradesh.
5. All Administrative Secretaries to the Government of H.P.
6. Pr. Chief Conservator of Forest (HoFF). Talland Shimla.
7. Divisional Commissioner, Shimla, Mandi & Kangra.
8. All Head of Departments.
9. All the Deputy Commissioners of Himachal Pradesh.
10. The Controller. Printing & Stationery Department, H.P. Shimla-5.
11. S.O. (Forest-A), H.P. Secretariat Shimla-2.
12. Guard File.

**(Prakasha Nand)
Deputy Secretary (Forests) to the Government of
Himachal Pradesh.
0177-2628481, 94184-55573**

**Government of Himachal Pradesh
Department of Forest.**

FFE- B- F (5) 2/2002- Pt. IV- Loose

Dated: Shimla-2, the

17-07-14.

ADDENDUM

In continuation to this department Notification of even No. dated 17-7-14, the Governor, Himachal Pradesh is pleased to order that the suspension of Forest Conservation Act, 1980 in Scheduled areas of the state shall be for the limited purpose of implementation of the Himachal Pradesh Nautor Rules, 1968 subject to the conditions imposed vide above Notification.

By. Order

Tarun Shridhar

Principal Secretary (Forest) to the

Government of Himachal

Pradesh.

Endst. No. As above dated, Shimla-2

23-07-14.

Copy forwarded for information & necessary action to:-

1. Private Secretary to Governor, Himachal Pradesh.
2. Private Secretary to Chief Minister, Himachal Pradesh.
3. Private Secretary to chief Secretary, Himachal Pradesh.
4. All Administrative Secretaries to the Government of H.P.
5. Pr. Chief Conservator of Forest (HoFF). Talland Shimla.
6. Divisional Commissioner, Shimla, Mandi & Kangra.
7. All the Deputy Commissioners of Himachal Pradesh.
8. The Controller. Printing & Stationery Department, H.P. Shimla-5.
9. S.O. (Forest-A), H.P. Secretariat Shimla-2.
10. Guard File.

(Prakasha Nand)

**Deputy Secretary (Forests) to the Government of
Himachal Pradesh.**

0177-2628481, 94184-55573

Government of Himachal Pradesh

Department of Forest

FFE-B-F (4) 1/2015

Dated: Shimla-2, the

02-12-2016

NOTIFICATION

Consequent upon expiry of validity of GoHP Notification No. FFE-B-F (5) 2/2002- Pt. IV- loose dated 17-07-14 and its addendum dated 23-07-14, the Governor, Himachal Pradesh in exercise of the powers, vested in him, under sub- para (1) of Para 5 of Schedule- V appended to the Constitution of India is pleased to direct that the Forest Conservation Act. 1980 shall not apply to the Scheduled Area of the state of Himachal Pradesh for the limited purpose of implementation of the H.P. Nautor Rules, 1968 carrying essential development activities for a period of two year subject to the fulfillment of following conditions.

9. The area does not fall in National Park/ Sanctuary/ Conservation Reserve/ Community reserve Forest/ Demarcated Protected Forest.
10. The number of trees standing over the land proposed to be allowed as Nautor should not exceed two.
11. It shall only be applicable to the nautor lands already sanctioned by competent authority till the date of issue of this Notification in which pattas could not be granted.
12. The Nautor so granted is utilized only for bona- fide domestic purpose and is not utilized for any commercial activity.
13. The Nautor is not granted to any such person who is involved in any kind of forest offence including encroachment on forest land.
14. No forest land will be granted for any purpose in which natural water resources are utilized by the local inhabitants.
15. No forest land will be granted for any purposes where paths and roads exist which are used by the local inhabitants.
16. The essential developmental activities to be provide by the Govt. shall include (1) Schools (2) Dispensaries/ Hospitals (3) Electric and telecommunication lines (4) Drinking water projects (5) Water/ Rain Water Harvesting Structures (6) Minor Irrigation Canals (7) Renewable Sources of Energy (8) Skill Up gradation/ Vocational training contras (9) Power sup- stations (10) Communication posts (11) Construction/ Widening of roads including approach roads to road side establishments (12) Up gradation/ Strengthening/ Widening of existing bridges by the Border Roads Organization (BRO) (13) Police Establishments like Police Stations/ Outposts/ Border Outposts/ watch towers in sensitive's areas identified by the Ministry of Home Affairs. Permission for these activities shall be granted by the Forest Department, Government of H. P. on case to case basis for which regulation shall be framed by the Government of H. P. specifying procedure and authorities for granting the permission.

By Order

(Tarun Kapoor)
Principal Secretary (Forests) to the
Government of Himachal Pradesh.

Endst. No. as above dated Shimla-2

-2016

Copy forwarded for information & necessary action to:-

1. Private Secretary to Governor, Himachal Pradesh.
2. Private Secretary to Chief Minister, Himachal Pradesh.
3. Private Secretary to Forest Minister, Himachal Pradesh.
4. Private Secretary to chief Secretary, Himachal Pradesh.
5. All Administrative Secretaries to the Government of H.P.
6. Pr. Chief Conservator of Forest (HoFF). Talland Shimla.
7. Divisional Commissioner, Shimla, Mandi & Kangra.
8. All Head of Departments.
9. All the Deputy Commissioners of Himachal Pradesh.
10. The Controller. Printing & Stationery Department, H.P. Shimla-5.
11. S.O. (Forest-A), H.P. Secretariat Shimla-2.
12. Guard File.

(Sat Pal Dhiman)
Joint secretary (Forests) to the
Government of Himachal Pradesh.

**Government of Himachal Pradesh
Department of Forests**

FFE-B-F (4) 1/2015

dated: Shimla-2, the

27th May, 2017

Notification

WHEREAS, the Governor of Himachal Pradesh, in exercise of the powers vested in him, under sub-para (1) of Para 5 of Schedule- V appended to the Constitution of India issued vide Notification No. FFE-B-F (4) 1/2015 dated 2nd December, 2016 and published in the Rajpatra, Himachal Pradesh (Extra Ordinary) on 6th December, 2016 (hereinafter referred to as the said Notification) stipulating that Forest Conservation Act, 1980 shall not apply to the Scheduled Areas of the State of Himachal Pradesh for the him listed purpose of implementation of the H.P. Nautor Rules, 1968 and carrying essential development activities for a period of two years subject to fulfillment of certain conditions;

AND WHEREAS, the Governor, Himachal Pradesh is satisfied that it is necessary and expedient to amend the said notification and

NOW, THEREFORE, in exercise of the powers vested in him, under sub- para (1) of Para 5 of Schedule- V appended to the Constitution of India, the Governor of Himachal Pradesh is pleased to substitute the condition No. 3 of the said notification, as under, namely:

“Condition no.3 Where ever Nautor land has already been sanctioned by competent authority till the date of issue of said Notification, dated 02-12-2016 but pattas could not be granted, pattas may now be granted at the same location for which sanction was issued. For new sanctions of Nautor in Un-demarcated protected Forest (UPFs) land parcels be selected in such a manner that the general forests and ecology of the area is not disturbed. Land chunks be, therefore, identified jointly by Revenue and Forest Officers in order to avoid scattered allotment of Nautor in the Forests. Divisional Forest officer concerned shall be authorized to issue No. objection Certificate for allotment of Nautor in UPF areas all such time as Forest conservation – Act, 1980 does not apply in the Scheduled areas.

**By Order
(Tarun Kapoor)
Addl. Chief Secretary**

(Authoritative English Text of this Department Notification No FFE –B –A (3) 4/2015, dated- as required under Clause (3) of article 348 of the Constitution of India)

Government of Himachal Pradesh

Department of Forests

No. FFE-B-A (3) 4/2015

Dated: Shimla -2, the

26 February, 2016

Notification

Whereas, the draft Himachal Pradesh Forest (Timber Distribution to the Right Holders) Amendment Rules, 2015 were published in the Rajpatra, Himachal Pradesh on 15-09-2015 vide Notification of even No. dated 03-09-2015 for inviting objection(s) and suggestion (s) person (s) likely to be affected, thereby, within a period of 30 days from the date of their publication;

Whereas, no objection (s) or suggestion (s) from any interested person (s) has/ have been received by the Principal Chief Conservator of Forest (HoFF), Himachal Pradesh within the above stipulated period;

Now, in exercise of the powers conferred by clause (L) of section 32 of the Indian Forest Act, 1927 (16 of 1927), the Governor of Himachal Pradesh is pleased to make the following rules further to amend the Himachal Pradesh Forest (Timber Distribution to the Right Holder) Rules, 2013 notified vide Notification No. FFE-B (3) 43/ 2006- Vol-II, dated 26-12-2013 and published in the Rajpatra, Himachal Pradesh on 28-12-2013, namely:-

Short title (1) These rules may be called the Himachal Pradesh and commencement. Forest (Timber Distribution to the Right Holders) Amendment rules, 2016.
 (2) They shall come into force from the date of their publication in the Rajpatra, Himachal Pradesh

Amendment 2. In rule of the Himachal Pradesh Forest of rule 2 (Timber Distribution to the RightHolder) 2013 (hereinafter referred to as the said ‘rules’), for clause (e), the following clause shall be substituted , namely:-

“(e) Timber Distribution Rights means right of a Right Holder having cultivable land, acquired only through inheritance, for grant of timber for construction, repair and addition or alteration of residential house and cow shed for bonafide domestic use of the Right Holder as recorded in the Forest Settlement Repot of the area concerned provided that no person who have purchased land for construction of residence, cultivation or any other allied purpose settled from outside in the revenue estate shall be entitled for Timber Distribution rights”.

Amendment 3.. In rule 3 of the said rules, for clauses (ii) and of rules 3.(vi) The following new clauses (ii) and (vi) shall respectively be substituted, namely
 “(ii) In case Right Holder has land holding which qualifies him for grant of timber at more than one place, he may be granted timber only at one place where he actually resides;
 (vi) Timber shall not be granted to the Right Holders, if salvage trees for the purpose are not available in the forest where concerned Right Holders have timber Distribution rights’.

Amendment 4. In rule 4 of the said rules, for sub rule (2), of rule 4(following sub-rule shall be substituted, namely):-
 “(2) Trees shall be given from salvage (fallen, dry standing) trees. No green standing trees shall be granted to the Right Holder”.

Amendment 5. In rule 5 of the said rules, in clauses (i) and (ii), of rule 5. For the words “fifteen years” and “five years” the words “twenty years” and “ten years” shall respectively be substituted.

Substitution 6. For rule 7 of the said rules, the following rule of rule 7. shall be substituted namely:-

“7” Procedure for grant of trees. The Right Holder may apply for grant of trees on Annexure –I to the Gram Panchayat concerned after getting necessary remarks from the Patwari concerned about his land holding acquired through inheritance and rights. The concerned Gram Panchayat shall scrutinize the applications for making recommendations after ascertaining the genuineness of the requirement of the Right Holders. The recommendation shall be made in the form of a resolution of the Gram Panchayat. Thereafter, Right Holder shall submit his application to the Forest Guard of the area who shall enter the same in the register maintained for the purpose and shall acknowledge the receipt of the application to the Right Holder and shall send the application with his recommendations to the Block Officer after ascertaining the genuineness of demand, who in turn shall submit application along with his recommendations to the Range Officer. The Range Officer shall forward the same with his recommendations to the Divisional Forest Officer. After receipt of application from the Range Officer, the Divisional Forest Officer shall take action for grant of the trees after satisfying himself about the genuineness of the requirements and availability of salvage trees in the concerned forest and intimate his decision to the Right Holder concerned as per Annexure –II appended to these rules”.

Amendment 7. In rule 12 of the said rules, after the word of rule 12. and sign Thereafter, another, the word “salvage” shall be inserted. Substitution 8, for rule 14 of the said rules, the following of rule 14, and rule shall be substituted, namely:-

“14 Penalties.- If any Right Holder, contravenes any of the provisions of these rules, except rule 3 (ii) , in utilization of timber obtained, his rights shall be suspended for next twenty years. In the case of contravention of rule 3 (ii), Timber Distribution Rights of such Right Holder shall be suspended permanently. The Right Holder, in addition to the above penalty, shall also be liable to pay the cost of the tree at the market rate.

Substitution of 9. For annexure – I annexed to the said rules, Annexure- I following Annexure shall be substituted namely:-

“Annexure –I”

PERFORMA FOR APPLICATION FOR GRANT OF TIMBER DISTRIBUTION

(See rule 7)

(Delete whichever is not applicable)

(see rule 7)

1. Name of Applicant _____
2. Occupation _____
3. Fathers Name _____
4. No. of Family members _____
5. Is the applicant head of family _____
6. Village _____
7. Post Office _____
8. Tehsil _____
9. District _____
10. Panchayat _____
11. . Year in which Timber Distribution was earlier granted and quantity / No. of trees granted

12. Purpose for which TD required _____

(Whether for new construction, repair and addition or alteration of residential house/cow shed).

13. Detail of TD required:

Species	Volume in Cubic Meter	Name of forest where right exists

14. I, hereby declare that:

- (i) Trees to meet the requirement for construction ,repair and addition for alteration of residential house /cow shed are not available on my land;
- (ii) I have not sold any tree from my land under the 10 years felling program during the last 10 years .
- (iii) I have land holding at only one place /more than one place i.e. at _____ and at _____ and I am actually residing at _____place. The detail of T.D. already granted is as under:-
- (iv) I am the original right holder and also head of the family;
- (v) I have not purchased land after obtaining the permission of the Government under section 118 of the Himachal Pradesh Tenancy and Land Reforms Act,1972 ;
- (vi) I Understand that rights Holders are subject to the active cooperation and participation of Right Holders in forest conservancy and I Shall perform my duties for apprehending forest offenders, offenders , extinguishing fire etc; and
- (vii) I shall not misuse the Timber obtained in TD and abide by the rules/ instructions of the Forest Department in this regard.

Date _____

(Signature of applicant)

Name in block letters _____

Recommendations in the form of a Resolution of Gram Panchayat:

It is certified that Sh. ____ S/o Sh. ____ is a permanent resident of Village ____ Mauza ____ and is head of the family as per Panchayat record. The requirement of trees of the application is genuine and he requires ____ Cubic Meter of timber for construction, repair and addition or alteration of his residential house /cow shed. His /her application is recommended vide Resolution No. ____ dated ____ in the Gram Panchayat.

Seal & Signature of Pradhan, Gram Panchayat

Report of Patwari:-

Certified that Sh. ____ S/o Sh. ____ is a Permanent resident of Mauza _____. Applicant is owner of the cultivable land acquired through inheritance comprising khasra number ____ measuring ____ and pays an amount of Rs. ____ Per annum as land Revenue and has recorded rights to obtain trees in T.D. He is the head of the family.

Date ____

Seal & Signature of Halqua Patwari

Report of Forest Guard :

- (i) The application has not obtained trees/timber Distribution for construction of new residential house/ cow shed during last 20 Years. The application has not obtained trees /timber distribution for repair, addition or alteration of residential house/cow shed for the last 10 years;
- (ii) The applicant has not caused any loss/damage to forest wealth / encroached on forest land and no damage report/ FIR /court case relating to any forest offence is pending against him;
- (iii) The requirement to timber is for _____
- (iv) The Applicant extends full cooperation in protection of the forest, and
- (v) The applicant may be sanctioned following trees:-

Species	Class	Number	Volume	Forest	Salvage

Seal & Signature of Forest Guard

Name of Forest Guard _____

Date ____

Beat _____

Report of Block Officer (Deputy Ranger):

- (i) Certified that the contents of the application and the certificate given by the beat Guard are correct;
- (ii) I have inspected the site of construction, repair and addition or alteration of residential house/cow shed, where TD grant is proposed to be utilized and the applicant may be granted following trees on spot:-

Species	Class	Number	Volume	Forest	Salvage

Which is available as salvage in _____ Forest; and

- (iii) Applicant has not sold any trees from his land during the last ten years under 10 years felling programme.

Date _____ Seal & Signature of Block Officer
Name _____
Block _____

Report of Range Officer:

The requirement of the application is genuine and he may be granted following trees:-

Species	Class	Number	Volume	Forest	Salvage

Which is available as salvage in _____ Forest,

Date: _____ Signature and seal of Range Officer
Name _____
Range _____

Sanction by DFO:

Following trees are sanctioned for construction, Repair and addition or alteration of residential house /cow shed to Sh.____ S/o Sh. _____ of Village _____ Gram Panchayat _____ Tehsil _____ District _____

Species	Class	Number	Volume	Forest	Salvage

Date _____ Signature and seal of
Divisional Forest Officer
Forest Division Kinnaur”.

**Substitution of
Annexure –II**

**10. For Annexure – annexed to the
Said rules, the following Annexure shall be substituted, namely:-**

“Annexure –II
(See rule 7)

Form

No.
Forest Department,
Himachal Pradesh

To,

Divisional Forest Officer,
_____Forest Division

Sh. / Smt. _____
Village _____ Post Office _____
Tehsil _____ District _____
Dated _____

Subject:-

Sanction of trees under Timber Distribution Rights.

Dear Sir,/ Madam,

Please refer to your application dated _____ for TD for construction, repair and addition or alteration.

2. Your application for grant of _____ Cubic Meter timber of _____ species for construction, repair and addition or alteration of residential house/cow shed has been considered by the undersigned and following trees have been sanctioned in your favour:-

Species	Class	Number	Volume	Forest	Salvage

3. That your TD application has been considered and rejected on the following ground:-

- (i) _____
(ii) _____
(iii) _____

Date _____

By Order,

Your faithfully

Signature and Seal
of Divisional Forest Officer.

(R.D. Dhiman)
Pr. Secretary (Forests) to the
Government of Himachal Pradesh,

Ends, No. FFE- B-A (3) 4/2015, Dated; Shimla -2, the 2016
Copy forwarded for information and necessary action to:-

1. All Administrative Secretaries to the Government of Himachal Pradesh.
2. The Principal Chief Conservator of Forests (HoFF), Shimla 171001.

3. The Pr. Chief Conservator of Forests (Wildlife), Shimla -171001.
4. All Addl. Chief Conservator of Forests / Chief Conservator of Forests, H.P.
5. Addl. Secretary (GAD-C-Cabinet Branch) to the Govt. of H.P. w.r.t. item No. 54, dated 30th June,2015
6. All Deputy Commissioner in Himachal Pradesh.
7. All Conservator of Forests/ Divisional Forest, Officers in H.P.
8. The Controller, Printing & Stationery Department, Himachal Pradesh, Shimla-5 for Publication in the Rajpatra, Himachal Pradesh.
9. The Deputy Legal Remembrance- cum – Deputy Secretary (Law) to the Govt. of H.P.
10. Guard File.

(Sat Pal Dhiman)
Deputy Secretary (Forests) to the
Government of Himachal Pradesh
Ph. No. 0177-2621874

(Authoritative English Text of this Department Notification No. FFE-B-F (4) 3/2018 dated 13-02-2019 as required under Clause (3) of Article 348 of the Constitution of India.)

**Government of Himachal Pradesh
Department of Forests.**

No. FFE-B-F (4) – 3/2018

Dated Shimla-2, the

13th February, 2019.

NOTIFICATION

Consequent upon expiry of validity of the Government of Himachal Pradesh Notification No. FFE-B-F (4) 1.2015, dated 2nd December, 2016 and 27th May, 2017, the Governor, Himachal Pradesh, in exercise of the powers conferred under Sub-clause (1) of clause 5 of FIFTH SCHEDULE appended to the Constitution of India, is pleased to direct that the Forest (Conservation) Act, 1980 shall not apply to the Scheduled Areas of the State of Himachal Pradesh for the limited purpose of implementation of the Himachal Pradesh Nautor Rules, 1968 and carrying essential development activities, for a period of one year, subject to fulfillment of the following conditions,-

9. The area does not fall in National Park/ Sanctuary/ Conservation Reserve/ Community Reserve/ Reserve Forest/ Demarcated Protected Forest.
10. The number of trees standing over the land proposed to be allowed as Nautor should not exceed two.
11. Wherever Nautor land has already been sanctioned by competent authority till the date of issue of this Notification but pastas could not be granted, pastas may now be granted at the same location for which sanction was issued. For new sanctions of Nautor in Un-demarcated Protected Forest (UPFs) land parcels be selected in such a manner that the general forest and ecology of the area is not disturbed. Land chunks be, therefore, identified jointly by Revenue and Forest officers in order to avoid scattered allotment of Nautor in the Forests. Divisional Forest Officer concerned shall be authorized to issue No Objection Certificate for allotment of Nautor in Un-demarcated Protected Forest areas till such time as Forest (Conservation) Act, 1980 does not apply in the Scheduled Areas.
12. The Nautor so granted is utilized only for bonafide domestic purpose and is not utilized for any commercial activity.
13. The Nautor is not granted to any such person who is involved in any kind of forest offence including encroachment on forest land.
14. No forest land shall be granted for any purpose in which natural water resources are utilized by the local inhabitants.
15. No forest land will be granted for any purpose, where paths and roads exist which is used by the local inhabitants.
16. The essential development activities to be provided by the Government shall include (1) School (2) Dispensaries/Hospitals (3) Electric and telecommunication lines (4) Drinking water projects (5) Water/Rain Water Harvesting Structures (6) Minor Irrigation Canals (7) Renewable Sources of Energy (8) Skill Up-gradation/Vocational training centers (9) Power sub-stations (10) Communication posts (11) Construction/ Widening of roads including approach roads to road side establishments (12) Up-gradation/ Strengthening/ Widening of existing bridges by the Border Roads Organization (BRO) (13) Police Establishments like Police Stations/ Outposts/ Border Outposts/ watch towers in sensitive areas identified by the Ministry of Home Affairs. Permission for these activities shall be granted by the Forest Department, Government of Himachal Pradesh, on case to case basis as per the regulation already framed by the Government of Himachal Pradesh vide Government of Himachal Pradesh letter No. FFE-B-F (4)-1/2015, dated 31st December, 2016, specifying procedure and authorities for granting the permission.

By Order,
Ram Subhag Singh
Additional Chief Secretary (Forests) to the
Government of Himachal Pradesh, Shimla

Endst . No. FFE-B-F (4)-3/2018 Dated Shimla-2, the 13th February, 2019.

Copy forwarded for information and necessary action to the following:-

Government of Himachal Pradesh, Shimla-2.

1. All the Additional Chief Secretaries/ Principal Secretaries to the Government of Himachal Pradesh, Shimla-2.
2. JLR- Cum-Joint Secretary (Law) to the Government of H.P. Shimla-2.
3. The under Secretary (GAD) to the Government of H.P. Shimla-2 w.r.t. item No.09 of the Council of Ministers' meeting held on 11th December, 2018.
4. The Principal Accountant General, Himachal Pradesh, Shimla.
5. Principal Chief Conservator of Forests (HoFF), H.P. Shimla-01.
6. Principal Chief Conservator of Forests (Wild Life)-cum-Chief Wild Life Warden, H.P. Shimla-01.
7. Divisional Commissioners, Shimla/Mandi/Kangra, Himachal Pradesh.
8. All the Deputy Commissioners in Himachal Pradesh.
9. All the Chief Conservator of Forest / Conservators of Forests in Himachal Pradesh.
10. All the Divisional Forest Officers in Himachal Pradesh.
11. Private Secretary to the Governor, Himachal Pradesh, Shimla-2.
12. Private Secretary to the Chief Minister, Himachal Pradesh, Shimla-2.
13. Private Secretary to the Forest Minister, Himachal Pradesh, Shimla-2.
14. Private Secretary to the Chief Secretary, Himachal Pradesh, Shimla-2.
15. The Controller, Printing & Stationary Department, Himachal Pradesh, Shimla-2.
16. The Section Officer (Forest-A) H.P. Secretariat, Shimla-02.
17. Guard file.

(Sat Pal Dhiman)
Joint Secretary (Forests) to the
Government of Himachal Pradesh
Phone No. 0177-2621874.

]

**हिमाचल प्रदेश सरकार
वन विभाग**

संख्या: संख्या एफ एफ ई – बी-एफ (4)3/2018

तारीख शिमला-2ए फरवरी, 2019

अधिसूचना

हिमाचल प्रदेश के राज्यपाल, हिमाचल प्रदेश सरकार की अधिसूचना संख्या एफ एफ ई- बी- एफ (4) 1-2015, तारीख 2 दिसंबर, 2016 और 27 मई, 2017 की विधिमान्यता की समाप्ति के परिणामस्वरूप, भारत के संविधान से संलग्न पांचवी अनुसूची के खण्ड 5 के छ उप-खण्ड (1) के अधीन प्रदत्त शक्तियों का प्रयोग करते हुए निर्देश देते हैं कि वन (संरक्षण) अधिनियम, 1980, हिमाचल प्रदेश नौतौड रूलज, 1968 के कार्यान्वयन के सीमित प्रयोजन और अनिवार्य विकास क्रियाकलापों के कार्यान्वयन के लिए हिमाचल प्रदेश राज्य के अनुसूचित क्षेत्रों को, निम्नलिखित शर्तों की पूर्ति के अधीन, एक वर्ष की अवधि के लिए लागू नहीं होगा,—

1. क्षेत्र राष्ट्रीय पार्क/ अभ्यारण्य/ आरक्षित संरक्षण/ आरक्षित समुदाय/ आरक्षित वन/सीमांकित संरक्षित वन में नहीं आता हो।
2. नौतोड के रूप में अनुज्ञात की जाने वाली प्रस्तावित भूमि पर खड़े वृक्षों की संख्या दो से अधिक नहीं होनी चाहिए।
3. जहां कहीं इस अधिसूचना के जारी होने की तारीख तक सक्षम प्राधिकारी द्वारा नौतोड भूमि पहले ही मंजूर कर दी गई है, परन्तु पट्टे प्रदान नहीं किए जा सके थे, पर अब उसी स्थान के लिए प्रदान किए जा सकेंगे जहां के लिए मंजूरी प्रदान की गई थी। असीमांकित संरक्षित वनो (यु पी एफज) में नौतोड की नई मंजूरीयों के लिए, भूमि के टुकड़े ऐसी रिति में चिन्हित किए जाए, कि सामान्य वन और क्षेत्र की पारिस्थितिकी अस्त-व्यस्त न हों। इसलिए वनों में नौतोड के अलग-अलग आबंटन के परिवर्जन के आशय से भूमि के टुकड़ों की पहचान राजस्व और वन अधिकारियों द्वारा संयुक्त रूप से की जाए। संबंधित वन मण्डल अधिकारी को असीमांकित संरक्षित वन क्षेत्रों में नौतोड के आबंटन के लिए ऐसे समय तक जब तक की अनुसूचित क्षेत्रों में वन (संरक्षण) अधिनियम, 1980 लागू नहीं हो जाता है, निराक्षेप प्रमाण-पत्र जारी करने के लिए प्राधिकृत किया।
4. इस प्रकार प्रदत्त नौतोड का उपयोग केवल वास्तविक घरेलू प्रयोजन के लिए किया जाएगा और यह किसी वाणिज्यिक क्रियाकलाप के लिए उपयोग नहीं किया जाएगा।
5. नौतोड किसी ऐसे व्यक्ति को प्रदान नहीं की जाएगी, जो वन भूमि पर अतिक्रमण सहित किसी प्रकार के वन अपराध में सम्मिलित हो।
6. कोई वन भूमि, किसी ऐसे प्रयोजन के लिए प्रदान नहीं की जाएगी, जिसमें प्राकृतिक जल संसाधनों का उपयोग स्थानीय निवासीयों द्वारा किया जाता है।
7. कोई वन भूमि, जिसमें रास्ते और सड़कें विद्यमान हैं, जो स्थानीय निवासियों द्वारा उपयोग किए जा रहे हैं, किसी भी प्रयोजन के लिए प्रदान नहीं की जाएगी।
8. सरकार द्वारा व्यवस्थित करवाए जाने वाले आवेगक विकासात्मक क्रियाकलापों के अर्न्तगत (1) स्कूल (2) औषधालय/अस्पताल (3) विद्युत और दूरसंचार लाइनें (4) पेयजल परियोजनाएं (5) जल / वर्षा जल संग्रहण अवसंरचना (6) लघु सिंचाई नहरें (7) नवीकरणीय उर्जा स्रोत (8) कौशल उन्नयन व्यावसायिक प्रशिक्षण केन्द्र (9) विद्युत सब-स्टेशन (10) संचार चौकियां (11) सड़क किनारे स्थापनों के पहुंच-मार्गों सहित, सड़कों का सन्निर्माण/ चौड़ा करना (12) सीमा सड़क संगठन (बी.आर.ओ.) द्वारा विद्यमान पुलों का उन्नयन/सुदृढीकरण/चौड़ा करना (13) गृह मंत्रालय द्वारा पहचान किए गए संवेदनशील क्षेत्रों में पुलिस स्थापनाएं जैसे कि पुलिस स्टेशन/आउटपोस्ट/सीमा आउटपोस्ट/निगरानी

टावर। इन क्रियाकलापों के लिए अनुज्ञा वन विभाग हिमाचल प्रदेश सरकार द्वारा अलग-अलग मामलों के आधार पर हिमाचल प्रदेश सरकार के पत्र संख्या एफ एफ ई -बी-एफ (4)1/2015, तारीख 31 दिसम्बर, 2016 द्वारा पहले ही विरचित विनियम के अनुसार अनुज्ञा प्रदान करने हेतु प्रक्रिया और प्राधिकारियों को विनिर्दिष्ट करते हुए, प्रदान की जाएगी।

आदेश द्वारा,
राम सुभग सिंह
अतिरिक्त मुख्य सचिव (वन)
हिमाचल प्रदेश सरकार।

पृष्ठांकन संख्या एफ.एफ.ई.-बी-एफ (4)-3/2018 तारीख 11 मला/2, फरवरी, 2019
प्रतिलिपि निम्नलिखित को प्रेषित है:-

1. सचिव पर्यावरण वन एवं जलवायु परिवर्तन मन्त्रालय, भारत सरकार इन्दिरा पर्यावरण भवन, नई दिल्ली।
2. महानिदेशक वन एवं विधेय सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन मन्त्रालय, भारत सरकार इन्दिरा पर्यावरण भवन, नई दिल्ली।
3. प्रधान सचिव (मुख्यमंत्री), हिमाचल प्रदेश।
4. समस्त प्रांतीय सचिव, हिमाचल प्रदेश सरकार।
5. प्रधान महालेखाकार (लेखा एवं हकदारी), हिमाचल प्रदेश।
6. सचिव अरण्यपाल हिमाचल प्रदेश मला।

Appendix - XXXII

Relevant Notification and orders

Transfer of Bushahr Forests from the East Punjab Government to Himachal Pradesh.

1.) Copy of letter no, Ft. 29-47/48, dated, the 25th April, 1949 from the Dy Chief Commissioner, H.P, Shimla, to the Secretary to Govt. of India, Ministry of State, New Delhi.



Subject:- Transfer of the control of the Bushahr Forests to Himachal Pradesh.

I have the honour to state that the Bushahr Forest lease has been terminated and the management of these forests has been taken over by this administration from the East Punjab Govt. with effect from the 1st April, 1949 on the following conditions:-

- a) Any new working plan that may be drawn up or any changes in the existing working plans that may be decided up on by the Chief Conservator of Forests, H.P. will be communicated by him to the Chief Conservator of Forests East Punjab, for his comments. In the event of any differences of a technical nature between the two Chief Conservator of Forests the matter will be referred to the Inspector General of Forests, Govt. of India for final decision.
- b) The Chief Conservator of Forests, H.P. will supply to the Chief Conservator of Forest, East Punjab any information regarding the working plan and management of the Bushahr Forest including copies of the usual prescribed annual forest control forms.
- c) In view of the need for the closest co- operation in the common interest of the two administrations, the two Chief Conservator of Forests should take every opportunity of establishing very close contacts between themselves of mutual exchange of ideas as well as visits to the forests of the other Administration.

(2) As request will be made to the Govt. of India in due course to sanction the additional cadre required and the budget estimate as soon as the requisite data have been collected. In the mean time, the work will be carried on the basis of the strength of the cadre employed heretofore by the East Punjab and their budget estimates for 1949-50

Copy forwarded to the Chief Secretary to East Punjab Govt. for information with reference to the meeting held in his Excellency, the Governor, East Punjab's room on 15th March, 1949.

Sd/-
Dy. Chief Commissioner
Himachal Pradesh

ii) Copy of D.O letter no. 3601- Political-49/27680 dated 1 the 5/9th. May, 1949 from the Chief Secretary to Govt. of East Punjab, Shimla, to the Chief Commissioner, H.P. Shimla.



With reference to your D.O no. 71-CC/99 dated the 26th, March, 49 regarding the terms and conditions governing the transfer of Bushahr forest to H.P., I am desired to say that the East Punjab Government accept the terms proposed by you and communicated to the Govt. of India, Ministry of States, in Mr. Moon's official latter no. Ft. 29-47/48 dated the 25th April, 1949.

No . Ft. 29-47/48 dated Shimla-4, the 21st May, 1949.

Copy forwarded to the Secretary to the Govt. of India, Ministry of States, New Delhi for information in continuation of this office letter no. Ft. 29-47/48 dated the 25th April, 1949

Sd/-

E.P.Moon
Dy. Chief Commissioner

iii) Copy of letter no. 15-14/60 U.T dated the 4th May, 1960 forms the Under Secretary to the Govt. of India to the Secretary (Forests) to H.P. Administration, Shimla 4.

Subject:- Transfer of Bushahr from Punjab Govt. to H.P. Administration from 1st April, 1949.

I am directed to refer to your letter no. 29-47/48-4 dated 30th March, 1960 on the above Subject to say that the control of the Bushahr forest from the East Punjab Govt. was taken over by the H.P. Administration, w.e.f 1st April 1949 on the terms and conditions contained in their letter no. Ft. 29-47-1948, dated 25th April, 1949 and this arrangement was confirmed by the East Punjab Govt. vide their DO letter no. 3601- political-49/27680 dated 5/9th May, 1949. Copies of the two communications are enclosed for your information and record.

I am to add further that it has not been possible to locate any formal notification issued by the Govt. of India and the Subject as the lease appears to have been terminated by mutual agreement, there was apparently no occasion for unilateral termination by the Govt. of India.

No. Fts. 29-47/48/IV dated the 12 May, 1960

Copy with copies of enclosures forwarded to Sh. GC. Tandon, PFS (I) Divisional Forest Officer, Upper Bushahr Division, for information.

Sd/-
Chief Conservator of Forests,
Himachal Pradesh

Appendix - XXXIII

**Government of Himachal Pradesh
Forest Department**

No.FFE-B-A (10)-1/2009

Dated the Shimla – 18-08-2018

Notification

In supersession of all Previous Notification Nos. Fts (F) 6-7/82- Losse, Fts –B (B) -6-/ 82-II. FFE-B-A (10) -2005 AND FFE. B-A (10) -1 /2009 Dated 09.04.1996, 27.08.2001, 20.07.2006, and 04.03.2014 regarding relief due to losses caused to human beings and domestic live stock by the wild animals as defined in Wildlife (Protection) Act, 1972, the Governor , Himachal Pradesh is pleased to notify the following enhanced relief rates as under:-

S.No	Particulars	Enhanced Rates (in Rupees)
1.	In case of death of human being.	4,00,000/-
2.	In case of permanent disability to human being.	2,00,000/-
3.	In case of grievous injuries/ partial disability to human being.	75,000/-
4.	In case of simple injury to human being as per actual cost of medical treatment subject to maximum.	15,000/-
5.	In case of loss of Horse ,Mule, Bufalo, Ox, Yak and Camel	30,000/-
6.	In case of loss of Cow Jersey and cross breed.	15,000/-
7.	In case of loss of Cow (local; bred), Donkey, Churu, churi & Pashimna Goat.	6,000/-
8.	In case of loss Sheep, Goat and Pig.	3,000/-
9.	In case of loss of young ones of Buffalo, Cow Jersey and all other breeds, Mule, yak, Horse, Camel, Churu, Churi, Donkey. Pashimna Goat, Sheep and Goat.	15,00/-

The following guidelines will be followed for grant of relived:-

- i) Production of postmortem report in case of human life, certificate in case of grievous injury, partial & permanent disability and prescription slip as well as verification of actual cost of Medical treatment in case of simple injury (including Monkey bites) from the Medical officer of a Government Institution / Govt. recognized Medical Institution, as the case may be.
- ii) The verification of loss of cattle that was actually caused by wild animal can be done by the Pradhan / Up Pradhan of Panchayat/ Patwari/ President Notified Area Committee/ Chairman, Municipal Committee, Commissioner/ Mayor /Deputy Mayor, Municipal Corporation of the area /Elected Member of the Cantonment Board area /Councilor of the area, Range Officer / Deputy Ranger / Forest Guard or any other forest officer higher in rank than a Range Officer , Veterinary officer or Veterinary Pharmacist or officer authorized by Veterinary officer of the area .
- iii) All DFOs in HP Shall be the final authority to sanction all case of relief claims on account of losses caused by the wild animals to humans and domestic livestock.
- iv) The DFOs shall release 25% of the amount of relief prescribed for human loss/ permanent & partial disability / grievous injury on receipt of report as interim relief immediately to the family of the deceased /affected person after due verification in anticipation of formal sanction without delay. The balance amount will be released after receipt of the complete relief claim.
- v) For immediate disbursement of relief claim, a corpus fund will be created at the level of Principal Chief Conservator of Forests (Wildlife)- Cum Chief Wildlife Warden. All the Budget allocations from the state as well as from State CAMPA in respect of relief shall be deposited in the aforesaid corpus fund. The PCCF (WL) will ensure the disbursement of relief amount in respect of aforesaid categories of losses on the same day on receipt of a request from the concerned DFO. The DFO concerned will ensure to send such requests by E-mail /Fax asking for funds of relief amount on the same day of incident or on the day of receipt of information of

- the incident from the claimant. DFO will make payment of aforesaid 25% of the relief amount immediately from the budget available with him under any scheme and same will be recouped on receipt of funds from the Chief Wildlife Warden.
- vi) All claims in respect of simple injury to humans shall be restricted to actual cost of medical treatment, verified by the Medical Officer of a Government Institution / Govt. recognized Medical Institution subject to maximum of Rupees 15,000/- as prescribed above in the categories of losses.
 - vii) All cases of losses caused by the wild animals should be reported by the applicant to nearest Forest Office within seven days of the incident and claims for relief is filed within one month to the nearest Range Forest Office under control of Divisional forest officer (territorial or wildlife). The claim can be filed either at the place where the loss by, Wild animal has occurred /reported or where the applicant resides. All time barred cases shall be set to Govt. of Himachal Pradesh for approval.
 - viii) The relief will be granted in case of loss of livestock to the owner of the livestock. These rates would be applicable for killing of domestic animals by wild animals as defined in Wildlife (Protection) Act, 1972 in cattlesheds / cowsheds, private land, private premises and forests.
 - ix) The relief will be granted in case of loss of the human being will be granted in the order of preference given Below:-

- (a) Wife or husband, as the case may be.
 - (b) Sons, unmarried or divorced daughters and children of predeceased son (equal share).
 - (c) Daughters. (Equal share).
 - (d) Grand children being children of his/her sons or daughters who died before him/her (equal share).
 - (e) Father or Mother.
 - (f) Brothers or sisters or children of the deceased brothers (equal share).
 - (g) Failing all above any other next of kin entitled to a share in the estate.
- All the prescribed rates shall be made applicable with immediate effect.

By Order,

Tarun Kapoor
Additional Chief Secretary (Forest)
to the Government of Himachal Pradesh

Appendix - XXXIV

(Authoritative English Text of this Department Notification No. FFE-B-F (6)11/2005-II, Dated 7th June, 2013 as required under Articles 348 (3) of the Constitution of India).

**GOVERNMENT OF HIMACHAL PRADESH
DEPARTMENT OF FORESTS**

No. FFE-B-F (6)-11/2005-II/ Rakchham Chitkul Dated Shimla-2, the 7 th June, 2013.

NOTIFICATION

Whereas a notification under Section 26 A of the Wildlife (Protection) Act 1972 (53 of 1972) was issued by the Government vide Notification No. FFE-B-F(6)-2/99-II dated 1.9.2001, to declare Rakchham Chitkul as wildlife Sanctuary comprising an area of 304.00 sq. km.

And whereas, the matter with regard to rationalization of Wildlife Sanctuaries and National Parks in Himachal Pradesh was under consideration of the Hon'ble Supreme Court in IA No. 139/2010 in Writ Petition Civil No. 337 of 1995 titled Centre for Environmental Law, WWF-I Versus Union of India & Others.

And whereas, in pursuance to the Hon'ble Supreme Court order dated 7 th May 2010, the state Government issued intention Notifications under Section 18 of the Wildlife (Protection) Act, 1972 in respect of Wildlife Sanctuaries and National Parks for which rationalization had been proposed.

And whereas, the Hon'ble Supreme Court vide order dated 05/08/2011, further directed the State to follow the procedure laid down under Section 18 to 26 A and 35 of the Wildlife (Protection) Act, 1972, before issuance of final Notification under Section 26 A of the Wildlife (Protection) Act, 1972, which procedure was been followed.

And whereas, the Hon'ble Supreme Court vide order dated 01/02/2013, passed in. IA No. 155 (earlier IA No. 139/2010), has permitted the State Government to issue final Notification under Sections 26A, 35 (4) & 36A of the Wildlife Sanctuaries and National Parks in Himachal Pradesh.

Now, therefore, the Governor, Himachal Pradesh in exercise of the powers vested in her under Section 26A of the said Act is pleased to declare an area of 304.00sq km of Rakchham Chitkul as '**Rakchham Chitkul Wildlife Sanctuary**' with immediate effect for purpose of protecting, propagating and developing wildlife and its environment in supersession of previous notification No. FFE-B-F (6)-2/99-II dated 07.09.2001.

The limits of Rakchham Chitkul Wildlife Sanctuary shall be as under:

Sr. No.	Name of Wildlife Sanctuary	Constituents i)District ii)Forest Division	Boundaries of Rakchham Chitkul Wildlife Sanctuary
1.	Rakchham Chitkul	i) Kinnaur ii) Sarahan (Wildlife) Division	<p>NORTH: The Boundary starts from the point 5983 mtr passing through height points of 5990 mtr. 5290 mtr. to Daboling 6080 mtr. 5635 mtr, 5655 mtr 6032 mtr, and 5545 mtr. upto Charang Ghatti ridge to point 5810 mtr.</p> <p>EAST: From the point 5810 mtr, down wards to Baspa River across Jorya Garang upto Borasu Ghatti.</p> <p>SOUTH: Starting from Borasu Ghatti on Himachal Pradesh-Uttranchal border passing through Devkidhar from the high points of 5760 mtr., 5930 mtr., 5877 mtr., 5480 mtr., 5889 mtr, Khimloga pass 5712 mtr, and further down to 5424 mtr, along Singa Ghatti upto meeting point of Shimla, Uttaranchal & Sangla Tehsil boundary.</p> <p>WEST:- From Singa Ghatti passing through high points 5260 mtr. 5820 mtr. across Hania Glaciar and then along the Singa Khad down to Chispin from there the boundary goes upstream along Baspa river upto Rim Darang nalla,</p>

			then upstream along Rim Darang nalla passing through nalla to the North upto high point 3930 mtr. Then passing through Shilpya thach and point 4789 mtr, crossing shushang nalla upto Mangsa Garang, Gor Garang 4435 mtr., Khoragla Garang to high point 4440 mtr. and north upto peak 5983 mtr.
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This area is situated within the Geo-coordinates **North Lat.** 31°28'37"N & Long 78° 0' 22' **East Lat.** 31°20'00"N 7 Long .78°17'34"E which falls on Survey of India topo sheet No. 53 I/7, 53 I/8, 53 I/11 on scale 1:50,000.

Area of Rakchham chitkul Wildlife Sanctuary=304.00 sq.km

By Order
Principal Secretary (Forests) to the
Government of Himachal Pradesh.

Endst. No As above Dated shimla-2 the 7th june, 2013
Copy to forwarded to:-

1. All the Administrative Secretaries to the govt. of H.P. Shimla-2.
2. All the Divisional Commissioners, Shimla ,Mandi & Dharamshala, H.P.
3. All the Heads of Departments of H.P.
4. The Principal Chief Conservator of Forests, H.P. Shimla-1
5. The Principal Chief Conservator of Forests, (Wildlife) H.P. Shimla-1.
6. All CCFs / DFOs (Wildlife) in H.P.
7. All the Deputy Commissioners in H.P.
8. All the CCFs /CFs /DFOs IN H.P.
9. ALR-cum- under Secretary Law to the Government of Himachal Pradesh.
10. The Commissioner, Municipal Corporation, Shimla.
11. The Controller H.P. Printing & Stationary Department Shimla-5 for publication in the Raj- Patra (Extra-ordinary) five Copies of the Raj- Patra be sent to this Department.
12. Guard File.

Appendix – XXXIV

(Authoritative English Text of this Department Notification No. FFE-B-F (6) 11/2005-II,Dated 7th June, 2013 as required under Articles 348 (3) of the Constitution of India).

GOVERNMENT OF HIMACHAL PRADESH

DEPARTMENT OF FORESTS

No. FFE-B-F (6)-11/2005-II/ Rupī Bhaba Dated Shimla-2, the 7th June, 2013

NOTIFICATION

Whereas a Notification under Section 26A of the Wildlife (Protection) Act 1972(53 of 1972) was issued by the government vide Notification No. FFE-B-F (6)-2/99-II Dated 07.09.2001 to declare the **Rupī Bhaba as Wildlife Sanctuary** comprising an area of 503.00 sq.km;

And whereas the matter with regard to the rationalization of Wildlife Sanctuaries and National Parks in Himachal Pradesh was under consideration of the Hon'ble Supreme Court in IA No. 139/2010 in Writ Petition Civil No. 337 of 1995 titled Centre for Environmental Law, WWF-I Versus Union of India & Others;

And whereas, in pursuance to the Hon'ble Supreme Court order dated 7th May 2010, the State Government issued intention Notification under Section 18 of the Wildlife (Protection) Act, 1972 in respect of Wildlife Sanctuaries and National Parks for which rationalization had been proposed;

And whereas, the Hon'ble Supreme Court vide order dated 05/08/2011, further directed the State Government to follow the procedure laid down under Section 18 to 26A and 35 of the Wildlife (Protection) Act, 1972 before issuance of final Notification under Section 26A of the Wildlife (Protection) Act, 1972, which procedure was duly followed;

And whereas the Hon'ble Supreme Court vide order dated 01/02/2013, passed in IA No. 155 (earlier IA No. 139/2010), has permitted the State Government to issue final notifications under Sections 26A, 35(4) & 36A of the Wildlife (Protection) Act, 1972 with regard to the proposed rationalization of boundaries of Wildlife Sanctuaries and National Parks in Himachal Pradesh;

Now therefore, the Governor, Himachal Pradesh in exercise of the powers vested in her under Section 26A of the Act, is pleased to declare an area of 503.00 sq. km of Rupī Bhaba as '**Rupī Bhaba Wildlife Sanctuary**' with immediate effect for the purpose of protecting, propagating and developing wildlife and its environment in supersession of previous No. FFE-B-F (6)-2/99-11 Dated 7.9.2001.

The limits **Rupī Bhaba Wildlife Sanctuary** shall be as under:-

Sr. No.	Name of Wildlife Sanctuary	Constituents i)District ii)Forest Division	Boundaries of Rupī Bhaba Wildlife Sanctuary
1.	Rupī Bhaba	i) Kinnaur ii) Sarahan (Wildlife) Division	NORTH: Main Srikhand Dhar starting from Kokshane Peak 5625 mtr. passing through high points 5695 mtr., 5530 mtr., 5100 mtr., 5205 mtr., 5280mtr., 5365 mtr., 4865 mtr. 5430 mtr., 5495 upto 5567 mtr. EAST: Ridge line from height point 5567 mtr. on the main Sri Khand mountain range heading South dividing first Nichar from Murang Tehsil then Kalpa Tehsil till the point on the ridge line of the Mukim Dhar upto peak 5496 mtr. SOUTH: From peak 5496 mtr. along the ridge descending down to the Listrang Gad, south of Khosyan to meet the Listrang gad at 3214 mtr. and then along the downstream till below Ratba, from where the boundary follows up the ridge of Angyar dhar passing through points 4692 mtr. 4853 mtr.5574 mtr. and 5349 mtr. upto

			<p>5246 mtr. then along the ridge till beginning of the Angyar nalla just short of Mulling, downstream the Angyar nalla to Wanger Khad (Bhaba river) and then across the river to the ridge on the right side upto the point at 5176 mtr. From there along the ridge of Soiling dhar to point 4645 mtr. along the ridge to 4336 mtr. 3964 mtr. then upto 3550 mtr and then turning east along the Kandarn khad upto lower outer boundary of Saknatpa PF. From there turning West along lower outer boundary of Saknatpa PF excluding Shilpe cultivation and further along outer boundary of Dangarang PF, Rakchang Salarang PF Tira Forest, Chhota Kamba PF, Bara Kamba PF then down to Shorang Khad upto the source of Bara Kamba Kuhl. Thereafter the boundary of Kinnaur and Shimla District on Sri Khand Dhar at point 3038 mtr.</p> <p>West:- Starting from the high point 3038 mtr. along the boundary of Shimla and Kinnaur Districts to Sri Khand Dhar via Gushu Pishu peak at 5600 mtr. upto Kokshane peak 5625 mtr.</p>
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This area is situated within the Geo-coordinates North Lat. $31^{\circ}47'18''$ N & Long. $77^{\circ}57'02''$ E **East Lat.** $31^{\circ}41'42''$ N & Long. $78^{\circ}07'19''$ E, **South Lat.** $31^{\circ}34'28''$ N & Long. $78^{\circ}59'15''$ **West Lat.** $31^{\circ}42'49''$ N & Long. $77^{\circ}45'00''$ E which falls on Survey of India topo sheet No. 53 E/ 13, 53 E/ 14, 53 I/1 and 53 I/2 on scale 1:50,000.

Area of Rupri Bhaba Wildlife Sanctuary=503.00 sq. km

By Order
**Principal Secretary (Forests) to the
Government of Himachal Pradesh**
7th June, 2013

Endst. No. As above
Copy forwarded to:-

Dated Shimla-2 the

1. All the Administrative Secretaries to the Govt. of H.P. Shimla-2.
2. All the Divisional Commissioners, Shimla, Mandi & Dharamshala, H.P.
3. All the Heads of Departments of H.P.
4. The Principal Chief Conservator of Forests, H.P. Shimla-1
5. The Principal Chief Conservator of Forest (Wildlife) H.P. Shimla-1.
6. All CCFs/ DFOs (Wildlife) in H.P.
7. All the Deputy Commissioners in H.P.
8. All the CCFs/ CFs/ DFOs In H.P.
9. ALR-cum-Under Secretary Law to the government of Himachal Pradesh.
10. The Commissioner, Municipal Corporation, Shimla.
11. The Controller H.P. Printing & Stationary Department Shimla-5 for publication in the Raj-Patra (Extra-ordinaty) Five Copies of the Raj-Patra be sent to this Department.
12. Guard File

**Principal Secretary (Forests) to the
Government of Himachal Pradesh.**

(Authoritative English Text of this Department Notification No. FFE-B-F (6) 11/2005-II, Dated 7th June, 2013 as required under Articles 348 (3) of the Constitution of India).

**GOVERNMENT OF HIMACHAL PRADESH
DEPARTMENT OF FORESTS**

No. FFE-B-F (6)-11/2005-II/ Lippa Asrang Dated Shimla-2, the 7th June, 2013

NOTIFICATION

Whereas a Notification under Section 26A of the Wildlife (Protection) Act, 1972 (53 of 1972) was issued by the Government vide Notification No. FFE-B-F(6)-2/99-II dated 07.09.2001 to declare Lippa Asrang as Wildlife sanctuary comprising an area of 31.00 sq. km;

And whereas, the matter with regard to the rationalization of the Wildlife Sanctuaries and National Parks on Himachal Pradesh was under consideration of the Hon'ble Supreme Court in IA No. 139/2010 in Writ Petition Civil No. 337 of 1995 titled Centre for Environment Law, WWF-I Versus Union of India & Other;

And Whereas, in pursuance to the Hon'ble Supreme Court order 7th May 2010, the state Government issued intention Notification under Section 18 of the Wildlife (Protection) Act, 1972 in respect of Wildlife Sanctuaries and National Parks for Which rationalization has been proposed;

And Whereas, the Hon'ble Supreme Court vide order dated 05/08/2011, further directed the State Government to follow the procedure laid down under Section 18 to 26A and 35 of the Wildlife (Protection) Act, 1972 before issuance of the final Notification under Section 26A of the Wildlife (Protection) Act, 1972, which procedure was duly followed;

And whereas, the Hon'ble Supreme Court dated 01/02/2013, passed in IA No. 155 (earlier IA No. 139/2010), has permitted the State Government to issue final Notification under Section 26A, 35(4) & 36A of the Wildlife (Protection) Act, 1972 with regard to the proposed rationalization of boundaries of Wildlife Sanctuaries and National Parks in Himachal Pradesh;

Now, therefore, the Governor, Himachal Pradesh in exercise of the powers vested in her under Section 26A of the Act ibid is pleased to declare an area of 31.00 sq. km of Lippa Asrang as '**Lippa Asrang Wildlife Sanctuary**' with immediate effect for the purpose of protecting, propagating and developing wildlife and its environment, in supersession of earlier notification No. FFE-B(6)-2/99-II dated 07.09.2001

The limits **Lippa Asrang Wildlife Sanctuary** shall be as under:

Sr. No.	Name of Wildlife Sanctuary	Constituents i) District ii) Forest Division	Boundaries of Lippa Asrang Wildlife Sanctuary
1.	Lippa Asrang	i) Kinnaur ii) Sarahan (Wildlife) Division	<p>NORTH: Taiti Gad from the point 3440 mtr. down to point 3225 mtr. which is located at the meeting point with a stream flowing from South- East into Taiti Gad.</p> <p>EAST: From the point 3225 mtr. along precipitous ridge to the West of Bhogto dogri upto point 4465 mtr.</p> <p>SOUTH: From point 4465 mtr. along ridge (Tehsil boundary of Kalpa and Morang) passing through high point 4404 mtr. 4977 mtr. 5122 mtr. upto Drimbling glacier at high point 5088 mtr.</p> <p>WEST:- From point 5088 mtr. along Drimbling Gad originating from Drimbling glacier downstream upto Taiti Gad at point 3440 mtr.</p>

This area is situated within the Geo-coordinates **North** Lat. 31° 44' 21" N & Long. 78° 15' 00" E **East** Lat. 31° 40' 32" N & Long. 78° 18' 07" E, **South** Lat. 31° 39' 29" N & Long 78° 17' 24" E

WestLet.31°41'27"N&Long. 78°13'09"E which falls on Survey of India topo sheet No. 53 I/2 and 53 I/6 on scale 1:50,000.

Area of Lippa Asrang Wildlife Sanctuary=31.00 sq. km

By Order
**Principal Secretary (Forests) to the
Government of Himachal Pradesh**
7th June, 2013

Endst. No. As above Dated Shimla-2 the
Copy forwarded to:-

1. All the Administrative Secretaries to the Govt. of H.P. Shimla-2.
2. All the Divisional Commissioners, Shimla, Mandi & Dharamshala, H.P.
3. All the Heads of Departments of H.P.
4. The Principal Chief Conservator of Forests, H.P.Shimla-1
5. The Principal Chief Conservator of Forest (Wildlife) H.P. Shimla-1.
6. All CCFs /DFOs (Wildlife) in H.P.
7. All the Deputy Commissioners in H.P.
8. All the CCFs/ CFs/DFOs In H.P.
9. ALR-cum-Under Secretary Law to the government of Himachal Pradesh.
10. The Commissioner, Municipal Corporation, Shimla.
11. The Controller H.P. Printing & Stationary Department Shimla-5 for publication in the Raj-Patra (Extra-ordinary) Five Copies of the Raj-Patra be sent to this Department.
12. Guard File

**Principal Secretary (Forests) to the
Government of Himachal Pradesh.**

Appendix - XXXV

Government of Himachal Pradesh

Department of Forests

No. FFE-B (F) 2-73/97

Dated Shimla-2,

the 23rd Oct, 2002.

Notification

The Governor, Himachal Pradesh is pleased to constitute the Upper Satluj Valley watershed Development society for the implementation of Catchment Area Treatment plans of all Hydrel projects coming up, or in existence, in Satluj Valley basin. The Society will be responsible for the implementation of Cat plans.

The Society will function in accordance with the approved byelaws as annexed to this notification at (Annexure -A).

By order

Principal Secretary (Forests) to the
Government of Himachal Pradesh.

Endst . No. As above, Dated Shimla-2, the

Any for information and necessary action is forwarded to :-

1. Pr. Chief Conservator of Forests (WL), H.P. Shimla-1
2. Pr. Chief Conservator of Forests, H.P. Shimla-1.
3. M.D. H.P. State Forest Corporation Ltd, Shimla-9.
4. All CCFs/CFs/Directors of HPSFC in H.P.
5. The Controller (P&S), H.P. Govt. Press, Shimla-5.
6. Conservator of Forests Rampur Circle.
7. All Executive Directors/ General Managers of the Power Projects in Satluj Valley Basin.
8. Finance Department Himachal Pradesh.

Addl. Secretary (Forests) to the
Government of Himachal Pradesh.

A. List of Existing Road and Paths

Name of Range	Name Of Road	Length of KM	Year of construction	Amount incurred/Spent
A Jeepable Road				
B/Nagar	NH-5 to Range Office B/Nagar	0.390	2003-2004	2,00,000/-
B Bridge Path				
	Chaura to yalza	8	1972-73	30000/-
	Chaura to Tranda via Yalza Ddogri	10.5	1973-74	60000/-
	Sholtu FRH to Kilba	8.85	Not Known	Not Known
	Sholtu to Ramni	7.2	do	do
	Garshudar to Rupī	20	Not Known	Not Known
	Gatge to Kaligo via Lisnam	18	Not Known	Not Known
C Inspection Path				
	Lisnam via C. No. 130 (a)	8.8	Not Known	Not Known
	Ramni-Lisnam via C.No. 130 (a) & 131	5.8	Not Known	Not Known
	Jani-C No. 131	1.6	Not Known	Not Known
	Lisnam- Kilba via C. No. 133,134,136& 137	13.8	Not Known	Not Known
	Sholtu to Lisnam	8	Not Known	Not Known
D Sleeper Path				
	Lisnam Sleeper path	5.25	Not Known	Not Known
		A Jeepable Road		
Kalpa	Approach Road to Kalpa Rest House	0.5	1970-71	4000/-
	Kalpa Pauri Jhulla	15.2	Not Known	Not Known
	Shongthong-Purbani	13	1965-69	286495/-
		B Bridge Path		
	-	-	-	
		C Inspection Path		
	Kihar- Tangling	9	Not Known	Not Known
	Tangling- Anodan	9.9	Not Known	Not Known

	Shongthong-Anodan- Ralli	13.15	Not Known	Not Known
	Shongthong-Tangling- via C.No. 177	10.5	Not Known	Not Known
	Through C.No. 175 (b)	1.8	Not Known	Not Known
	Chini- Pangi	6.05	Not Known	Not Known
	Runang-Choling	3.4	Not Known	Not Known
	Pangi- Rarang	9.65	Not Known	Not Known
	Through C. No. 247	1.57	Not Known	Not Known
	Through C. No. 248 (b)	2.2	Not Known	Not Known
	Through C. No. 243	2	Not Known	Not Known
	Through C. No. 234 (b)	4.6	Not Known	Not Known
		D Sleeper Path		
		Nil		
A Jeepable Road				
Katgaon	Motorable/Jeepable Road	-----Nil-----	-----Nil-----	-----Nil-----
B Bridge Path				
	Satluj to Salarang	5	Not Known	Not Known
	Kandhar to Runi	720	2018-19	1250000.00
	Kadhar to Salarang	5	Not Known	Not Known
	Bai to Kandhar	12	1999-2000	Not Known
	Shango to Surcho	10	Not Known	Not Known
	Shango to Kangrang	8	Not Known	Not Known
	Homty to Muling	6	1993-94	65000.00
C Inspection Path				
	Kangrang to C-87	2	1999-2000	62500.00
	Kafnoo to Dutay	9	1992-93	80000.00
	Shango to Dutay	8	Not Known	Not Known
	Katgao to Kraba	5	Not Known	Not Known
	Shango to Panduswar	9	1992-93	80000.00
D Sleeper Path				
	Steel foot Bridge	Salarang Khad 10mtr.	Not Known	Not Known
	Jhulla	Shango Khad	2014-15	450000.00
A Jeepable Road				
Kilba	Karcham- Kilba	5.2	1965-66	66093/-
B Bridge Path				

	Kilba FRH Range Qtr. Kilba	0.4	Not Known	Not Known
	Kilba- FRH Karcham Brodge	5.23	Not Known	Not Known
	Karcham-Tidong via Purbani & Riba	45.5	Not Known	Not Known
	Shong to Rutrang	2.5	1908-09	
	Seringcha to panpo	4	--	----
	Seringcha to Bhulding	3		
	Batseri to dever Kanda	4		
C Inspection Path				
	Seedling-Sapru	9.85	Not Known	Not Known
	Teodan- Kilba FRH	2.2	Not Known	Not Known
	Kilba-FRH Morangdhar	2	Not Known	Not Known
	Kilba-Sapni via Kanhai	7.25	Not Known	Not Known
	Sapni- Brua	7.25	Not Known	Not Known
	Through C.No.144	0.8	Not Known	Not Known
	Through C.No. 139 (a)	3	Not Known	Not Known
	Through C.No. 171 (b) & 170 (b)	1.85	Not Known	Not Known
D Sleeper Path				
	-	-	-	-
A Jeepable Road				
Malling	-	-	-	-
B Bridge Path				
	-	-	-	-
C Inspection Path				
	-	-	-	-
D Sleeper Path				
	-	-	-	-
A Jeepable Road				
Moorang	Rarang- Akpa Jhulla	5.55	Not Known	Not Known
	Skibba- Ribba Road	6	1988-90	587000/-
B Bridge Path				
	-	-	-	-
C Inspection Path				
	Jangi Moorang Jhulla	2.7	Not Known	Not Known
	Kirang- Loppa	2.5	1955-56	2500/-
	Through C.No. 227	1.3	Not Known	Not Known
	Through C. No. 219 (a)	0.8	Not Known	Not Known

D Sleeper Path				
	-	-	-	-
A Jeepable Road				
Nichar	PWD Terminus to log hut Nichar	2	1996-70	5870/-
	Metalling to Jeepable road from PWD	1	1986-87	100000/-
	Terminus to Forest Colony Nichar			
	Soling & Mettaling of Nichar Link Road	2	1987-88	81000/-
	From PWD Terminus to FRH log hut, Nichar			
B Bridge Path				
	Rupi Chaura Bridge	11.5	Not Known	Not Known
	Chaura- Chaura Bridge	4.43	Not Known	Not Known
	FRH Tranda- Chaura	2	Not Known	Not Known
	FRH Tranda- old H.T Road	0.83	Not Known	Not Known
	Nichar- Nathpa Jhulla	3.62	Not Known	Not Known
	Nichar- Panwi	8.85	Not Known	Not Known
	Wangtu- Ramni	11.26	Not Known	Not Known
	Wangtu-Panwi	4.83	Not Known	Not Known
	Nichar- Panwi	3	1974-75	12,000/-
C Inspection Path				
	Panwi- Ramni via Kaksthal	11.26	Not Known	Not Known
	Nichar- Gotrang	11.6	Not Known	Not Known
	Tranda- maneotidhar	19.5	Not Known	Not Known
	Inspection path in C. No. 127 & 128	3.52	Not Known	Not Known
	Bari- Tranda	16	1961-63	21975/-
	Nichar- Ramni	-	1978-79	33570/-
D Sleeper Path				
	-	-	-	-
A Jeepable Road				
Pooh	Approach road to Forest colony	-	1985-86	72000/-

	Widening & Construction of approach road to Forest colony	1	190-91	98000/-
	Approach road from HPPWD Rest House to Forest colony Pooh	0.595	1985 to 1991	1,70,000/-
	Hoj to Kachey Lakhang Kanam	0.75	2009- 2010 to 2014- 2015	19,50,000/-
B Bridge Path				
	-	-	-	-
C Inspection Path				
	From C.No. 205 to 209	10.5	1968-69	23500/-
D Sleeper Path				
	-	-	-	-

Appendix- XXXVI				
B. List of proposed Road, Bridges, paths and I/ Paths				
Name of Range	Name of Road	Length in KM		
A Jeepable Road				
Bhaba Nagar	NH-5 to FRH Chaura	3.00	-	-
	Chaura to Kanlu	3.00		
	NH-5 to Range Forest Office Bhaba Nagar	0.500	-	-
	Bara Kamba to Village Shorang	3.00		
	Sholtu Bridge to Tepanang	2.00		
	Jani to Gatage	2.00		
	Fochitang to Ramni	3.00		
	Burang to Rupi	4.00		
	Chhota Kamba to Gharshu	2.500		
B Bridge Path				
	Over Jabha Nallah (Rupi)	1 No		
	Over Ajagral Nallah (Rupi)	1 No		
C Inspection Path				
	Dubling to Maghgaon	3.00		
	Burang to Ghurguri	3.00		
	B/Kamba to Rupi (via Shorang)	6.00		
	B/Kamba link road to Fgd Hut	1.00		
D Sleeper Path				
	Nil			
Kalpa	A Jeepable Road			
	C/o Jeepable road from Boktu to Kulange	2 Km		
	Yulla Village to Yulla Kanda	7 Kms.		
	B Bridge Pat			
	C Inspection Path			
	Chini C-143 to Chaka	5		
	Through C-240 (b), C-238, C-237 to Tassam	12		
	Karchham to Runang	5		
	Miru to Tharu	7		

	D Sleeper Path			
Katgaon	A Jeepable Road			
	Kandhar (1892) to Gharshu (Via Nathpa, Kachrang and Rockchrang) = 10Kms			
	B Bridge Path			
	Nil			
	C Inspection Path			
	Nil			
	D Sleeper Path			
	Nil			
Kilba	A Jeepable Road			
	Ralli to Guard Hut	0.700		
	FRH Sangla to Sangla Kanda	8 Km		
	B Bridge Path			
	Fishery to Devar Kanda	4		
	Themagarang to C-157	3		
	Sapni to I/Hut	1		
	Sapni to Guard Qtr.	1		
	C Inspection Path			
	C-154 (a) to C-154 (c)	5		
	Gangarang to Panpo	4		
	Ralli to Fobnang	5		
A Jeepable Road				
Malling	Kankani to old Gonpa	10		
	NH-5 to Himalayan Interpretation centre Nako	0.500		
	Hango to Sunnam	45		
B Bridge Path				
	Nako to Somang	16		
	Leo to Sumdo	30		
	Chulling to Terasubg Temple	10		
C Inspection Path				
	Nil			
D Sleeper Path				
	Nil			
Moorang				
A Jeepable Road				
	Solding Santhang to Spera = 5 Kms			
	Solding Santhang to Reganti = 3 Kms+++			
B Bridge Path				
	Nil			

C Inspection Path				
	Nil			
D Sleeper Path				
	Nil			
A Jeepable Road				
Nichar	Kalabey to Chot Kanda = 7 Kms			
	Bari to Bari Kanda = 10 Kms			
	Ponda to Bari via Kanolang = 7 Kms			
	Bari to Pyaratapoo (Sungra) = 8 Kms			
	Chaunda to Kutange = 4 Kms			
B Bridge Path				
	Nil			
C Inspection Path				
	Nil			
D Sleeper Path				
	Nil			
	A Jeepable Road			
Pooh	Link road Gaiboung to Fgd hut Sunnam	0.5		
	Spillow to Karla Top	9 Km		
	B Bridge Path			
	Pooh Village to Rizing Kanda	6		
	Dubling to Rishi Kanda	9		
	Kanam to Tapang Kanda	3.90		
	Telenque Nalla to Hango Village	6.7		
	Labrang Budh temple to Tawang Kanda	5.5		

Appendix - XXXVII					
List of Existing Buildings, FRH & I Hut					
Sr No	Name of Range	Name of Buildings	Place	Year of Construction	Cost of Construction
A Forest Rest House / I hut					
1	B/Nagar	Rest House with outhouse and Kitchen	Chaura	1908	1920/-
		Rest house With Outhouse and Kitchen	Sholtu	1927	2668/-
		Kitchen of FRH Choura		1980-81	13541/-
B Range office Cum Residences					
		Range Office Cum Residence at B/Nagar		1992-93	4,43,000/-
C Block Office Cum Residences					
		BO Residence at B/Nagar		1996-97	3,50,000/-
		BO Quarter at Sholtu		1914-15	Not Known
		BO Quarter at Ramni		2002-03	6,51,277/-
D Forest Guard Quarters					
		Forest Guard Hut Choura	Choura	1959-60	4000/-
		Forest Guard Hut Sholtu	Sholtu	1914-15	500/-
		Forest Guard at B/Nagar	B/Nagar	1994-95	1,73,190/-
		Type one Quarter at B/Nagar	B/Nagar	1996-97	3,10,000/-
		Forest Guard at Ramni 1st	Ramni	2002-03	9,25,130/-
		Forest Guard at Ramni 2nd	Ramni	2002-03	Not Known
		Forest Guard at Bara Kamba	Bara Kamba	Not Known	Not Known
E Other Buildings					
		Stabel	Choura	1949-50	4066/-
		Godown	Choura	1920-21	1060/-
		Magazine Godown	Sholtu	Not Known	Not Known
		Kitchen for FRH	Choura	1980-81	13541/-
		Range Rest Room	Sholtu	1928	1493/-
		Chowkidar Quarter at Choura	Choura	1996-97	Not Known
		Check Post Gumti at B/Nagar	B/Nagar	2000-01	1,50,000/-
		Range Office Toilet		2006-2010	1,32,404/-
		Mali Hut Cum Store	Sholtu	2011-12	4,50,000/-
		Resue Room	B/Nagar	2011-12	75,000/-

		Check Post Gumti	Choura	2018-19	2,09,000/-
		Check Post Building at Chaura	Choura	2018-19	21,72,000/-
	A Forest Rest House / I hut				
2	Kalpa	Rest House with out House & Kitchen	Shongtong	1902	802/-
		Rest House with out House & Kitchen	Purbani	1915-16	2293/-
		DFO inspection hut	Anodan	1936	349/-
		I/ Hut Kalpa	Kalpa	2016-17	1950000/-
		D.F.O	R/Peo	2002-03	600000/-
		ACF		2008-09	800000/-
		I/Hut R/peo	R/peo	1997-98	200000/-
		Gang Hut R/Peo	R/Peo		40000/-
		DFO Office	R/Peo	2001-2002	1226000/-
		Conference Hall	R/Peo	2016-017	700000/-
	B Range office Cum Residences				
		RO Kalpa	Kalpa	1903	503.00/-
		Range Rest House	Tangling	Not known	Not known
		Range Qtr.	Shongtong	1922	855/-
		RO Office	Kapla	Not Known	500/-
		Range Rest Room	Kapla	1903	558/-
		Range Qtr.	Kapla	1903	558/-
		FRH Shongthong	Shongthong	1902	400/-
		FRH Purbani	Purbani	1915-16	2000/-
	C Block Office Cum Residences				
		BO Qtr Kalpa	Kalpa	1952-54	503.00/-
		BO Qtr R/Peo	R/Peo	1995-96	321700/-
		Bio Hut R/Peo	R/Peo	2011-12	1200000/-
		BO Qtr. Shongthong	Shongthong	Not Known	500/-
		BO Qtr.	Urni	1996-97	420000/-
		Forester Qtr	Kalpa	1952-54	3700/-
	D Forest Guard Quarters				
		Fgd hut kalpa	Kalpa	1912-13	298/-
		Fgd hut kalpa	Kalpa	1970-71	7000/-
		Fgd hut	Boktu	1905	128/-
		Fgd hut Pangi	Pangi	1972-74	700/-
		Fgd hut Roghi	Roghi	1996-97	400000/-
		Fgd Hut R/Peo	R/peo	1995-96	358556/-
		Bio Hut R/Peo	R/Peo	2011-12	1200000/-
		Fgd hut tangling	Tangling	Not Known	250000/-
		Fgd hut Purbani	Purbani	Not Known	800/-
		Fgd hut Urni	Urni	1946	1000/-
		Fgd hut Tapri at Urni	Urni	2008-09	740000/-
		Fgd hut Runang	Runang	2005-06	375000/-
		Fgd Hut	Shongthong	Not Known	380000
	E Other Buildings				
		Clerk Qtr.	Kalpa	Not Known	800/-

		Mali Qtr.	Kalpa	Not Known	400/-
		Chowkidar Qtr	Kalpa	Not Known	600/-
		Clerk Qtr.	R/peo	2002-03	150000/-
		Clerk Qtr.	R/peo	2007-08	255000/-
		Clerk Qtr.	R/peo	do	255000/-
		Clerk Qtr.	R/peo	Not Known	260000/-
		Clerk Qtr.	R/peo	Not Known	260000/-
		Clerk Qtr.	R/peo	Not Known	260000/-
		Clerk Qtr.	R/peo	Not Known	260000/-
		Peon Qtr.	R/peo	Not Known	260000/-
		Peon Qtr.	R/peo	Not Known	260000/-
		Peon Qtr.	R/peo	Not Known	260000/-
		Peon Qtr.	R/peo	Not Known	260000/-
		Peon Qtr.	R/peo	1997-98	532000/-
		Peon Qtr.	R/peo	2002-03	150000/-
		Peon Qtr.	R/peo	2007-08	270000/-
		Peon Qtr.	R/peo	Do	250000/-
		Store	R/peo	2001-02	111800/-
		Chowkidar Qtr.	Purbani	Not Known	200/-
		Godown	Boktu	1907	1189/-
		Godown	Tangling	1922	150/-
		Double Story Qtr	Kalpa		60000
		A Forest Rest House / I hut			
3.	Katgaon	Inspection hut		1987-88	93400.00/-
		B Range office Cum Residences			
		Range Office Cum Residence at Katgaon		190-91	212100/-
		C Block Office Cum Residences			
		D Forest Guard Quarters			
		Forest Guard hut & Chowkidar Qtr.	Katgaon	2000-01	260000.00/-
		Forest Guard hut	Yangpa	2000-01	Not Known
		Forest Guard hut	Shango	1987-88	50000.00/-
		E Other Buildings			
		Store Katgaon		1990-91	20800.00/-
		Labour shed & Seed store		2018-19	275000.00/-
		A Forest Rest House / I hut			
		DFO I/Hut Sumo	Sumo	1938	140/-
		I/ Hut	Limeinkhona	1936	130/-
4.	Kilba	FRH Sangla	Sangla	1908	
		I/hut Sangla Kanda	Sangla	1986-87	
		I/hut Chansu Kanda		1985-86	
		I/hut Sapni Kanda		2016-17	
		FRH Kilba		1926-27	2995
		B Range office Cum Residences			

		Range office Cum R/Peo Residence	Kilba	1904	525/-
		C Block Office Cum Residences			
		B.O. Qtr.	Karchham	1987-88	50825/-
		B.O. Qtr.	Sangla	1987-88	51826/-
		B.O. Qtr.		1977-78	
		B.O. Qtr.	Sapni	1991-92	
		B.O. Qtr. old	Kilba	1958	4500/-
		B.O. Qtr. new		2008-09	
		D Forest Guard Quarters			
		Fgd hut old	Kilba	1905	50/-
		Fgd hut	Sangla	1986-87	
		Fgd hut	Chansu	1985-86	
		Fgd hut old	Ralli	1915-16	214/-
		Fgd hut New	Ralli	2003-04	
		Fgd hut	Sapni	1998-99	
		Fgd hut	Shong	1998-99	
		Fgd Qtr.new	Kilba		
		Fgd Qtr.	Punag		
		Fgd Hut	Meber	1903-04	106/-
		E Other Buildings			
		Chokidar Hut	Kilba	2005-06	
		Dispensary Qtr. Old	Kilba	1902	1850/-
		Dispensary Qtr. New	Kilba	1922	3190/-
		SAS Qtr	Kilba	1922	3190/-
		Magazine	Kilba	1922	1850/-
		Godown	Ralli	Not Known	Not Known
		Godown	kilba	Not Known	Not Known
		Community Center	Chansu	2003-04	
		Fgd Store	Serince	1997-98	
		A Forest Rest House / I hut			
5.	Malling	Inspection hut	Malling	1980-81	Not Known
		B Range office Cum Residences			
		Range Office Cum R.F.O Residence	Malling	2010-11	17,90,000/-
		C Block Office Cum Residences			
		D Forest Guard Quarters			
		Forest Guard hut	Leo	1966-67	9655/-
		Forest Guard hut	Malling	1980-81	Not Known
		Forest Guard hut	Malling	2015-16	17,26,200/-
		E Other Buildings			
		Mali hut	Malling	1968-70	7750/-
		Mali hut	Gulling	1968-69	9120/-
		Trans Himalayan Interpretation center	Malling	2016-17	49,41,000/-

		A Forest Rest House / I hut			
6.	Moorang	Inspection hut	Akpa	1980-81	Not Known
		FRH/ I Hut:- I/ hut		1980-81	Not Known
		Gang hut		2016-17	2000000/-
		B Range office Cum Residences			
		Range Room	Jangi	Not Known	Not Known
		RO Office	Moorang	1992-93	
		RO. Resident	Moorang	1992-93	
		C Block Office Cum Residences			
		BO. Qtr.	Jangi	Not Known	Not Known
		BO. Qtr.	Skibba	1944	Not Known
		D Forest Guard Quarters			
		Forest Guard hut	Ribba	1958-59	4500/-
		Forest Guard hut	Lippa	1944	850/-
		Forest Guard hut	Rispa	1986-87	120000/-
		Forest Guard hut	Moorang	2008-09	700865/-
		Forest Guard hut	Jangi	2011-12	934000/-
		Forest Guard hut	Akpa	2010-11	885000/-
		E Other Buildings			
		Mali hut	Skibba	1968-69	6065/-
		Godown	Skibba	1900-01	1730/-
		Store/Godown 2 No.	Akpa	1987-88	265000/-
		Peon Qtr. Seed Store	Akpa	1993-94	Not Known
		Mali hut converted in to Fgd. Hut.	Lippa	2018-19	800000/-
		A Forest Rest House / I hut			
7.	Nichar	Rest House without House & Kitchen	Tranda	1936	3014/-
		Rest House without house	Nichar	1995	9950/-
		Log hut with kitchen	Nichar	1973-74	21900/-
		DFO Inspection hut with kitchen	Kaksthal	1937	115/-
		ACF Qtr.	Nichar	1963-65	18000/-
		DFO Qtr.	Nichar	Not Known	Not Known
		B Range office Cum Residences			
		Range Rest house	Tranda	1903	605/-
		Range Rest house	Nichar	Not Known	Not Known
		Range Qtr. Old	Nichar	1903	536/-
		Range Qtr. new	Nichar	1926	1456/-
		C Block Office Cum Residences			
		BO Qtr.	Sungra	Not Known	Not Known
		BO Qtr.	Nichar	1986-87	75000/-

		BO Qtr.	Tranda	Not Known	Not Known
		D Forest Guard Quarters			
		Forester Qtr.	Nichar	1913	355/-
		Forest Guard hut	Panwi	1904	100/-
		Forest Guard hut	Kaksthal	1904	100/-
		Forest Guard hut	Nichar	1914-15	300/-
		Forest Guard hut	Nichar	1970-71	8000/-
		Forest Guard hut	Nichar	1962-63	5926/-
		Forest Guard hut	Bari	1978-79	20801/-
		Forest Guard hut	Tranda	1979-80	47000/-
		Forest Guard hut	Sungra	Not Known	Not Known
		Forest Guard hut	Thach	Not Known	Not Known
		E Other Buildings			
		Mali hut old	Nichar	1909-10	1976/-
		Mali hut new	Nichar	1963-65	2990/-
		Mali hut	Nichar	1960-61	1545/-
		Timber seasoning shed	Nichar	1909-10	366/-
		Godown cum store	Nichar	Not Known	Not Known
		Stable	Nichar	1960-61	2150/-
		Mali hut	Sungra	1978-79	10001/-
		Class IV Qtr.	Nichar	1979-80	16600/-
		A Forest Rest House / I hut			
8.	Pooh	DFO Office	Pooh	1991-95	11,90,400/-
		FRH Pooh	Pooh	1989-91	4,54,000/-
		B Range office Cum Residences			
		Range Office	Pooh	1992-93	11,90,400/-
		Range Qtr.	Pooh	1964-65	14799/-
		FRH Pooh	Pooh	2017-18	55,00,000/-
		FRH/I Hut Giabong		1972-73	36,000/-
		Gang hut cum Fgd hut		2018-19	59,15,000/-
		C Block Office Cum Residences			
		B.O. Qtr	Kanam At Spillow	2005-06	8,52,700/-
		Type II Qtr. 1 No.	Pooh	1985-86	100000/-
		Type II Qtr. 2 No.	Pooh	1985-86	200000/-
		Type II Qtr. 1 No.	Pooh	1986-87	120000/-
		Type I & Type II Qtr. 1 No.	Pooh	1988-89	265000/-
		Type II Qtr.	Pooh	1989-90	150000/-
		Type- III 2no. Double.		1998-99	8,02,000/-
		Type- I Qtr. No. I-		1985-87	81,200/-
		Type- I Qtr.		1988-89	1,25,000/-
		D Forest Guard Quarters			
		Forest Guard Hut.	Giabang	1959-60	4000/-
		Forest Guard Hut.	Pooh	1964-66	11096/-

		Forest Guard Hut.	Kanam	1966-67	12800/-
		Forest Guard Hut.	Dubling	1989-90	72600/-
		Fgd hut	Sunnam	2012-13	11,50,000/-
		E Other Buildings			
		Mali hut	Pooh	1970-71	7000/-
		Mali hut	Giabong	1970-71	7000/-
		Sarai	Kirang	1960	10,000/-

HP Forest Department

From: The Pr. CCF (HOFF) H.P.
Talland, Shimla (H.P.)

To : The Pr. Secretary (Fts.)
To the Govt. of H.P.
Dated, the Shimla

Subject: Rationalization of Protected Areas and merger of excluded inhabitations the territorial forest divisions.
Sir,

The State Government decided to rationalize the wildlife protection areas of the State by excluding inhabitations and the adjoining forests where those inhabitations were exercising their rights. The matter was under consideration of the Hon' ble Supreme Court in a Writ Petition Civil No. 337 of 1995 titled Centre for Environment Law, WWF-1 versus Union of India & others. Therefore, the State Govt. filed IA No. 139/2010 in the Hon' ble Supreme Court after approval from the National Board for Wildlife. The Hon'ble SC in its judgment dated 7.5.2010 allowed the State Govt. to issue intention notification for those Wildlife Sanctuaries and National Parks where the area was to be included. Subsequently, in its judgment dated 1.2.2013, the Hon'ble Court allowed the State Govt. to issue the final notifications excluding inhabited areas and adjoining forests having rights of the people extending over 1059.3385 sq. km. from 23 Wildlife Sanctuaries. Accordingly, the sanctuary- wise notifications were issued on 7.6.2013 where rationalization work had completed.

2. The detailed position in respect of 24 Wildlife Sanctuaries (WLS) and National Parks (NP) are given in **Annexures A to C**. All those protected areas from which the inhabitations were excluded (Chail WLS, Dhauladhar WLS, Darlaghat WLS, Shilli WLS, Tundah WLS, Kala Top- Khajjar WLS, Nainadevi WLS, Shikaridevi WLS, Renukaji WLS) have been delineated in Annexure A. Those wild life areas (Sanctuaries, NP) where forest areas have been transferred from Territorial Forest Divisions / outside have been included in Annexure B (Talra WLS, Simbalbara NP, Pong Dam WLS). Annexure C includes those areas in which some areas have been excluded but also some other areas have been included from the Territorial Forest Divisions (viz., Kugti WLS, Sechu- Tuan WLS, Gamgul- Siyabehi WLS, Daranghatti WLS, Khokhan WLS, Nargu WLS, Kanwar WLS, and Kibber WLS).

3. A typical case of Palampur Forest Division has been included in Annexure A in which areas excluded from Dhauladhar WLS have been included to create a new range (Bir territorial range) which was a territorial range prior to inclusion in Wildlife Sanctuary. However, a new range jaisinghpur has been created out of the 3 territorial ranges namely Palampur, Daroh range, from where it has been difficult for people to approach Range Officer at Daroh, being 45 km. away from jaisinghpur and a Legislative Assembly Assurance was pending for the implementation of the same for creation of separate range office there. As a result, Palampur Division will have 5 Range instead of 3 Ranges.

4. After completion of the exercise, additional forest beats added to the Territorial Forest Divisions and those deleted or converted from wildlife have been tabulated along with the number of villages in each case in brief as below:-

Name of PA	Beats transferred from W/L	Areas merged with existing beats	New Beats	Beats Deleted/ abolished	No of villages excluded	Remarks
Chail WLS	7				84	Chail W/L Range will be transferred to Solan Forest Division
Dhauladhar	9				43	Bir W/L Range will be transferred to Palampur Forest Division
Rakcham Chitkul	2				5	
Rupi Bhaba	4				28	Katgaon W/L Range will be transferred to kinnaur Forest Division
Majathal		2	1		11	

Churdhar		2			9	
Darlaghat		4			11	
Shilli WLS		1			7	
Tundah			2		18	A new Block Banni I proposed to be created in Swai Range of Bharmour Forest Division.
Kala Top Khajjar	3			1	261	
Nainadevi	11				48	Entire Naina Devi Block will be transferred to Bilaspur Forest Division as a part of Newly created Naina Devi Range.
Shikharti Devi	7	2	1		113	
Renukaji		1			3	
Talra		2			23	
Simbalbara		3		1	20	
Pong Dam		3				
Kugti			1		7	
Gangul Siyabehi		4			73	
Sechu Tuan WLS		4	1		11	
Daranghati WLS		1		1	78	
Khokhan WLS		3			27	
Nargu	11	4			88	Tikkan W/L Range will be transferred to jogindernagar forest Division
Kanawar WLS		6		1	21	
Kibber WLS		2			9	
Total	54	48	6	4	998	

In the overall position of creation/ deletion of beats, only 6 beats more will be needed than the existing position of 2581 beats in the State with 998 villages excluded from the wildlife areas. However, wherever imperative new beats have been created with the deletion of those which have been merged in the existing beats.

5. In the light of aforesaid scenario, the proposed reorganization of excluded areas from the 24 Wildlife areas and their inclusion in territorial divisions as delineated in Annexure A, B and C are submitted for acceptance and approval of the Government please.

Yours faithfully,

(R.K. Gupta, IFS)
Pr. CCF (HOFF) H.P.

GOVERNMENT OF HIMACHAL PRADESH

DEPARTMENT OF FORESTS

No. FFE-B-A (1)- 1/2013 Dated: Shimla-2, the 31st July, 2014

NOTIFICATION

The Hon' ble Supreme Court vide order dated 01/02/2013 passed in IA No. 155 (earlier IA No. 139/2010), writ Petition Civil No. 337 of 1995 Centre for Environmental Law, WWF-I Versus Union of India & Others, permitted the State Government to issue final Notifications under Sections 26A, 35 (4) & 36 A of the Wildlife (Protection) Act, 1972 with regard to the proposed rationalization of boundaries of Wildlife Sanctuaries and National Parks in HP.

Pursuant to above orders of the Hon'ble Supreme Court of India, the final notifications in respect of 24 Wildlife Sanctuaries have been issued by the Government. Therefore, the Governor, Himachal Pradesh is pleased to order reorganization of the excluded area from 24 Wildlife Sanctuaries in Territorial Divisions as per the Annexure-A, B & C attached with the notification with immediate effect.

By Order

Tarun Shridgar.

**Principal Secretary (Forest) to the Government of
Himachal Pradesh.**

Endst. No As above

Dated Shimla-2 the

31st July, 2014

Copy forwarded to:-

1. All the Administrative Secretaries to the Govt. of H.P. Shimla-2.
2. All the Divisional Commissioners, (Shimla, Mandi & Dharamshala) H.P.
3. All the Heads of Departments of H.P.
4. The Principal Chief Conservator of Forests, H.P. Shimla-1
5. The Principal Chief Conservator of Forests, (Wildlife) H.P. Shimla-1.
6. All CCFs, CFs, DFOs (Territorial & Wildlife) in H.P.
7. All the Deputy Commissioners in H.P.
8. Guard File.

(Prakasha Nand)

Deputy Secretary (Forest) to the Government of
Himachal Pradesh.

Ph. No. 2880818, Mob. 94184- 55573

E. mail usforests. Hp @gmail.com.

Appendix - XXXIX						
A. List of Existing Boundary pillars						
Name of Range	Name Beat	Compartment No. (Old)	Compartment No. (New)	No of Boundary Pillars		
				Large	Small	Chak
Bhaba Nagar		C-68 (a) I,II	1 (a), 1 (b)	2	1	0
		C-68 (b) I,II & III	1 (c),1 (d), 1 (c)	11	2	0
		C-68 (c)	1 (f)	4	5	7
		C-73	6	8	2	0
		C-130 (a) I,II & III	36 (a),36 (b), 36 (c)	8	4	0
		C-130 (b)	36 (d)	7	4	0
		C-131	37	4	1	
		C-132 (a)	38 (a)	7	7	0
		C-132 (b)	38 (b)	4	0	0
		NC-1	163	63	0	9
		NC-2	164	44	0	0
		NC-3	165	76	0	67
		NC-4	166	19	0	0
		NC-5	167	63	0	0
		NC-16	178	4	0	8
		NC-17	179	14	0	8
		NC-18	180	12	0	0
		NC-19	181	11	0	0
		C-98	30	0	0	0
		C-99	31	3	0	0
	Total			364	26	99
Kalpa	Kalpa	C- 239	143	17	29	13
		C-241	145	17	19	0
		243 (a&b)	147 (a), 147(b)	6	2	0
	Pangi	C-233	137	6	11	0
		C-234 (a)	138 (a)	6	5	0
		C-234 (b)	138 (b)	9	12	0
		C-234 (c)	138 (c)	1	2	0
		C-235	139	7	9	0
		C-236	140	6	9	0
		C-237	141	6	1	0
		C-238	142	2	2	0
		C-240 (a)	144 (a)	5	2	0
		C-240 (b)	144 (b)	2	7	0
	Roghi	C-244	148	5	4	0
		C-245 (a)	149 (a)	8	3	0

		C-245 (b)	149 (b)	3	4	0
		C-246	150	4	5	4
		C-247	151	7	1	0
	R/Peo	C-242	146	23	25	26
	Barang	C-171 (a)	75 (a)	1	0	0
		C-171 (b)	75 (b)	3	3	0
		C-172 (a)	76 (a)	2	2	0
		C-172 (b)	76 (b)	5	8	0
		C-173	77	4	16	0
		C-174 (a)	78 (a)	1	1	0
		C-174 (b)	78 (b)	2	0	0
		C-175 (a)	79 (a)	3	6	0
		C-175 (b)	79 (b)	2	0	0
	Tangling	C-176	80	1	1	0
		C-177	81	4	1	0
		C-178	82	0	1	0
		C-179	83	3	1	0
		C-180	84	2	0	0
	Purbani	C-181 (a)	85 (a)	4	0	19
		C-181 (b)	85 (b)	0	0	0
		C-181 (c)	85 (c)	1	0	44
		C-182 (a)	86 (a)	6	2	0
		C-182 (b)	86 (b)	6	2	0
		C-183 (a)	87 (a)	0	0	9
		C-183 (b)	87 (b)	0	0	0
		C-184 (a)	88 (a)	2	0	0
		C-184 (b)	88 (b)	9	17	0
		C-184 (c)	88 (c)	0	0	0
		C-185	89	3	0	0
	Urni	C-253	157	3	10	4
		C-254	158	2	4	0
		C-255	159	7	13	0
	Tapri	C-256	160	7	1	0
		C-257	161	5	0	0
		C-258 (a)	162 (a)	7	0	0
		C-258 (b)	162 (b)	5	0	0
	Runang	C-248 (a)	152 (a)	4	2	0
		C-248 (b)	152 (b)	6	3	0
		C-249	153	4	2	0
		C-250	154	3	1	0
		C-251	155	4	4	0

		C-252	156	5	5	0
	Total			266	258	119
Katgaon	Kafnoo	C-87	20	5	5	0
		C-88	21	5	3	0
		C-89	22	6	3	0
		C-90	23	10	6	0
		C-91	24	11	8	0
	Total			37	25	0
Kilba	Sangla	C-154 a,b,c	60 (a), 60 (b), 60 (c)	11	16	0
		C-155	61	4	1	26
		C-156	62	0	3	12
	Chansu	C-152 a,b	58 (a), 58 (b)	8	20	0
		C-153	59	2	10	0
	Seringche	C-162 a	66 (a)	6	8	0
		C-162 b	66 (b)	2	29	0
		C-162 c	66 (c)	45	27	0
		C-163	67	1	9	0
		C-157	63	8	7	22
	Rakchham	C-160	64	3	0	0
		C-161	65	4	0	0
	Ralli	C-167	71	6	0	0
		C-168	72	9	25	0
		C-169 a	73 (a)	9	0	0
		C-169 b	73 (b)	4	8	0
		C-170 a	74 (a)	3	0	0
		C-170 b	74 (b)	3	0	0
	Sapni	C-141	47	7	7	0
		C-142	48	5	15	0
		C-143	49	8	20	0
		C-144	50	7	7	6
		C-145	51	7	21	0
		C-146	52	13	7	0
		C-166	70	3	0	0
	Shong	C-147	53	8	0	28
		C-148	54	5	4	0
		C-149	55	10	9	0
		C-150	56	9	0	0
		C-151 a,b	57 (a), 57 (b)	17	2	0
		C-164	68	3	0	0
		C-165	69	5	0	0
	Kilba	C-138 (a)	44 (a)	2	0	0

		C-138 (b)	44 (b)	5	6	0
		C-139 (a)	45 (a)	3	0	0
		C-139 (b)	45 (b)	2	3	0
		C-139 (c)	45 (c)	2	2	0
		C-140	46	3	3	0
	Punang	C-133	39	7	0	0
		C-134 (a)	40 (a)	4	0	6
		C-134 (b)	40 (b)	3	0	0
		C-135	41	4	0	0
		C-136 (a)	42 (a)	6	0	0
		C-136 (b)	42 (b)	2	0	0
		C-137 (a)	43 (a)	7	0	0
		C-137 (b)	43 (b)	6	5	0
	Total			291	274	100
Moorang		C-215	119	13	4	2
		C-216	120	3	0	0
		C-217	121	5	3	6
		C-218	122	11	8	5
		C-219 a	123 (a)	7	16	0
		C-219 b	123 (b)	7	11	6
		C-220	124	5	9	0
		C-221	125	3	7	5
		C-222 a	126 (a)	4	4	0
		C-222 b	126 (b)	2	2	0
		C-223 a	127 (a)	7	2	0
		C-223 b	127 (b)			
		C-224	128	6	2	0
		C-225	129	4	5	0
		C-226	130	16	3	0
		C-227	131	8	2	5
		C-228	132	10	3	4
		C-229	133	11	20	0
		C-230	134	3	6	0
		C-231	135	6	6	0
		C-232 a	136 (a)	6	4	0
		C-232 b	136 (b)	0	0	0
		C-186	90	0	0	0
		C-187	91	14	17	25
		C-188 a	92 (a)	14	10	19
		C-188 b	92 (b)	0	0	0
		C-189 a	93 (a)	9	14	22

		C-189 b	93 (b)	0	0	0
		C-190 a	94 (a)	0	0	0
		C-190 b	94 (b)	5	0	0
		C-191	95	11	4	0
		C-192	96	7	0	0
		C-193	97	6	8	0
		C-194	98	7	14	0
		C-195	99	4	0	0
		C-196	100	8	0	0
		C-197	101	4	0	0
	Total			226	184	99
Nichar		76 (a)	9 (a)	8	2	0
		76 (b)	9 (b)	3	0	0
		76 (c)	9 (c)	5	1	0
		C-77	10	9	9	0
		C-78	11	11	6	0
		79 (a)	12 (a)	12	8	0
		79 (b)	12 (b)	1	1	0
		C-80	13	7	8	0
		C-81	14	14	6	0
		C-82	15	9	12	0
		C-83	16	7	1	0
		C-84	17	8	3	0
		C-85	18	4	1	0
		C-86 (a)	19 (a)	8	3	0
		C-86 (b)	19 (b)	8	3	0
		C-126	32	6	2	0
		C-127	33	3	4	0
		C-128 (a)	34 (a)	3	4	0
		C-128- (b)	34 (b)	3	11	0
		C-129	35	7	7	0
		NC-6	168	35	0	0
		NC-7	169	96	0	0
		NC-8	170	26	0	0
		NC-9	171	40	0	130
		NC-10	172	67	0	33
		NC-11	173	16	0	0
		NC-12	174	16	0	0
		NC-13	175	21	0	16
		NC-14	176	31	0	0
		NC-15	177	53	0	111

	Total			537	92	290
Pooh		C-198	102	3	0	0
		C-199	103	4	0	0
		C-200 (SIBA-IV)	104	5	0	0
		C-201 (SIBA-III)	105	5	0	0
		C-202 (SIBA-II)	106	4	0	0
		C-203 (SIBA-I)	107	7	0	0
		C-204 (ROPA-II)	108	8	0	0
		C-205 (ROPA-I)	109	6	0	0
		C-206 (GIABOUNG-III)	110	4	0	0
		C-207 (GIABOUNG-II)	111	6	0	0
		C-208 (GIABOUNG-I)	112	16	0	0
		C-209 (TALLING)	113	8	0	0
		C-210 (SUNNAM)	114	6	0	0
		C-211 (KANAM)	115	4	0	0
		C-212 (TAPANG)	116	9	0	0
		C-213 (LABRANG)	117	5	0	0
		C-214 (KOILA PILO)	118	5	0	0
	Total			105	0	0
	G Total			1826	859	707

B. List of new Boundary Pillars to be constructed							
Name of Range	Name Beat	Sr. No.	Compartment No. (Old)	Compartment No. (New)	No of Boundary Pillars		
					Large	Small	Chak
Bhaba Nagar		1	C-98	30	6	4	3
Kalpa	Urni	2	NC-30	192	43	0	0
		3	NC-31	193	17	0	0
		4	NC-32	194	79	0	8
		5	NC-33	195	48	0	0
	Tapri	6	NC-21	183	55	0	0
		7	NC-34	196	35	0	0
	Runang	8	NC-26	188	116	0	25
		9	NC-27	189	49	0	0
		10	NC-28	190	164	0	81
		11	NC-29	191	54	0	36
		12	NC-23	185			
		13	NC-24	186			
		14	NC-25	187			
Katgaon	Nathpa	15	C-92	25			
Kilba		16	NC-20	182			

		17	NC-22	184			
		18	Tiuden Kilba	NDPF - 1			
		19	Wadang	NDPF - 2			
		20	Baturi Kanda	NDPF - 3			
		21	Ananti Dhar	NDPF - 4			
		22	Monorang	NDPF - 5			
		23	Kamru Chanso	NDPF - 6			
		24	Rutrang	NDPF - 7			
		25	Punang Kanda	NDPF - 8			
		26	Punang	NDPF - 9			
Moorang		27	C-232 b	136 (b)			
		28	C-186	90			
		29	C-188 b	92 (b)			
		30	C-189 b	93 (b)			
		31	C-190 a	94 (a)			

Appendix No- XL

Listl of Ranges, Blocks and Beats in Kinnaur Forest Division.

Sl. No.	Name of Range	Sl. No.	Name of Block	Sl.No.	Name of Beat
1	Bhaba Nagar	1	Bhaba Nagar	i	Bhaba Nagar
				ii	Rupi
				iii	Bara Kamba at Chota Kamba
				iv	Solaring
		2	Sholtu	i	Sholtu
				ii	Jani-Ramni
2	Kalpa	1	Kalpa	i	Kalpa
				ii	Peo
				iii	Pangi
				iv	Rogi
		2	Urni	i	Urni
				ii	Runang
				iii	Tapri
		3	Shongthong	i	Barang
				ii	Tangling
				iii	Purbani
3	Katgaon	3	Kafnoo at Katgon	i	Kafnoo
				ii	Musrang
				iii	Nathpa
				iv	Yangpa
4	Kilba	1	Kilba	i	Kilba
				ii	Punang
		2	Karchham	i	Sapni
				ii	Brua/Shong
				iii	Ralli
		3	Sangla	i	Sangla
				ii	Chansu

				iii	Rackchham
				iv	Seringcha
5	Malling	1	Malling	i	Malling
				ii	Chango
				iii	Sumra
		2	Leo	i	Leo
				ii	Chulling
6	Moorang	1	Jangi	i	Jangi
				ii	Rarang
				iii	Lippa
		2	Ribba	i	Ribba
				ii	Moorang
				iii	Rispa
7	Nichar	1	Nichar	i	Nichar
				ii	Panvi
				iii	Kaksthal
			Sungra	i	Sungra
				ii	Bari
			Tranda	i	Tranda
				ii	Thach
8	Pooh	1	Pooh	i	Pooh
				ii	Dubling
				iii	Namgia
		2	Kanam	i	Kanam
				ii	Sunnam
				iii	Giabong

Appendix - XLI

Per Hactare Indicative cost model for Raising Chilgoza Plantation under Enrichment						
S.No	Particulars	QTY	Unit	Rate	Unit	Amount
1	Survey and demarcation of plantation and area I/c marking of seditions, path preparation of map	1	Hac	88.7	Hac	110.875
2	Cutting and preparation of wooden posts 1.8 mtr and 8 to 10 CM dia I/C debarking and fashioning the top 15 cm in conical shape	60	Nos	1122.6	Per %	841.95
3	Carriage of fence posts upto 2 mtr long and 8 to 10 cm dia over distance 0.5 KM	60	Nos	590.85	Per% Per Km.	221.5688
4	Charing and coaltaring of the ends of the posts 45cm bottom and 15 cm conical taring	60	Nos	242.15	Per%	181.6125
5	Preparation and digging of holes 20-30 cm dia & 45 cm deep	60	Nos	786	Per %	589.5
6	Fixing of wooden posts I/C strutting	60	Nos	603.25	Per %	452.4375
7	Carriage of barbed wire bundles up hill over an average distance of 1 km	0.9	qtls	147.85	per qtl per Km.	166.3313
8	Stretching and fixing of barbed wire with U-staple in each strand	540	Rmt	4.1	per Rmt	2767.5
9	Interlacing of thorny bushes with barbed wire obtained from planting side	160	Rmt	3.55	per Rmt	710
10	Preparation of inspection path 60 cm wide	150	Rmt	9.4	Rmt	1762.5
11	Layout of pits/ patches	1	Hac	147.6	Hac	184.5
12	Digging of pits/ (60*60*60)cm	800	No	1512.6	Per%	15126
13	Filling of pits (60*60*60)cm	800	No	307.1	Per%	3071
14	Carriage of Plants in P/bags from Nursery site over an average distance of 1 Km.	800	No	283.58	Per % Km	2835.8
15	Planting of entire Plants I/C ramming raised in P bags	800	No	189.15	Per %	1891.5
16				Sub Total		30913.08
17	Add increase 92.30 % on basic rates (2012-13)					28532.77
						59445.84
18	Nursery Cost of P bags raised Plants	800	Tribal	28	Per Plant	22400
20	cost of B wire and other material					7120
				G Total		88965.84

Or
Says 89000

Note:- The above calculations are on the basis of schedule of rates of 2012-13 in Rampur Forest Circle by giving increase of 92.30% on these rates for the years 2019. The model is indicative only and will change as per cost norms as well as revised schedule of rates from time to time.

Appendix - XLII

INDICATIVE COST MODEL FOR RAISING CHILGOZA NURSERY

Calculation for thousand plants on the wages rate of Rs. 250 for Non Tribal area and Rs. 312.50 for Tribal areas

First Year operation

Sr. No.	Particulars	No/sqm	B/rate 2012- 13	S/ Rate 2019- 20	Qty in (Nos.)	Amount in (Rupees)
1	Preparation of a new nursery beds including layout ,	sqm/100	16.2	31.15	1000	311.53
2	Earth cutting in pick and spade work	sqm/100	120.25	231.24	1000	2312.41
3	Filling of polythene bags size 6"x18" including collection ,carriage ,sieving of soil, mixing of manure /humus, insecticide/pesticide	%	502.05	965.44	1000	9654.42
4	Lining of polythene bags in beds	%	30	57.69	1000	576.90
5	Sowing of seed in polythene bags	%	14.65	28.17	1000	281.72
6	Mulching of p/bags	%	4.4	8.46	1000	84.61
7	Providing cock mesh wire to polythene bags	sqm/100	14.8	28.46	1000	284.60
8	Hand watering of plants with alkathene pipes (20 times)	%	1.8	3.46	1000	692.28
9	Resowing of seeds (5%)	%	14.8	28.46	50	14.23
10	Cost of vermi compost / FYM / Goat manure	LS				500.00
11	Cost of insecticide and pesticide	LS				50.00
12	Cost of polythene bags	kg		160	7	1120.00
13	Cost of seeds	kg		2500	1.5	3750.00
14	Cost cock mesh wire	Sqm		105	1	105.00
	Total Cost in First Year operation					19737.70
	Or say					19700.00
	Per Plant cost For First Year					19.70
SecondYear operation						
1	Lining of polythene bags in beds	%	30	57.69	1000	576.90
2	Hand watering of plants with alkathene pipes (90times)	%	1.8	3.46	1000	3115.26

3	Shifting & Grading of plants to avoid rooting	%	20.8	40.00	1000	399.98
4	Weeding and Hoeing of plants (4 times)	%	10.25	19.71	1000	197.11
5	Cost of insecticide, pesticide and Pbags	LS		25.00		25.00
	Total Cost in Second Year operation					4314.25
	Or say					4300.00
	Per Plant cost For second Year					4.30
ThirdYear operation						
1	Hand watering of plants with alkathene pipes (90 times)	%	1.8	3.46	1000	3115.26
2	Shifting & Gardening of plants	%	20.8	40.00	1000	399.98
3	Weeding and Hoeing of plants (4 times)	%	10.25	19.71	1000	197.11
	Total Cost in Third Year operation					3712.35
	Or say					3700.00
	Per Plant cost For third Year					3.70
	Total plant cost for 3 years					27.70
	Or say					28.00

**THE HIMACHAL PRADESH PUBLIC PREMISES AND LAND
(EVICTION AND RENT RECOVERY) ACT, 1971
ARRANGEMENT OF SECTIONS**

Sections:

1. Short title, extent and commencement.
2. Definitions.
3. Unauthorized occupation of public premises.
4. Issue of notice to show cause against order of eviction.
5. Eviction of un-authorized occupants.
6. Disposal of property left in public premises by un-authorized occupants.
7. Power to require payment of rent or damages in respect of public premises.
8. Power of Collector.
9. Appeals.
10. Finality of orders.
11. Offences and penalty.
12. Power to obtain information.
13. Liability of heirs and legal representatives.
14. Recovery of rent etc., as arrears of land revenue.
15. Bar of jurisdiction.
16. Protection of action taken in good faith.
17. Power to make rules.
18. Repeal.

**THE HIMACHAL PRADESH PUBLIC PREMISES AND LAND
(EVICTION AND RENT RECOVERY) ACT, 1971
(ACT No. 22 OF 1971)¹**

(Received the assent of the Governor on the 5th November, 1971 and was published in the Rajpatra, Himachal Pradesh (Extra-ordinary), dated the 19th November, 1971, pp. 1448-1454.

Amended, repealed or otherwise affected by:-

- (i) H.P. Act No. 9 of 19832, assented to by the Governor on the 30th April, 1983, published in the Rajpatra, Himachal Pradesh (Extra-ordinary), dated 30th April, 1983, pp. 505-507.
- (ii) H.P. Act No. 18 of 20071, assented to by the Governor on the 26th December, 2007, published both in Hindi and English in the Rajpatra, Himachal Pradesh, dated 29th September, 2007, pp. 6149-6151.
- (iii) H.P. Act No. 15 of 20092, assented to by the Governor on the 17th September, 2009, published both in Hindi and English in the Rajpatra, Himachal Pradesh, dated 22nd September, 2009, pp. 3992-3995.
- (iv) H.P. Act No. 1 of 2012 3, assented to by the Governor on the 18th January, 2012, published both in Hindi and English in the Rajpatra, Himachal Pradesh, dated 28th January, 2012, pp. 5323-5324.

An Act to provide for the eviction of un-authorised occupants from public premises and for certain incidental matters.

BE it enacted by the Legislative Assembly of Himachal Pradesh in the Twenty-second Year of the Republic of India as follows:-

1. Short Title, Extent and Commencement:- (1) This Act may be called the Himachal Pradesh Public Premises and Land (Eviction and Rent Recovery) Act, 1971.

(2) It extends to the whole of Himachal Pradesh.

(3) It shall come into force at once.

2. Definitions.- In this Act, unless the context otherwise requires,-

- (a) “Collector” means the Collector of the district, and includes any other officer appointed by the State Government for performing the functions of the Collector under this Act;
- (b) “Corporate authority” means any company or corporation referred to in sub-clauses (ii) and (iii) of clause (e) of this section;
- (c) “Estate” has the meaning assigned to it in the Himachal Pradesh Land Revenue Act, 1953 (6 of 1954);
- (d) “Premises” means any land, whether used for agricultural or non-agricultural purposes, or any building or part of a building and includes,-
 - (i) The garden, grounds and out-houses, if any, appertaining to such building or part of a building, and
 - (ii) Any fittings affixed to such building or part of a building for the more beneficial enjoyment thereof;
- (e) “Public Premises” means any premises belonging to, or taken on lease or requisitioned by, or on behalf of, the State Government and includes any premises belonging to, or taken on lease by, or on behalf of-
 - (i) Any municipal corporation/committee, notified area committee, panchayat samiti, Panchayat or improvement trust 1[XXXXXXXXXXXX],
 - (ii) Any company as defined in section 3 of the Companies Act, 1956, in which not less than fifty one per cent of the paid up share capital is held by the State Government, 2[XXXXXX]
 - (iii) Any corporation (not being a company as defined in section 3 of the Companies Act, 1956 or a local authority) established by or under a Central Act as defined in clause (7) of section 3 of the General Clauses Act, 1897, or a Himachal Pradesh Act and owned or controlled by the State Government 3[, and]
 - (iv) Any Co-operative Society registered or deemed to have been registered under the Himachal Pradesh Cooperative Societies Act, 1968;
- (f) “Prescribed” means prescribed by rules made under this Act;
- (g) “Rent” in relation to any public premises means the consideration payable periodically for the authorized occupation of the premises, and includes-
 - (i) Any charge for electricity, water or any other services in connection with the occupation of the premises; and
 - (ii) Any tax (by whatever name called) payable in respect of the premises, where such charge or tax is payable by the State Government, the corporate authority or a local body as given in sub-clause (i) of clause (e) of this section.

3. Unauthorized Occupation of Public Premises.- For the purposes of this Act, a person shall be deemed to be in unauthorized occupation of any public premises:-

- (a) Where he has whether before or after the commencement of this Act entered into possession thereof otherwise than under and in pursuance of any allotment, lease or grant; or
- (b) Where he, being an allottee, lessee or grantee, has by reason of the determination or cancellation of his allotment, lease or grant in accordance with the terms in that behalf

therein contained, ceased, whether before or after the commencement of this Act, to be entitled to occupy or hold such public premises; or

- (c) Where any person authorized to occupy any public premises has, whether before or after the commencement of this Act
 - (i) Sub-let in contravention of the terms of allotment, lease or grant, without the permission of the State Government or of any other authority competent to permit such sub-letting the whole or any part of such public premises, or
 - (ii) Otherwise acted in contravention of any of the terms, express or implied, under which he is authorized to occupy such public premises.

Explanation.-For the purposes of clause (a) a person shall not merely by reason of the fact that he has paid any rent be deemed to have entered into possession as allottee, lessee or grantee.

4. Issue of Notice to Show Cause Against Order of Eviction.- (1) If the Collector is of opinion that any persons are in unauthorized occupation of any public premises situate within his jurisdiction and that they should be evicted, the Collector shall issue in the manner hereinafter provided a notice in writing calling upon all persons concerned to show cause why an order of eviction should not be made.

- (2) The notice shall-
 - (a) Specify the grounds on which the order of eviction is proposed to be made; and
 - (b) Require all persons concerned, that is to say, all persons who are, or may be, in occupation of, or claim interest in, the public premises, to show cause, if any, against the proposed order on or before such date as is specified in the notice, being a date not earlier than ten days from the date of issue thereof.
- (3) The Collector shall cause the notice to be affixed on the outer door or some other conspicuous part, of the public premises, or of the estate in which the public premises are situate, and in such other manner as may be prescribed, whereupon the notice shall be deemed to have been duly given to all persons concerned.
- (4) Where the Collector knows or has reasons to believe that any persons are in occupation of the public premises, then, without prejudice to the provisions of sub-section (3), he shall cause a copy of the notice to be served on every such person by post or by delivering or tendering it to that person or in such other manner as may be prescribed.

5. Eviction of unauthorized occupants.- (1) If, after considering the cause, if any, shown by any person in pursuance of a notice under section 4 and any evidence he may produce in support of the same and after giving him a reasonable opportunity of being heard, the Collector is satisfied that the public premises are in unauthorized occupation, the Collector may, on a date to be fixed for the purpose, make an order of eviction, for reasons to be recorded therein directing that the public premises shall be vacated by all persons who may be in unauthorized occupation thereof or any part thereof, and cause a copy of the order to be affixed on the outer door or some other conspicuous part of the public premises or of the estate in which the public premises are situate:

- (1) Provided that subject to the provisions of this Act or any rules made there under, the Collector shall make an order of eviction within a period of six months from the date of issuance of notice under section 4, however, the period may further be extended by three months for the reasons to be recorded in writing.
- (2) If any person refuses or fails to comply with the order of eviction within fifteen days of the date of its publication under sub-section (1), the Collector or any other officer duly authorized by him in this behalf may evict that person, within fifteen days after expiry of the above mentioned period, and take possession of the public premises and may, for that purpose, use such force as may be necessary.
- (3) The Collector shall impose upon the person evicted under this section a fine up to ten thousand rupees or the market value of the premises whichever is higher.

6. Disposal of property left on public premises by un-authorized occupants.- (1) Where any persons have been evicted from any public premises under section 5, the Collector may, after giving fourteen days' notice to the persons from whom possession of the public premises has been taken and after publishing

the notice in at least one newspaper having circulation in the locality, remove or cause to be removed or sell by public auction any property remaining on such premises.

- (2) Where any property is sold under sub-section (1), the sale proceeds thereof shall, after deducting the expenses of the sale and the amount, if any, due to the State Government, a corporate authority or a local body as given in sub-section (i) of clause (e) of section 2 on account of arrears of rent or damages or costs, be paid to such person or persons as may appear to the Collector to be entitled to the same:

Provided that where the Collector is unable to decide as to the person or persons to whom the balance of the amount is payable or as to the apportionment of the same, he may refer such dispute to the civil court of competent jurisdiction and the decision of the court thereon shall be final.

7. Power to require payment of rent or damages in respect of public premises.- (1) Where any person is in arrears of rent payable in respect of any public premises, the Collector may, by order, require that person to pay the same within such time as may be specified in the order.

- (2) Where any person is, or has at any time been, in unauthorized occupation or any public premises, the Collector may, having regard to such principles of assessment of damages as may be prescribed, assess the damages on account of the use and occupation of such premises and may, by order, require that person to pay the damages within such time as may be specified in the order.
- (3) No order under sub-section (1) or sub-section (2) shall be made against any person until after the issue of a notice in writing to the person calling upon him to show cause within such time as may be specified in the notice why such order should not be made, and until his objections, if any, and any evidence he may produce in support of the same have been considered by the Collector:

Provided that every order under sub-sections (1) and (2) shall be made within a period of six months, however, the period may further be extended by three months for the reasons to be recorded in writing.

8. Power of Collector.- A Collector shall, for the purpose of holding any inquiry under this Act, have the same powers as are vested in a civil court under the Code of Civil Procedure, 1908, when trying a suit, in respect of the following matters, namely:-

- (a) Summoning and enforcing the attendance of any person and examining him on oath;
- (b) Requiring the discovery and production of documents;
- (c) Any other matter which may be prescribed.

9. Appeals.- (1) An appeal shall lie from every order of the Collector made in respect of any public premises under section 5 or section 7 to the Commissioner .

- (2) An appeal under sub-section (1) shall be preferred-

- (a) In the case of an appeal from an order under section 5, within thirty days from the date of publication of the order under subsection (1) of that section; and
- (b) In the case of an appeal from an order under section 7, within thirty days from the date on which the order is communicated to the appellant:

Provided that the Commissioner may entertain the appeal after the expiry of the period of thirty days if he is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

- (3) Where an appeal is preferred from an order of the Collector, the commissioner may stay the enforcement of that order for such period and on such conditions as he deems fit.
- (4) Every appeal under this section shall be disposed of by the Commissioner within a period of three months.
- (5) The costs of any appeal under this section shall be in the discretion of the Commissioner.

10. Finality of orders.- Save as otherwise expressly provided in this Act, every order made by the Collector or Commissioner under this Act, shall be final and shall not be called in question in any original suit, application or execution proceeding, and no injunction shall be granted by any court or other authority in respect of any action taken or to be taken in pursuance of any power conferred by or under this Act.

11. Offences and penalty.- (1) If any person who has been evicted from any public premises under this Act, again occupies the premises without authority for such occupation, he shall be punishable with

imprisonment which may extend to one year or with fine which may extend to twenty thousand rupees or twice the market value of the premises, whichever is higher, or with both.

(2) Any Magistrate convicting a person under sub-section (1) may make an order for evicting that person summarily and he shall be liable to such eviction without prejudice to any action that may be taken against him under this Act.

12. Power to obtain information.- If the Collector has reasons to believe that any persons are in unauthorized occupation of any public premises, the Collector or any other officer authorized by him in this behalf may require those persons, or any other person to furnish information relating to the names and other particulars of the persons in occupation of the public premises and every person so required shall be bound to furnish the information in his possession.

13. Liability of heirs and legal representatives.- (1) Where any person against whom any proceeding for the determination of arrears of rent or for the assessment of damages is to be or has been taken dies before the proceeding is taken or during the tendency thereof, the proceeding may be taken or, as the case may be, continued against the heirs or legal representatives of that person.

(2) Any amount due to the State Government, any corporate authority or a local body as mentioned in sub-clause (i) of clause (e) of section 2 from any person whether by way of arrears of rent or damages or costs shall, after the death of the person; be payable by his heirs or legal representatives, but their liability shall be limited to the extent of the assets of the deceased in their hands.

14. Recovery of rent etc., as arrears of land revenue.- If any person refuses or fails to pay the arrears of rent payable under sub-section (1) of section 7 or the damages payable under sub-section (2) of that section or the costs awarded to the State Government, any corporate authority or a local body as given in sub-clause (i) of clause (e) of section 2 under sub-section (5) of section 9 or any portion of such rent, damages, or costs, within the time, if any, specified therefore in the order relating thereto, the Collector shall proceed to recover the amount due as arrears of land revenue.

15. Bar of jurisdiction.- No civil court shall have jurisdiction to entertain any suit or proceeding in respect of the eviction of any person who is in unauthorized occupation of any public premises or the recovery of the arrears of rent payable under sub-section (1) of section (7) or the damages payable under sub-section (2) of that section or the costs awarded to the State Government, corporate authority or a local body as given in sub-clause (i) of clause (e) of section 2 under sub-section (5) of section 9 or any portion of such rent, damages or costs.

16. Protection of action taken in good faith.- No suit, prosecution or other legal proceeding shall lie against the State Govt. or the Commissioner or the Collector in respect of anything which is in good faith done or intended to be done in pursuance of this Act, or of any rules or orders made there under.

17. Power to make rules.- (1) The State Government may, by notification in the Official Gazette, make rules not inconsistent with this Act, prescribing all matters which by this Act are required or permitted to be prescribed or which are necessary or convenient to be prescribed for carrying out or giving effect to this Act.

(2) In particular, and without prejudice to the generality of the preceding sub-section, such rules may provide for all or any of the following matters, namely:-

- (a) The form of any notice required or authorized to be given under this Act, and the manner in which it may be served;
- (b) The holding of inquiries under this Act;
- (c) The procedure to be followed in taking possession of public premises;
- (d) The manner in which damages for unauthorized occupation may be assessed and the principles which may be taken into account in assessing such damages;
- (e) The manner in which appeals may be preferred and the procedure to be followed in appeals; and
- (f) Any other matter which has to be or may be prescribed.

(3) All rules made under this Act shall as soon as may be after they are made, be laid before the State Legislature and shall be subject to such modifications as the State Legislature may make during the session in which they are so laid or the session immediately following:

18. Repeal.- The Punjab Public Premises and Land (Eviction and Rent Recovery) Act, 1959 (31 of 1959), as in force in the areas added to Himachal Pradesh under section 5 of the Punjab Re-organization Act, 1966 (31 of 1966) is hereby repealed.

**Drying of Deodar trees in Kalpa Forest Range,
District Kinnaur: A Report**



Himalayan Forest Research Institute
(Indian Council of Forestry Research and Education)
Conifer Campus, Panthaghati
SHIMLA – 171 013

Background:- Divisional Forest Officer, Kinnaur intimated that the foliage of *Cedrus deodara* trees in the Kalpa forest range, Kinnaur forest division was covered by black fungal mass and requested Himalayan Forest Research Institute, Shimla to investigate the problem and suggest remedial measures. In this context, a team of researchers: Dr. Ashwani Tapwal, Scientist-E (Plant Pathologist), Sh. Subhash Chander, Scientist-D (Entomologist) & Dr. Pradeep Kumar, Project Assistant of Forest Protection Division, HFRI, Shimla visited the affected site in Kalpa forest range during 2nd & 3rd August, 2019 and discussed the history of the disease incidence with DFO, Kinnaur and his field staff. The deodar forest in the altitude range of 2500-3000m amsl was infected, but disease was more prevalent at 2600-2800m amsl. Although, the infected compartments were dominated by *Cedrus deodara* but scattered trees of *Pinus wallichiana*, *P. gerardiana*, *Prunus armeniaca* and *Prunus cerasoides* were also seen.

The discussion with officials of state forest department revealed that the problem has gained momentum 2-3 years back and escalating to new trees with time. At present, deodar trees in ten compartments (C-234, C-239 to C-247) were infected. The compartments C- 239, C-241 and C-242 were severely infected, where about 80-90 per cent foliage of deodar trees was covered with black fungal spore mass. The compartments C-240, C-243, C-245 AB were moderately infected (40-50 per cent), while the compartments C-234, C-244, C-247 and C-246 were least infected, where, 30-40 per cent of foliage of deodar was covered with fungal spores. Visual observation revealed 10-20 per cent mortality for deodar trees having girth of 4-8 inches, while no mortality was noticed in the trees with higher girth. The symptoms of drying deodar trees were recorded and diseased samples, eggs and adults of insect-pest were collected from compartment C-241 for laboratory analysis.

Field/ Visual Observations:-

- i. After intensive survey of affected site, it was observed that the health of *Cedrus deodara* forest along the both bank of canal (Kalpa Kuhl) was poor. Higher invasion was noticed on the lower side of canal.
- ii. The leaves and twigs of *C. deodara* were covered with black powder.
- iii. The trees of all girths/ ages were infected, but few trees in the infested area appeared healthy.
- iv. Foliage of some of associated shrubs like *Berberis* and *Sarcococca* were also covered with black powder.
- v. Few young trees of *Pinus wallichiana* were also covered with black fungal spore mass.
- vi. Parasitic macrofungi were not recorded on the infected trees.
- vii. Beside the black fungal spore mass, few adults and eggs of scale insects (Sap Sucker) were recorded on infected trees.
- viii. The insect attack was observed from bottom to top of tree.



Infected trees of *Cedrus deodara* and *Pinus wallichiana* in Kalpa Forest Range

Laboratory observations:- Samples of infected plant parts, eggs and adults of insect-pest were analysed in laboratory for entomological and pathological aspects to identify the possible cause.

Pathological Examination:- Spot examination revealed that the needles of *C. deodara* trees were covered with black fungal spore mass. Therefore, the infected needles and twigs were analysed by following procedures:

I. Phyllosphere examination:- Phyllosphere examination of diseased leaves was carried by two methods.

a) Agar plate method:- Small piece of diseased leaf sample was inoculated on potato dextrose agar media, incubated at $25 \pm 1^\circ\text{C}$ and observed for the fungal growth.

b) Dilution plate method:- The diseased leaves placed in sterilized distilled water and shaken. The leaves were discarded and water was inoculated on PDA after serial dilution. The inoculated Petri plates were incubated at $25 \pm 1^\circ\text{C}$ and observed for the fungal growth.

II. Bark examination: Small pieces of bark were inoculated in moist chambers and observed for fungal growth.

III. Microscopic examination: Thin section of infected needles were cut and observed under microscope. Temporary mounts of fungi isolated from infected plant parts were prepared in lactophenol and cotton blue and observed under microscope.

Observations on pathological examination:- For disease to occur, virulent pathogen and susceptible host must occur together at a time when the environmental conditions are favorable for the development of disease. This concept, known as the “Plant Disease Triangle,” is a fundamental principle in basic plant pathology. Thus, we must consider the pathogen, host, and environment when developing approaches to predict where forest diseases will occur. As per visual observations, the foliage of most of deodar trees in the infected site in Kalpa Forest Range was covered with black spore mass and health of trees was not sound.

The laboratory observation on the infected samples revealed that the black spore mass contains the species of *Alternaria*, *Penicillium*, *Cladosporium*, *Capnodium*, *Aspergillus*, *Chaetomium*, *Cephalosporium*, *mycelia sterilia* etc. The group of fungi which form black powder on needles are known as sooty/black molds, which grow on plant exudates and honey dew secreted by insects such as aphids, whiteflies etc. Severely infected leaves shows premature defoliation in various tree species (Srivastava and Verma, 2008). These molds are not responsible for the drying of the deodar trees. Although, none of these are not serious pathogen of deodar, but in future, detailed investigation symptom

Development / pathogen invasion in nurseries as well in plantations should be done in different seasons to isolate and identify pathogens, if left in present investigations.



a) Infected forest area (satellite image), **b)** Infected trees, **c)** Needles covered with black spore mass, **d-f)** Mycobiota associated with phyllosphere and rhizosphere, **g)** spores of *Alternaria* sp., **h)** Spores of *Cladosporium* sp. **i)** Spore mass of *Aspergillus* sp.

The sooty molds are secondary colonizers and generally do not harm the plants except reducing the rate of photosynthesis. Therefore, upon controlling primary cause of invasion (insect-pest attack), the sooty molds will automatically disappear. Therefore, intensive efforts were made to search the possible insect-pest responsible for drying of deodar trees.

The practices for the management of sooty molds has been described below, but the molds isolated from the infested tree samples are not responsible for the drying of deodar trees in Kalpa forest range, therefore, the recommendation for management of associated insect-pest should be followed initially to manage the problem.

Management of sooty mold:-

- Field sanitation i.e. pruning of infected branches and their prompt destruction prevents the spread of the disease.
- Application of Rogor 30EC (0.05%) + Blitox (0.2%).
- Application of suspension of bioagents like *Trichoderma viride*, *Trichoderma harzianum*, *Pseudomonas fluorescence* etc. @8-10g of formulations / l water.
- Applications of formulations of Neem oil, which is an organic broad spectrum pesticide, fungicide and miticide.

Entomological Examination:- Examination of the Branches/twigs of *C. deodara* trees also revealed that they were covered with white woolly cocoons containing reddish colored eggs of insects. The microscopic examination revealed that the adults and eggs of insects on infected twigs belong to scale insect families. The details are summarized as follows:

Scale Insects:- Scale insects are some of the most destructive pests of conifers and ornamentals, but few are serious forest pests. The scale insects belong to order - Hemiptera, Suborder - Sternorrhyncha, Superfamily – Coccoidea and they are typically small (about 1/8 to 1/2 inch). Scales go through three life stages: the egg, the nymph, and the adult. Many scales can only move about during the nymph stage, which is also called the crawler stage. As adults, these scales cannot move around a tree and stay in one place. Depending on the type of scales, adults usually have some form of outer covering, either a hard covering or a softer, waxy one.

All scale insects pierce plant tissues and obtain nutrients by the sucking large amounts of plant sap. Localized injury may occur around feeding sites and serious damage or death may occur in heavily infested trees, each scale species usually infests only one (or a few) host species. Therefore, many scales are named for the specific host species on which they feed. Long-term and/or heavy infestations of scale can be extremely damaging to the plants on which they feed, leading to needle discoloration, defoliation, stunted growth, limb dieback, vulnerability to other pests and diseases, and even plant death.



Collected samples of *Cedrus Deodara* from Kalpa



Cocoon and eggs on observed in the braches of *Cedrus deodara*



A Scale insect shell observed under the Microscope

Life Cycle:- In the spring, female scales lay their eggs underneath their protective covering which hatch over a period of one to three weeks. The newly hatched nymphs (called crawlers) migrate out from this covering and move about the plant until a suitable feeding site is found. Young nymphs insert their piercing mouthparts into the plant and begin to feed, gradually developing their own armor as they transform into immobile adults. They do not pupate and may have several overlapping generations per year.

Laboratory observation:- The infected needles were observed under the microscope and small soft brown colored waxy shells were notice all over the needles of deodar. The shells were scratched and small insect was found imbedded under the shell. The investigations revealed that deodar forest in Kalpa is under scale insect attack and needed immediate attention to manage the attack and prevent further spread of infestation to new areas.

Management:- In order to determine the best time to attempt control, one must determine when the scale insect is in its most vulnerable stage.

- Field sanitation i.e. pruning of affected branches and their prompt destruction is the only effective cultural method to avoid use of chemical insecticides.
- Application of Monocrotophos (0.05%): Foliar spray of 1.25 ml of 0.05% of Monocrotophos dissolves in 1000ml of water.
- Oil emulsion Spray: 5ml of oil emulsion in 1000ml of water.
- Insecticide must be applied in May and early June to provide some control of heavy infestations. Insecticides should be applied just before eggs hatch and then once or twice more at 7-10 day intervals to control nymphs hatching later.
- Adult insects are protected by a waxy covering and almost impossible to kill with 6 contact insecticides. Summer or horticultural oils may improve effectiveness but they can discolor or burn plants if not applied correctly.
- Under Biological control measure Predatory lady beetle (ladybug) species (*Chilocorus*, *Hyperaspis*, *Rhyzobius*), *Crysoperla* spp. and a few species of parasitic wasps if released in the affected area usually help in controlling populations of this pest.
- Other non-persistent, contact sprays for forest trees/plants include insecticidal soap (Safer Brand Insect Killing Soap Concentrate II), neem oil - Azamax contains azadirachtin, the key insecticidal ingredient found in neem oil. This concentrated spray is approved for organic use and offers multiple modes of action, making it virtually impossible for pest resistance to develop.

An Advisory:- Chemical control of the insect-pests and diseases in forest ecosystem is not recommended due to difficulty in application, huge expenses and harm caused to wildlife, beneficial microbes and insects, associated healthy vegetation and contamination of soil and underground

water resources. Therefore, it is advised to initially follow the good cultural practices (planting, pruning, controlled lopping etc.). It will help in reducing pest inoculums below threshold level and further spread of disease.

Methodology for application of pesticides:- Take a clean bucket. Prepare **Monocrotophos** solution as per the availability according to the suggested concentrations e.g. to make 5lt. solution of **0.05% Monocrotophos**, add 6.25 ml. of **Monocrotophos** in 5 litres of water. For the application of **monocrotophos 0.05%**, dissolve 0.05 ml. of **monocrotophos** in 1000ml of water and make desired volume through this method to cover the entire foliage of the trees. Stir well with the help of iron rod. After preparing desired volume spray with the help of Knapsack sprayer, but before that take necessary precautions enlisted below to prevent any harm to human body. Repeat the same application after 15 days to prevent the foliar damage.

While using these chemicals, necessary safeguards are maintained so as to protect lives.

Precautions and safeguard measures in Handling the Pesticides:-

The following general precaution should be followed in handling the pesticides:-

1. The pesticides should be retained in their original labelled containers.
2. The pesticides should be kept in a locked cupboard or closet so as to be out of reach of children, pets and other domestic animals.
3. Pesticides should not be stored near food-stuffs or medicines.
4. The labels on the containers should be carefully read and the instruction strictly followed.
5. A separate knife should be kept for purposes of opening bags or tin containers.
6. Empty containers of pesticides should be destroyed and should not be used for any other purpose.
7. Inhaling of pesticides sprays or dust when mixing or applying them should be avoided.
8. Dusting or spraying should never be done against the wind and when the wind is high. These operations should preferably be done in the early hours of forenoon.
9. Protective clothing and devices should be used while handling pesticides to avoid exposure to spray or drifts.
10. Spilling of pesticides on skin or clothing should be avoided.
11. While applying solution bare hands should never be used for mixing the solution. It is advisable to use a long-handled mixer to avoid splashing.
12. While handling pesticides; smoking, eating or drinking should be avoided.
13. After application, hands and other exposed parts of the body should be thoroughly washed with soap and new clothes should be worn.
14. The nozzles or other parts of equipments should not be blown by mouth and contaminated washers from spray appliances should be buried.
15. The appliances and empty containers should not be washed near a stream or well, as it will contaminate the water.
16. The clothes worn during spraying or dusting operations should be washed after each operation.
17. Persons engaged in handling of pesticides should be checked periodically by a physician.
18. In the case of any suspected poisoning due to pesticides the nearest physicians should be called in immediately.

Department of Forests

No. FFE-B –C (15) -3/2005

Dated : shimla -171002 the

25-02-2017

The Governor of Himachal Pradesh is Pleased to notify the “ HP Forest Department Re-revised Eco- Tourism Policy -2017 “ enclosed as Annexure – I (15- Pages) approved by the State Cabinet vide Memorandum under Item No. 9.7 On dated 17-02-2017.

By Order

(Tarn Kapoor)

Pr. Secretary (Forests) to the
Government of Himachal Pradesh

Endst. No. as

Dated Shimla – 171002

25-02-2017

Copy forwarded for information and n/a to:

- 1 The ACS to the Hon'ble Chief Minister, HP
- 2 The Private Secretary to Hon'ble Chief Minister, HP.
- 3 The Private Secretary to Hon'ble Forest Minister, HP.
- 4 The Private Secretary to the Chief Secretary to the GoHP.
- 5 All the ACS/ Pr. Secretaries/ Secretaries to the GoHP.
- 6 The Principal Chief Conservator of Forests (HoFL) HP, Shimla-I
- 7 The Principal Chief Conservator of Forests (WL) HP, Shimla-I
- 8 The Managing Director, HPSFC Ltd. Shimla -171009.
- 9 The Accountant General, H.P. Shimla -4.
- 10 The Sr. Dy. Accountant General, H.P. Shimla -4.
- 11 All the Deputy Commissioners in H.P.
- 12 All the Conservators of Forests, Himachal Pradesh.
- 13 All the DFOs in Himachal Pradesh.
- 14 The Controller, Printing and Stationary Department , HP Shimla 171005 with a request to publish the Notification in Extra Ordinary Gazette at early date with 5 extra copies.
- 15 GAD Section, HP Secretariat w.r.t. the cabinet decision dated 17- 02-2017.
- 16 Guard file (100) spare copies.

(Sat Pal Dhiman)

Joint Secretary (Forests) to the
Government of Himachal Pradesh

**HIMACHAL PRADESH FOREST DEPARTMENT
RE-REVISED POLICY
ON**

**DEVELOPMENT OF ECO –TOURISM
IN HIMACHAL PRADESH**

2017

1 PREAMBLE

Himachal Pradesh, known for its rich natural heritage, is amongst the top tourist destinations in the country, both for national as well as international visitors. Recent estimate, Place the number at about 160 lakh visitors – more than twice the State’s population. However much of the tourism related activity is concentrated in four major locations, Shimla, Manali, Dharamshala and Dalhousie. A majority of the visitors do not get an opportunity to experience the rich bio –cultural diversity contained in the many Forest areas, Sanctuaries and National Parks that comprise such a large part of Himachal Pradesh. The Forest Department of Himachal Pradesh framed an Eco- tourism policy during 2005 to enable tourist to experience this national heritage. The policy needed revision mainly due to the procedural requirements of obtaining clearance of Eco-tourism sites under Forest Conservation Act, 1980 as per guidelines of the Ministry of Environment, Forest & Climate Change (MoEF&CC) Government of India. Some changes in the existing policy document have also been necessitated in the context of the evolving understanding of Eco- Tourism concepts and principles.

The Revised Eco- Tourism policy 2016 aims at bringing the wilderness and virgin ecosystems of Himachal Pradesh closer to visitors and at the same time ensure adequate safeguards and systems for the protection and conservation of these natural resources. By involving local communities, the Policy would help in increased livelihood opportunities as well as their involvement in awareness building protection and conservation. It also envisages generation of financial returns which can be ploughed back into proper upkeep and maintenance of the environment. It shall also promote greater understanding and appreciation for natural and cultural heritage.

The ongoing Eco – Tourism projects also need to be re-looked at reviewed in view of the Central Ministry’s guidelines on Eco- Tourism. It may be necessary to evaluate the on – going projects in order to decide on their further continuation after the culmination of the term of these projects.

2. CONCEPT

‘Eco- Tourism’, in a very broad sense, means venturing into and enjoying nature in such a way as to assure that negative impacts on the cultural and natural environment are minimized and mitigated. It is, therefore, ‘responsible’ tourism, which, besides being ecologically sensitive, helps the local communities in realizing social and economic benefits.

This Policy is based on the understanding that involvement of local communities in eco- tourism would support their livelihood needs and consequently create a stake for them in the conservation of local culture, and environment.

3. VISION & OBJECTIVES

The vision is to preserve and protect the natural (both flora and fauna) and cultural heritage of Himachal Pradesh, provide opportunities to enhance livelihood of local people, generate resources for sustainable development and promote greater understanding and appreciation for this heritage through authentic Eco- Tourism initiatives.

The Eco-Tourism Policy would encourage a partnership between civil society (local communities NGOs, Eco-Clubs, academic institutions) as well as private enterprises / businesses and the State Government Departments of Forest, Tourism, Fisheries, I & PH, Power & PWD.

4. MISSION STATEMENT

To make Himachal Pradesh a leading Eco- tourism destination, with Eco- Tourism attracting at least 10 % of overall tourists visiting the State by the year 2030

5. PRINCIPLES

Eco- Tourism can be one of the most viable options for conservation of natural resources and sustainable development in a mountain State like Himachal Pradesh. It has to be executed mindfully, with

the minimum impact to inspire cultural awareness, tolerance, and commitment to natural resource conservation. The following Eco- Tourism Principles will form the basis of this policy.

Design, construct and operate low – impact facilities.

- Provide a positive experience for both visitors and hosts.
- Build environmental and cultural awareness and respect.
- Minimize physical, social and behavioral impacts.
- Provide direct financial benefits for conservation and livelihood opportunities to local communities.
- Deliver memorable interpretative experience to visitors
- Recognize the rights and spiritual beliefs of the local people

6. STRATEGY

The Principles outlined above will be pursued through an appropriate strategy that comprises the following components:-

A. Institutional Arrangements :

- (i) Forest Department has created a Special Purpose Vehicle in the form of ‘ Himachal Pradesh Ecotourism Society ‘ (HP EGOSOC) , registered vide No. 422 dated 30-06-2006 under the Registration rule of Societies Act 1860 to assist in delivering the mission and objectives of the Policy.
- (ii) HP ECOSOC covers the entire State. It will work with eco- tourism Societies at Division / Circle level to facilitate PPP initiatives at identified locations and provided guidance in furtherance of the principles underlying this policy.

The Division / Circle level societies shall be chaired by the concerned Conservator of Forests/Chief Conservator of Forests of the Forest Circle concerned. The local Divisional / Circle level Society and a member of the Governing Body. The District Tourism Development Officer and representative of Deputy Commissioner as well as representatives from the Zilla Parishad, Panchayat Samiti, Nagar and Gram Panchayats will be members of the Governing Body New Circle level Societies shall be constituted where these do not exist already and existing Division level Societies shall be merged into respective Circle level societies in due course of time. The Division / Circle level Societies can meet on quarterly basis to review, monitor and evaluate the implementation of various activities of all Eco- tourism projects in a Circle. The Constitution is suggested as under:

- | | | |
|--------|--|-------------------------------|
| (i) | Chairman | CF/CCF concerned |
| (ii) | Member Secretary | DFO (T) / DFO (HQ) of Circle |
| (iii) | Representative of Deputy Commissioner | Member |
| (iv) | Representative of Zilla – Parishad | Member |
| (v) | Representative of Gram Panchayats | Member |
| (vi) | Representative of BDC | Member |
| (vii) | Representative of Tourism Dep | Member |
| (viii) | All DFOs of the Circle | Member |
| (ix) | DM Forest Corporation | Member |
| (x) | NGO /CBO working in the field within the Circle Member (one person). | |

This Governing body will be responsible for approving the annual budgets, action plan. The society will have Supervision Committees headed by the concerned DFOs who will be responsible for all the day to day operations and preparing the budget and annual plan etc. for approval of the Governing Body. The constitution of the Supervision Committee shall be as under.

1. Divisional Forest Officer	Chief Executive Officer.
2. Divisional Manager of HPSFDSC Ltd.	Member
3. All R.Os of Concerned Division	Member
4. Pradhan of the Gram Panchayt	Member
5. SDO (I& PH)	Member
6. Representative of HIMURJA	Member
7. A.M. HPSFDC Ltd Concerned	Member
8. NGO / CBO (One Member)	Member

The Supervision Committees will look after projects and activities in the area of the Division.

- (iii) These Division / Circle level societies will send their proposals for fresh eco- tourism sites to HP ECOSOC for securing Government approval and further action for getting project proposals prepared and securing partners for their operation, by following the procedure laid down in this policy.

B. Creating awareness and capacity building of the principal stakeholders:-

- (i) HP ECOSOC will concentrate on capacity building through experience sharing. Workshops, training programmers and field visits etc, either in –house or through carefully selected organization / entities.
- (ii) To inculcate the spirit of environmental awareness at an early age, the Division level Societies would engage students at various levels beginning at the Primary level.
- (iii) HP ECOSOC will develop appropriate training modules (continuous. Practical & participatory) and training material /case studies for the various stakeholders and ensure that emergence of appropriate technologies is to be advanced.
- (iv) Training programmers for nature guides appreciation of flora /fauna shall be organized. It shall be the endeavour of the Division level Societies to train a pool of certified nature guides and provide them livelihood opportunities.
- (v) Division /Circle level Societies shall liaise with Community Based Organizations (CBOs) working in the field of Natural Resource Management for providing them training and other material relevant for eco-tourism.
- (vi) For their education and awareness activities, HP ECOSOC and Division level Societies shall leverage funds through the Externally Aided Projects, the CAT Plans, Capacity Building programmers of H.P. State Tourism Development Board and resources generated from projects developed under PPP mode.

C. Community Involvement

- (i) The Endeavour would be to extend maximum benefit to local community either in the form of employment or resource generation. Local communities will be encouraged to come forward to take

- up various economic or promotional activities in their areas for furthering the vision and objectives of this policy.
- (ii) Such local communities could be in the form of PRIs, CBOs, User Groups, Mahila Madal , Yuvak Mandals, Forests Development Committees, Watershed development Committees, Eco-Clubs, Self –help groups etc.
- (iii) Members of the local community will be represented in the Division / Circle level societies as well as in Executive body.

D. Coordination with partner Departments

- (i) Necessary linkages and synergies in the policies and programs of all concerned departments/ agencies will be aimed at establishing effective coordination mechanisms at the State and the District levels.
- (ii) Linkages with other partner Departments shall be established in the HP ECOSOC (at the level of Governing Body and Executive Committee) and other societies.
- (iii) Linkages with other policies / programs of the State Government / other States & Eco-Tourism Societies of India will be established, such as the State Forest policy and the New Sustainable Tourism Development Policy 2013, etc.

E. Marketing

- (i) HP ECOSOC shall provide a platform for effective marketing through website and website linkages, which shall provide information for online booking of facilities.
- (ii) Tie ups shall be facilitated with organization / entities /tour operators / travel agents/ hoteliers engaged in tourism promotion.
- (iii) HPECOSOC shall utilize the service of publicity wing of Forest Department for popularizing the eco-tourism destinations during fairs and festivals.
- (iv) The service of print and electronic media shall be utilized for dissemination of eco –tourism hot spots and potential sites so as to lure the ‘discerning tourist’.
- (v) Forest Rest Houses included under eco-tourism shall be used for marketing of eco- tourism products like camps/ nature walks / trekking etc. by enhancing its infrastructure.

F. Important Stakeholders and their functions:

- a) **Visitors:-** Responsible travel to natural areas and marking available financial contribution for conservation for natural heritage and empowerment of local people.
- b) **Local Communities:-** Provide positive experiences for the visitors.
- c) **HP ECOSOC (Special purpose Vehicle):-** Practice and promote ecotourism according to the principles of ecotourism; Capacity building of stakeholders; key interface for ensuring FCA Clearance and PPP partners.

- d) **Division / Circle level Societies:** Managing all operations for responsible eco- tourism at ground level.
- e) **Government Departments (Forests, tourism , PWD , I& PH, Rural Development , Revenue):-** Provide positive experiences for the visitors ; Minimize impact; Build environmental, cultural awareness and respect. By implementing and educating others about ecotourism, contribute to the positive and more sustainable development of the tourism industry.
- f) **Concerned Panchayat, BDC and Zilla Parishad:-** Provide positive experiences for the visitors.
- g) **Partners managing sites:-** Practice and promote ecotourism according to the principles of ecotourism.

G. Development & Management of Eco- Tourism Assets.

- (i) The State already boasts of a few van vihars and nature awareness centers. It shall be the endeavour to bring all the facets of such nature tourism related assets into a common fold under the aegis of the institutional arrangements envisaged in this policy.
- (ii) Development of nature parks / van vihars, nature trails etc. that are important from eco- tourism point view shall be carried out so that not only the tourists outside State have access to nature. State dwellers shall also have an opportunity for nature appreciation and recreation. Decisions with respect to utilization and management of these assets shall be taken by the Division / Circle level Societies.
- (iii) Eco- tourism circuits shall be created, which will allow the visitors to access the existing infrastructure of Forest Rest Houses/ Eco – Tourism Camping sites.
- (iv) HP ECOSOC Shall facilitate selection of partners for Eco- Tourism sites in PPP mode after taking approval of Government of HP. The guidelines about the management of existing Eco-Tourism sites are also provided in this policy document. Adherence to guidelines will be overseen by the Division / circle level societies.
- (v) Trekking routes shall be popularized and arrangements shall be worked out to offer trekking packages to the discerning tourist. Who may like to visit rural and interior areas of the state.
- (vi) Eco- tourism societies at division level shall endeavour to tie up with school groups and colleges for organizing camps in selected forest Rest House/ Eco- Tourism camping sites operating under its aegis.
- (vii) Eco circuits shall be created by these societies to link the potential sites.

H. Development and Management of New Eco- Tourism sites through Departmental Mode and public private partnership (PPP):-

A constructive and mutually beneficial partnership ;between the public and the private sector would be worked out for development of New Eco- Tourism projects under public private partnership

mode as per the provisions made under Himachal Pradesh Infrastructure Development Act, 2001. Some sites shall be developed by the H.P. Tourism Development Corporation (HPTDC) and the HP State Forest Development Corporation Ltd (HPSFDC) which are agencies of the State Government. HPTDC will be given preference over HPSFDC if they ask for the same site. They will, however, be given only those sites which they want to run on their own. Few sites shall be developed in department. ECOSOC & Circle level Societies may therefore take action accordingly.

(i) Type of Structures allowed :-

No permanent structures will be allowed. Only following types of structures will be allowed:-

- (a) Tents of various types;
- (b) Wooden structure and
- (c) Pre-fabricated structures which can be removed.

In all these cases flooring of cement or tiles or stone may be put up without building deep foundation.

(ii) Modes of Operation :-

The sites may be operated in the following mode:

- (a) By the societies directly on departmental mode;
- (b) By the H.P. Tourism Development Corporation / H.P. Forest Development Corporation and;
- (c) Through a private party/ outsourcing agency/ PPP mode. These will be given directly by the Forest department.

Even in departmental mode some services may be outsourced or given in PPP mode. Detailed terms and model agreement will be developed for the sites.

(iii) Investment /Building of infrastructure:-

Infrastructure i.e. paths, roads, sewerage, water supply and all buildings / structures may be developed in the following alternatives:-

- a) All infrastructures to be built by Societies/ Tourism Corporation/Forest Corporation;
- b) Partial infrastructure by Societies & Partially out-sourced /private agencies;
- c) All infrastructures by out-sourcing to private agency/ PPP mode.]

Whoever builds the infrastructure, the ownership will lie with the forest department i.e. Government. The private party or Corporations, if allowed to build infrastructure, will be on behalf of forest department and assets created will therefore be owned by Forest Department only.

The private party will build infrastructure only in land allotted. In case any work pertaining to water supply or sewerage has to be done outside the allotted area. Forest department may be asked to do the work on payment basis or society may do it. If any infrastructure belonging to forest department of Government falls in the area it may be allowed to be used if included in the project by the forest department.

(iv) Nature/ Forest awareness Centers:-

Those sites where all infrastructures belong to forest Department and is primarily used for creating of awareness about nature/ forests, training regarding environmental protection/nature/forestry and spreading message to the community, generating interest in nature are considered as Forest sites and will also serve as Nature/ Forest Awareness Centers. These centers

will have experts on the subject and literature/ audio visual aids and material etc. to create awareness about Nature/ Forest and sensitize the visitors Environmental Conservation.

(v) Time period of allocation to private parties:

- i. When all investment is made by Society (ies) of Forest Department: 3 years extendable by 2 years.
- ii Where major investment is made by the private party- out sourced agency: 10 years extendable by 5 years. The time period of allocation for Tourism/ forest Corporation will also be 10 years extendable by 5 years.

(vi) Common facilities:

In all the modes of operation. It shall be ensured that following common facilities are available to the visitors:-

- a. Booking arrangement;
- b. Website; and
- c. Publicity.

(vii) MoEF&CC, GoI Guidelines regarding FCA clearance for Eco- tourism Projects:

As per ministry of Environment, Forests & Climate Change, GOI guidelines, an Eco-Tourism project implemented in PPP mode, shall require prior approval of Central Government under the Forest Conservation Act, 1980 if it involves or one or more of the following, namely,

- (a) De- notification of Forest land or apportion thereof.
- (b) Breaking up or clearing of a forest land or portion thereof.
- (c) Assigning any forest land or any portion thereof by way of lease or otherwise to any private person to any authority, corporation, agency or any other organization not owned, managed or controlled by government.
- (d) Clearing of trees which have grown naturally in a forest land or a portion, for the purpose of using it for reforestation.

Efforts will therefore be made to identify sites where none of the above is involved and no forest land is required to be given on lease or breaking of land or cutting of trees is involved. Only in rare cases where there is no alternative, sites requiring FCA clearance be taken up.

(viii) Allotment of Projects:-

Such projects shall be allotted to the private sector through a transparent and competitive process. The Guidelines issued by the Ministry of Finance, Government of India for Formulation, Appraisal and Approval of Public Private Partnership Project shall be broadly followed for greater transparency. The following stepwise procedure shall be followed.

a) Step-I: Project Identification- Selection of new sites:-

New Eco- Tourism Projects proposed to be taken up through PPPs may be identified through various channels of Forest Department and Forwarded to the HP ECOSOC by Circle level societies. The forest land to be leased out for each project shall be maximum up to one (1) hectare and no felling of trees should be involved HP ECOSOC will assess prima facie feasibility keeping in view relevant parameters of access, infrastructure, attractions, etc. and secure government approval to

proceed further in the matter. This will involve engaging of consultants for project formulations, preparation of bidding documents and assisting in this process. The Himachal Pradesh Infrastructure Development Board (HPIDB) shall be asked to assist in this process as envisaged in the HP IDB Act and as per the instructions of the Finance Department issued from time to time.

b) Step-II: Approval of HPIDB to Final Project Proposal:-

The HP ECOSOC through the Administrative shall secure approval of the HPIDB to the final shape of the project including the terms of concession agreement and period of concession. The project period shall be kept for 10 years extendable by 5 years which shall be reckoned from the date of commercial operations of one project since at least a period of 6-12 months would be spent in getting all the clearance. The documents that would need to be prepared would. Inter- alia, include the various agreements to be entered into with the concessionaire detailing the terms of the concession agreement that will specify the terms of the concession granted to the private party and will include the rights and obligations of all parties.

There could be associated agreements based on specific requirements. The proposed RFP from prospective parties will also be got approved from the HPIDB.

c) Step-III Approval of the project under Forest Conservation Act.1980:-

After the approval of the final project proposed by the HPIDB, HP ECOSOS wherever non-forestry activities are involved shall got prepared the diversion proposal through concerned Divisional level / Circle level societies and seek prior approval of the competent authority under the Forest Conservation Act, 1980 in view of the MoEF&CC's guidelines in this regard. Payment of all the costs like Net Present Value (NPV). Compensatory Afforestation (CA) and other charges so required shall be borne by the HP ECOSOS. Subsequently these funds these funds shall be realized by the Government from the Project awardees through HP. ECOSOC in due course on finalization of the award and during project of commercial operation: of the project. Alternatively when project is given on PPP mode private party may be asked of pay for these charges or asked to obtain clearance at their level.

d) Step-IV Invitation to Bids and Bid Criteria:-

Financial bids will be invited after approval of the project under FCA, 1980 has been obtained wherever required. An appropriate Concession fee will be fixed as bidding parameter for the selection of best bidder. The qualified bidder who quotes the highest best bid/price shall be selected for award of the project. Eligibility conditions for bidders will be as specified in the RFP as per criteria enclosed at Annexure-A. *For eligibility criteria, preference will be given to Himachalis.*

e) Step-V Eco-restoration:-

(i) Sites that shall be offered for Eco-Tourism project shall be returned back by the entrepreneur after the project period as envisaged in the Concession Agreement is over. The entrepreneur shall pay eco-restoration charges as specified in the Concession agreements and any subsequent agreements mutually arrived at thereafter.

(ii) Eco-restoration refers to the scientific practice of ecological restoration, which is the practice of renewing and restoring degraded, damaged or destroyed ecosystems and habitants in environment by active human intervention and action.

(iii) The idea is to bring back the site to its original condition (or as near to original as possible), through intervention designed to (a) mitigate the impacts caused by human on forest lands and (b) allow supplement process of natural rejuvenation. The structures put up will be transferred to Forest Department as such and will not be removed.

(f) Step –VI: Distribution of Revenues generated through Eco Tourism:-

(i) HP ECOSOC and Division/Circle Level Eco-Tourism Societies shall act as the repository of all possible sources of funding. Like grants from state Tourism Department of Govt. HP State CAMPA and other such sources.

(ii) HP ECOSOC and division/Circle Level eco-tourism sites, Van Vihars, Van Chetna Kendra and Nature Awareness Centers use of government assets such as rest house shall be as under:-

a) State Government Share:- 20% of the total revenue realized shall be deposited in the Government treasury.

b) HP ECOSOC Share:- 20% of the total revenue realized shall go to the HP ECOSOC

c) Division/Circle Level Eco-Tourism Society Share:- Remaining 60% revenue shall remain with the Division/Circle Level Eco-Tourism Society to implement the action plans and also for further sharing with the local Gram Panchayats/communities for which appropriate guidelines shall be framed.

d) HPSFDC Ltd/ HPTDDC Share:- The HPSFDC Ltd/ HPTDDC shall make use of 60% share for the Promotion of Eco-Tourism as well as a proportion out of this amount shall go as revenue to the Corporation Appropriate guidelines will be framed for this purpose.

i) Impact assessment studies, research and ‘do not disturb’ practices:

i) Impact assessment studies would be carried out at periodic intervals so as to ascertain impacts of eco-tourism on environment and remedial measures taken.

ii) Impact assessment studies would also be carried out to gauge the efforts been made for education and awareness about nature and ecology through eco-tourism.

iii) The number of tourists permissible shall be kept within limits. The carrying capacity concept will be the cornerstone of State’s Eco- Tourism Policy. Carrying capacity shall be determined for various eco-tourism products i.e. sites, trekking site/ trekking circuits.

iv) Eco-tourism would aim to have low impact on environment and minimal infrastructure requirements.

v) Regulatory measures to ensure social, cultural and environmental sustainability as well as safety and security of tourists shall be enforced through appropriate instruments.

vi) A set of ‘do not disturb’ guidelines would be issued for educating tourists, private enterprises so as to inculcate the right eco-tourism spirit. To minimize the use of resources for recreation and for general protection of nature.

vii) Research shall be undertaken in various facets of eco-tourism, with a view to encourage eco-tourism, minimize negative impacts, eco-restoration techniques and technologies and to offer better eco-tourism products including their marketing.

j) Future Policy for Existing Sites- Impact Assessment Studies:-

Impact assessment studies to evaluate the on-going projects shall be carried out immediately based on that, fresh project formulation is proposed by following the same process as already specified for new sites. The only difference will be in selection of PPP partner. Swiss Challenge method will be used for allotment on the culmination of the term of the project. This will allow the existing partners (subject to their meeting eligibility conditions) to match a higher financial bid by any other person, subject to any minimum conditions of original bid amount specified in the RFP. The existing sites given for the term less than specified in the policy i. e. ten year expendable by five years may be brought under the amended policy through mutual agreement.

k) Eco Club:-

An Eco-Club will be created at the state level for promotion of Environment conservation related activities. Any individual interested in Environmental conservation and nature may become member of the Club. The club will promote Environment & Nature conservation in Himachal Pradesh. All the persons staying in any of the Eco-Tourism sites will be encouraged to become members of the club in order to continue their long term association with the eco-tourism sites it is hoped that the membership will increase gradually and will go in lakhs. There will be tremendous support for such environmental friendly activities in HP. Eco- clubs will be registered as separate society with Chief Secretary as Chairman and the Hon'ble Chief Minister as Chief Patron.

Eco Tourism Project in Himachal Pradesh

Minimum Eligibility Criteria: (SUGGESTIVE)

To be considered as technically qualified, a Bidder shall fill the following eligibility criteria (the "Minimum eligibility Criteria")

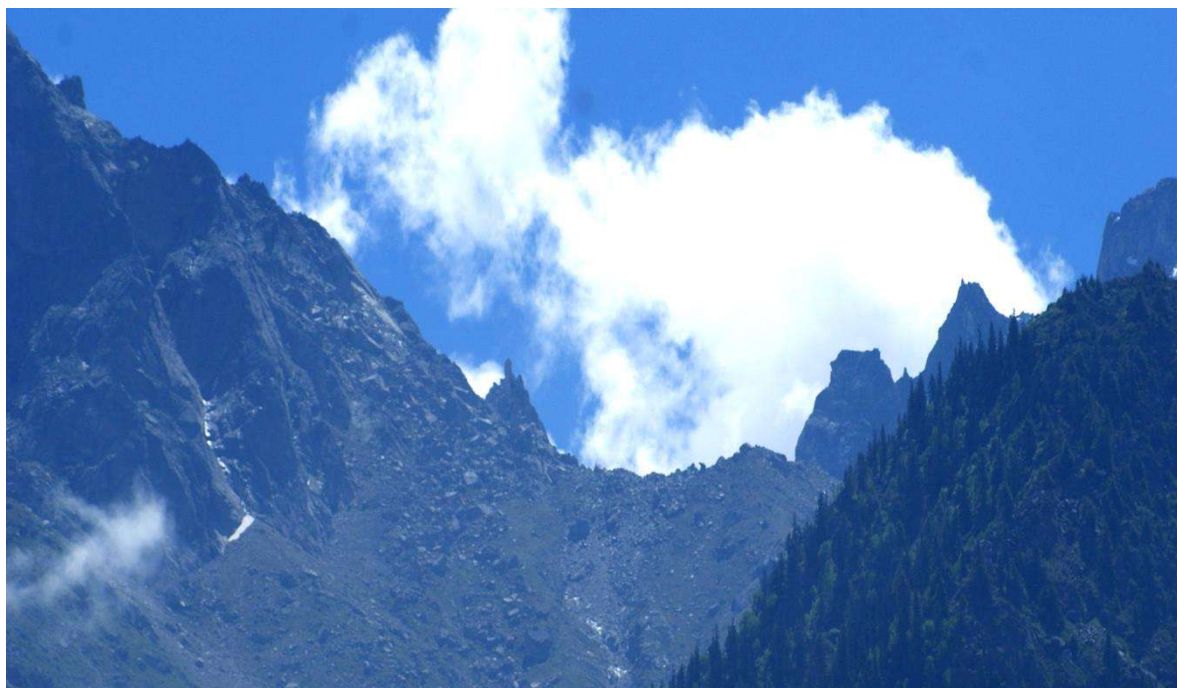
- A. Technical Capacity:-** For demonstrating technical capacity and experience (the "Technical Capacity") the bidder shall over the past 1(one) financial year preceding the Bid Due Date, have operated in India, any travel & tourism or entertainment project with minimum turnover/income of(2 project cost). *Provided further that in case of Himachali enterprises. This shall be 1.5 x project cost.*
- B. Financial Capacity:** the Bidder shall have net worth (the "financial capacity") of 0.5 of project cost in absolute amount at the close of preceding financial year. *Provided further that in case of Himachali entrepreneurs, this shall be 0.3 of project cost.*

Definition of Travel & Tourism or Entertainment Project:

- 1 Eco Tourism activities as per central/state govt. guidelines
- 2 Hotel & restaurant
- 3 Resorts
- 4 Heritage or Historical Monuments
- 5 Museum & Galleries
- 6 Lodging & Catering
- 7 Transport
- 8 Tour Operators
- 9 Travel Agents
- 10 Information & Guiding
- 11 Adventure
- 12 Wildlife Attraction
- 13 Castles
- 14 Leisure Parks
- 15 Sports Complex
- 16 Event Management
- 17 Multiplex
- 18 Shopping Mall & Festival

19	Banquets
20	Cinema & Film
21	Theatre

Status of Biodiversity in Kinnaur, Himachal Pradesh



Compiled by

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&

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Preface

Kinnaur surrounded by the Tibet to the east, in the northeast corner of Himachal Pradesh, about 235 kms from Shimla is a tremendously beautiful district. It has three high mountains ranges, namely, Zaskar and Himalayas that enclose valleys of Sutlej, Spiti, Baspa and their tributaries. The slopes are covered with thick wood, orchards, fields and hamlets. At the peak of Kinnaur Kailash mountain is a natural rock Shivling (Shiva lingam). The slopes are covered with thick wood, orchards, fields and picturesque hamlets. The much religious Shivlinga lies at the peak of Kinner Kailash mountain.

Kinnaur is situated high in the Himalaya, where vegetation is sparse and consists primarily of hardy grasses. Alpine species such as juniper, pine, fir, cypress and rhododendron can be found at elevations between 3,500 and 5,000 metres. At lower altitudes, temperate-climate trees are found, including oak, chestnut, maple, birch, alder, magnolia, apple and apricot. Yaks are reared by local farmers in the higher areas. Scattered populations of the Himalayan black bear and small ponies may also be found.

Present enlisting contains a total of 1070 species of different groups of living beings including ferns, herbs, shrubs, grasses, sedges, climbers, trees, butterflies, earthworms, insects, fish, amphibians, reptiles, birds and mammals spread over 212 families. These consist of 30 species spreads over 12 families of ferns and fern allies, 606 species spread over 30 species of herbs, 194 species of shrubs and grasses belonging to 36 families, 28 species of climbers spread over 11 families, 64 species of trees spread over 26 families, 31 species of butterflies spread over 6 families, 10 species of earth worms spread over 2 families, 5 species of fish belonging to 3 families, 2 species of amphibians, 5 species of reptiles belonging to 4 families, 77 species of birds belonging to 26 families and 23 species of mammals spread over 11 families.

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IMPORTANCE OF BIODIVERSITY

Biodiversity is essential for sustaining all life on earth. The living networks and systems provide us with food, fuel, health, wealth and the other vital services on which our lives depend. The biological diversity, ecosystems and ecological processes supply us with oxygen and clean water as well. They help us to keep our lives in balance and regulate the climate. The forests convert the environmental carbon dioxide into carbon and oxygen. The loss of forests will contribute to the greenhouse effect and global warming, leading to melting of glaciers and ice caps. This will lead to submerge the low lying areas in the world (Japan and many island countries for example) due to rise in the sea level. The biodiversity is very essential for regulating the ecological processes, such as recycling of nutrients, soil formation and for maintaining water cycle in the biosphere. The value and importance of biodiversity can be classified into direct and indirect values.

I. Direct Values

The direct value of biodiversity includes the benefits we directly derive from the biological resources. It includes food resources like grains, pulses, vegetables and fruits from plant resources and meat, fish, egg, milk and milk products from animal resources. Medicines, timber, fuel, fiber, wool, wax, resin, rubber, silk and decorative items are also included in direct values of biological diversity. The direct values are of two types:

1. Consumptive use value

2. Productive use value

1. Consumptive Use Values: These are the direct use values where the biodiversity products are harvested and consumed directly. These goods are mostly consumed at local level. They are discussed below under separate headings:

i. Foods: We use plants and animals and their products as food materials to obtain energy for carrying out our day to day activities. We use plants and their products like cereals, vegetables, pulses and fruits as a source of energy, which are given below:

a. Major cereals: Wheat, maize and rice constitute more than two third of the food requirements all over the world. They are the chief source of carbohydrates and to a lesser extent of proteins also. They contain carbohydrates (mainly starches, 65-75%), proteins (6-12%), fat (1-5%) and traces of minerals and vitamins.

b. Minor cereals: Oats, sorghum, rye, barley and various millets are still a part of staple diet in many parts of the world. They provide carbohydrates and fibre.

c. Vegetables: They provide us with minerals, vitamins and fibre. Cauliflower, cabbage, pumpkin, ladyfinger, bitter gourd, bottle gourd, brinjal, amaranth, beans, broccoli, carrot, pea, ivy gourd, spinach, potato, snake gourd, tomato, zucchini, etc. are some of the important vegetables in India.

d. Fruits: They are rich source of carbohydrates, vitamins and mineral besides flavonoids, which have many health promoting benefits. Apple, mango, banana, guava, kinnow, orange, water melon, papaya, grapes, pear, peach, strawberry, raspberry, jamun, amla, cherry, figs, muskmelon, jujube, kiwi fruit, persimmon, litchi, pineapple, pomegranate, loquat, sapota, etc. are some of the important fruits in India.

ii. Meat and Fish: Meat and its products are held in high esteem in most societies. It provides proteins, minerals and vitamins to the human beings. Egg and fish are the largest source of protein in the world.

iii. Fuel: The forests have provided wood that is used as a fuel since ages. The fossil fuels like coal, petroleum, natural gas are also product of biodiversity which are directly used by humans.

iv. Timber: It is used for making houses. Various kinds of furniture can be made from the wood obtained plant resources.

v. Drugs and medicines: A number of therapeutically useful substances are present in plants. 25% drugs are obtained from a mere 120 species of plants in modern pharmacy. Some 25,000 species of plants are being used in traditional medicines worldwide. More potent medicines can be prepared by chemically modifying the therapeutically useful plant biochemicals. Indian traditional medical practices like Ayurveda, Tibetan medicine and Unani utilize plants or their extracts directly. The pharmaceutical industry is highly dependent on natural products for their allopathic medicines even today. Many drugs are derived from plants.

2. Productive Use Values: These are the direct use values, where the product is commercially processed and sold in national and international markets. It consists of marketable goods. Many industries are dependent upon these values. Textile, leather, silk, paper and pulp industry are dependent upon the productive value of the diversity. Natural fibers are obtained from cotton, jute,

flax, hemp, sun hemp, coir, etc. The furniture available in the market constitutes productive use value of biodiversity.

New ecofriendly biopesticides are being developed from Neem and bacteria *Bacillus thuringiensis* and marketed. A major part of plant matter is used for manufacturing paper. The varnishes for paints are prepared from resins obtained from gymnosperms.

II. Indirect Values

The biodiversity also provides many indirect benefits to human beings which support the existence of life on the planet Earth. Some of these benefits are difficult to quantify in terms of money. These include social and cultural values, ethical values, aesthetic values, option values and environmental service values. They are discussed below:

1. Social and Cultural Value: These values refer to the religious and cultural importance of plant and animal biodiversity. Many plant and animal species are considered sacred in India. Some of them like tulsi, peepal, sandalwood, cow, snake, etc. are worshipped. Some forests like sacred groves are considered holy and are not cut for any use by the local people.

Even in Himachal Pradesh, many sacred groves are present and protected by inhabitants of those areas. Some plants and animals have high esteem in the minds of Indian society. Animals like tiger, peacock and river dolphin and plants like lotus, banyan tree and mango have been named as national symbols of India.

2. Ethical Values: These values refer to the use of plant and animal species in a right and moral way. They are concerned with conservation of biodiversity present in every possible form on the planet Earth. Indian way of life stresses upon the need for conservation of every living organism. We Indians believe in the principle of ‘Live and let others live’, which implies also to the other forms of life on Earth. World Heritage Convention has granted the status of world heritage sites to 5 of our national parks (Manas, Kaziranga, Bharatpur, Nandadevi and Great Himalayan National Parks), which are rich centres of biodiversity in India.

3. Aesthetic Value: These values refer to the role of plant and animal species in beautifying our surroundings. A great aesthetic value has been attached to the biodiversity. Beautiful species of plants, birds and mammals give a natural beauty to the habitats. All of us grow ornamental plants to beautify our surroundings. Many of us maintain aquaria with beautiful fish in our houses. We

love to visit the zoos and museums to enjoy the biodiversity kept over there. The natural landscapes are also a delight to watch. They provide opportunities for recreational activities like bird watching, photography, etc. Many governments are promoting eco-tourism these days. Zoological parks, botanical gardens, national parks, wild life sanctuaries and conservatories are playing their role in providing us with aesthetic value of the biodiversity.

4. Option Values: These values refer to keeping of different species of plants and animals to fulfil specific wishes of people in future. They include the unexplored or unknown potentials of biodiversity. These wishes can be either for the better health of the future generations, for the environmental protection or for any other futuristic need. The cultivation of dense vegetable in cyclone and tsunami prone areas can protect human and animal life from the fury of these natural calamities. Genetically modified (GM) plants, animals or microbes may help the society in fulfilling the specific needs of human beings.

5. Environmental Service Values: These values refer to the role of plant and animal species in maintenance of environmental services they provide. The biodiversity plays its very important role in the generation of oxygen we breathe in and absorption of greenhouse gas carbon dioxide (CO₂) from the environment. Plants are capable of fixing atmospheric CO₂ into sugars (food for plants themselves and for all the consumers in the world) through photosynthesis. Fungi and bacteria help in recycling and maintenance of essential nutrients through carbon (C), oxygen (O), nitrogen (N), sulphur (S), and phosphorus (P) cycles. Water cycle of the Earth is regulated by the vegetation present in the biosphere. Lichens and mosses are involved in soil formation and protection from soil erosion. Microbes detoxify and decompose the wastes and sewage. Many plant species help in purifying the air from gaseous pollutants. The indoor environment of our homes contains various highly toxic pollutants like toluene, xylene, ethyl acetate, methylene, acetone, benzene, trichloroethylene and formaldehyde, which could lead to serious health problems like asthma, cancer and various allergies.

Pollination is a very important environmental service value from animal biodiversity. It is the transfer of pollen grains to fertilize the ovaries of flowers, which is an essential part of a healthy ecosystem. Most of flowering plants require help from pollinators to produce fruits and seeds. Over 100,000 species of invertebrate such as bees, moths, butterflies, beetles and flies and 1,035 species of vertebrates such as birds, mammals and reptiles serve as pollinators

worldwide. Pollinators play a significant role in the production of more than 150 food crops such as apples, almonds, melons, plums, squash, etc. Honeybees are one of the important pollinators in the world. Annual benefit of managed honeybees to American consumers has been estimated nearly \$8.3 billion. The benefits of all other pollinators to US agriculture are estimated between \$4.1 to \$6.7 billion annually. The declines in pollinator activity could have serious repercussions worldwide.

TABLE 1: FERNS AND FERN ALLIES FOUND IN KINNAUR

S.No.	Species	Common Name	Locality	Additional Information
	Adiantaceae			
1.	<i>Adiantum venustum</i> D.Don	Himalayan Maidenhair Fern	Bhabhanagar	It is native to China and the Himalayas. It is a slow to establish plant that usually grows on moist rocks and soil with a good amount of humus and dead leaves. It is very hardy, largely evergreen to -10°C, when it becomes deciduous. It is also known as black Hansraj in India for its black stalks at the fronds
2.	<i>Adiantum incisum</i> Forssk. subsp. <i>incisum</i>	Medicinal Maidenhair Fern, Nilakantha-shikhaa, Mayurshikhaa, Vahrishikha	Nigulseri	<i>Adiantum incisum</i> is an aromatic ornamental and medicinal plant. Prefers moist shady places especially on damp old walls and crevices of rocks.
3.	<i>Adiantum capillus-veneris</i> L.	Southern Maidenhair Fern, Black Maidenhair Fern	Sangla	It has subcosmopolitan worldwide distribution. It is found in temperate climates from warm-temperate to tropical, where the moisture content is high but not saturating, in the moist, well-drained sand, loam or limestone of many habitats, including rainforests, shrub and woodlands, broadleaf and coniferous forests, and desert cliff seeps, and springs.
	Aspleniaceae			
4.	<i>Asplenium dalhousiae</i> Hooker	Spleenworts	Bhabhanagar	
5.	<i>Asplenium septentrionale</i> Hoffm.	Northern Spleenwort, Forked Spleenwort.	Kharogla	It is native to western North America, Europe, and Asia, where it grows on rocks. Its long, slender leaves give it a distinctive appearance, more like a grass than a typical fern.
6.	<i>Asplenium trichomanes</i> L subsp. <i>trichomanes</i>	Maidenhair Spleenwort	Bhabhanagar	It is a widespread and common species, occurring almost worldwide in a variety of rocky habitats.
7.	<i>Asplenium laciniatum</i> D.Don subsp. <i>laciniatum</i>		Rupi	Grows as an epiphyte, sometimes lithophytic.
	Athriaceae			
8.	<i>Athyrium schimperi</i> Mougl ex Fée subsp. <i>biserrulatum</i> (Christ) Fraser-Jenk.		Rupin Pass	Prefers rock overhangs, earth banks of shaded ravines, rock crevices, sometimes among boulders

				near streams, exposed or light shade in montane grassland.
	Blechnaceae			
9.	<i>Woodwardia unigemmata</i> (Makino) Nakai	Jewelled Chain Fern	Ponda	Native to Eastern Asia from the Himalayas to China, Japan and the Philippines. It occurs in areas of high rainfall.
	Cryptogrammaceae			
10.	<i>Cryptogramma brunoniana</i> (Wall. ex Hk.) Grev.	Edge Splash Plant	Bhabhanagar	
	Davalliaceae			
11.	<i>Araiostegia delavayi</i> (Bedd. ex C.B.Clarke and Baker) Ching		Raksham	
	Dryopteridaceae			
12.	<i>Deparia allantodioides</i> (Bedd.) M. Kato	Maize Plant	Mulling	
13.	<i>Dryopteris barbigera</i> (Hook.) Ktze.	Wood Fern	Chansu	Found in Himalayas in the Alpine zone from Kashmir to Sikkim.
14.	<i>Dryopteris redactopinnata</i> S.K.Basu and Panigrahi		Kharogla	It prefers shady and moist forests and forms a shuttle-cock like structure at high altitude in western Himalayas.
15.	<i>Dryopteris cochleata</i> (Don.) C. Chr.		Solding	Found in Broad-leaved forests at 1200-1600 m altitudes.
16.	<i>Dryopteris chrysocoma</i> (Christ) C. Chr		Katgoan, Rupi	Found in thickets, broad-leaved evergreen forests, forest margins at 2400-3000 m altitudes.
17.	<i>Dryopteris juxtaposita</i> Christ		Rekong Peo	Found in valleys and riversides at 1500-2500 m altitudes.
18.	<i>Diplazium maximum</i> (D.Don) C. Chr		Solding	Plants evergreen, large. Rhizome creeping, robust, up to 3 cm in diam., with dense loose scales at apex; scales brown or chestnut, slightly shiny up to 1.5 cm, thickly membranous, margin with black band, toothed; fronds subapproximate. Found in valleys, evergreen broad-leaved forests, beside streamlets; at 900-1800 m altitudes.

19.	<i>Polystichum squarrosus</i> (D. Don) J.Sm.		Ralli	Plants evergreen. Rhizome erect, densely covered with broadly lanceolate brown scales. Found in forests; at 1900-2400 m altitude.
20.	<i>Polystichum discretum</i> (D.Don) J.Sm.		Ralli	Plants evergreen. Rhizome erect or ascending, short, densely covered with linear brown scales. Found in forests; at 1700-2900 m altitudes.
	Equisetaceae			
21.	<i>Equisetum arvense</i> L.	Field Horsetail, Common Horsetail	Sangla	Plants small to medium-sized. Rhizome ascending, erect, or creeping, blackish brown, nodes and roots with sparse long yellowish brown trichomes or glabrous. Aerial stem annual, dimorphic. Fertile stems appearing in spring earlier than sterile branches, yellowish brown. Found in forests, forest margins, under bushes, meadows, banks of rivers and streams, open fields; altitudinal zone varies from sea level to 3700 m.
22.	<i>Equisetum diffusum</i> L.		Solding, Karaba, Kuppa, Shurting	Plants small to medium-sized. Rhizome creeping, erect, or ascending, blackish brown, nodes and roots with dense long yellowish brown trichomes or glabrous. Aerial stems annual, monomorphic. Found under bushes, roadsides; from sea level to 3400 m.
	Hymenophyllaceae			
23.	<i>Mecodium exsertum</i> (Wall. ex Hook. et Grev.) Cop		Sangla	
	Ophioglossaceae			
24.	<i>Botrychium ternatum</i> (Thunb.) Swartz		Sangla	Found in shaded shrubs; at 400-1000 m altitudes.
	Pteridaceae			
25.	<i>Pteris cretica</i> L.		Bari, Ponda, Solding	Rhizome creeping or ascending, 1 cm in diam., apex with black-brown scales. The species as a whole occurs widely throughout the tropics and subtropics. Found between 400-3200 m.
26.	<i>Pteris pseudo-quadriaurita</i>		Surchoo	
27.	<i>Notholaena marantae</i> (L.) Desv.		Roghi	

28.	<i>Onychium contiguum</i> (Wall.) Hope.		Ponda	Unbelievable soft lacy deciduous fern May-Sep, 30cm or more if happy. Best in open soil in shade.
29.	<i>Onychium japonicum</i> (Thunberg) Kunze var. <i>lucidum</i> (D. Don) Christ		Kafnu	Rhizomes long creeping; scales brown or reddish brown, lanceolate. Found around stream banks, roadsides, forest margins, mountain slopes; at 200- 2400 m altitudes.
	Selaginellaceae			
30.	<i>Selaginella subdiaphana</i> Spreng.		Rupi	Terrestrial as well as epiphytic in dense forests.

TABLE 2: HERBS FOUND IN KINNAUR

S.No.	Taxon	Common Name	Habit	Status	Locality/ Habitat	Additional Information
Acanthaceae						
1.	<i>Dicliptera bupleuroides</i> Nees	Roxburgh's Foldwing	Herb	-	Solding	Found at altitudes of 500-2000 m. Flowering: November-June
2.	<i>Dicliptera chinensis</i> (L.) Juss. (Syn. <i>D. roxburghiana</i> Nees)	Chinese Foldwing	Herb	-	Forests	
3.	<i>Strobilanthes atropurpureus</i> Nees	Deep-Blue Curved Bells, Kibbu, Jaro Buti	Herb	-	Solding, Yangpa	Found growing gregariously at altitudes of 1300-3600 m. Flowering: June-October.
4.	<i>Strobilanthes urticifolia</i> Wall. ex Kuntze (Syn. <i>S. alatus</i> Nees)		Herb	-	Forests	
5.	<i>Strobilanthes wallichii</i> Nees (Syn. <i>Pteracanthus alatus</i> (Nees) Bremek.)	Kashmir Acanthus	Herb	Endemic	Solding, Rupi	
Amaranthaceae						
6.	<i>Achyranthes aspera</i> L.	Prickly Chaff-flower, Chirchita	Herb	-	Bhabhanagar	Juice is applied to relieve toothache. The ashes with honey are given to relieve cough; the root in doses of one tola is given at bedtime for night blindness, and rubbed into a paste with water.
7.	<i>Achyranthes bidentata</i> Blume	Ox Knee, Putkanda	Herb	-	Forests	This species is globally distributed in the Paleotropics. Within India, it is found throughout the hilly regions between an altitude range of 1200-3200 m, and is common in waste places and in shady oak-forests.
8.	<i>Amaranthus caudatus</i> L.	Foxtail Amaranth	Herb	-	Bari	The seeds of this species are edible, and species plants are grown as a grain crop in some parts.

9.	<i>Amaranthus cruentus</i> L. (Syn. <i>Amaranthus paniculatus</i> L.)	Red Amaranth, Chaulai, Lal Sag, Ramdana	Herb	-	Shango	This species was in use as a food source in Central America as early as 4000 BC. The seeds are eaten as a cereal grain.
10.	<i>Amaranthus retroflexus</i> L.	Red-root Amaranth	Herb	-	Forests	This plant is eaten as a vegetable in different places of the world.
11.	<i>Axyris hybrida</i> L.	Russian pigweed	Herb	-	Alpine grasslands and meadows, Scrublands	
12.	<i>Chenopodium album</i> L.	White Goosefoot, Bathua	Herb	-	Forests, Temperate grasslands, Alpine grasslands, Scrublands	Eaten as a vegetable, either steamed in entirety, or the leaves cooked like spinach as a leaf vegetable. Its black coloured seeds are very nutritious, high in protein, vitamin A, calcium, phosphorus, and potassium.
13.	<i>Dysphania botrys</i> (L.) Mosyakin and Clemants (Syn. <i>Chenopodium botrys</i> L.)	Jerusalem Oak Goosefoot	Herb	-	Forests, Alpine grassland and meadows, Scrublands.	The plant has a strong scent, reminiscent of stock cubes, and can be used as a flavouring in cooking.
14.	<i>Chenopodium foliosum</i> Asch.	Leafy Goosefoot, Strawberry Sticks	Herb	-	Scrublands	Found at altitudes of 1800-3600 m. Flowering: June-September.
15.	<i>Chenopodium murale</i> L.	Nettle-leaved Goosefoot, Australian-spinach	Herb	-	Scrublands	It is a common weed of fields and roadsides.
16.	<i>Cyathula capitata</i> Moq.	Roundhead Pastureweed	Herb	-	Sangla	Found at altitudes of 1300-2900 m. Flowering: Aug-September.
17.	<i>Cyathula tomentosa</i> (Roth) Moq.	Woolly Pastureweed, Cottony Chaff Flower	Herb	-	Forests, Temperate Grasslands.	Found at altitudes of 1400-2400 m. Flowering: June-July.
18.	<i>Krascheninnikovia ceratoides</i> (L.) Gueldenst	Pamirian Winterfat	Herb	-	Scrublands	Found at altitudes of 3500-4300 m. Flowering: June - September.

19.	<i>Salsola collina</i> Pall.	Slender Russian Thistle	Herb	-	Leo, Mulling, Nako	<i>Salsola collina</i> can threaten native plant ecosystems. This species can reduce yield and quality of numerous agricultural crops. It depletes soil moisture, interferes with tillage operations, and serves as a shelter or food source to many insects, vertebrate pests, and crop diseases.
Amaryllidaceae						
20.	<i>Allium carolinianum</i> DC.	Wild Onion	Herb	-	Katgaon, Sangla	It grows in sunlit slopes at elevations of 3000–5000 m. It produces egg-shaped bulbs up to 25 mm across.
21.	<i>Allium humile</i> Kunth	Small Alpine Onion	Herb	-	Sangla	Found on open alpine slopes, at altitudes of 3000-4000 m. Flowering: June-August.
22.	<i>Allium jacquemontii</i> Kunth	Jacquemont's Onion	Herb	-	Sangla	Jacquemont's Onion is found in Central Asia, Afghanistan, Pakistan and Western Himalaya. It is a common species in the plains and the foothills, but also found at high altitudes. Flowering: March-April.
23.	<i>Allium stracheyi</i> Baker	Jambu, Feren	Herb	Vulnerable	Temperate Grasslands	It is used very commonly as a spice to add flavor to soups and dals. Jambu is found at altitudes of 2500-3000 m in Alpine Himalayas. Jambu is traditionally believed to be useful in jaundice, cold, cough, wound-healing and other stomach problems.
24.	<i>Allium victorialis</i> L.	Alpine Leek, Victory onion, Pangari	Herb	-	Alpine grassland and meadows	Leaves, stem, flowers are eaten raw or cooked. The juice of the plant is used as a moth repellent. The whole plant is said to repel insects and moles. It is found at altitudes of 600-2500 m. Flowering: June-August. The root is antiscorbutic, carminative, diuretic and vermifuge. Used in the treatment of profuse menstruation.

	Apiaceae					
25.	<i>Angelica glauca</i> Edgew.	Chora/ Smooth Angelica	Herb	Critically Endangered	Forests	It is endemic to India found in Western Himalaya between an altitude range of 1800-3700 m. Flowering: June-August.
26.	<i>Bunium persicum</i> (Boiss.) B. Fedtsch	Black Cumin, wild jeera	Herb	-	Forests Dry scrubby slopes	This plant and its derivatives are valuable compounds that have antimicrobial, antioxidant, anti-inflammatory, anti-diabetes, antihyperlipid and analgesic properties. Its essential oil contains high levels of oxygenated monoterpenes, especially γ -Terpinene, cuminaldehyde, p-cymene and limonene, which has high antimicrobial and antioxidant effects.
27.	<i>Bupleurum candollii</i> Wall. ex DC.	Himalayan Thorowax	Herb	-	Pangi	Found in mixed forests on shady slopes, open forests, mountain slopes, grassy places, at altitudes 2400-4000 m. The roots are famous for their use as the traditional Chinese medicine “chai hu” for treatment of coughs, fevers, and influenza.
28.	<i>Bupleurum falcatum</i> L.	Chinese Thorowax	Herb	Endemic	Forests, Scrublands	Used in Chinese medicine for over 2,000 years as a "liver tonic"
29.	<i>Bupleurum falcatum</i> ssp. <i>marginatum</i> Wall. ex DC.	Margined Chinese Thorowax, Singu, Jangli jeera	Herb	-	Rarang Panoong	It is found in the Himalayas, at altitudes of 1500-4000 m. Flowering: May-August. It is one of the more important herbs used in Oriental medicine. It has a reputation for its ability to relieve liver tension and digestive disturbances, and because it is detoxifying and antimicrobial. The essential oil in <i>Bupleurum</i> is responsible for its ability to relieve surface heat.

30.	<i>Bupleurum jucundum</i> Kurz		Herb	Endemic	Karaba, Nichar, Kharogla	Native to W. Himalaya, at elevations up to 3,000 metres. The root is diaphoretic, febrifuge. It is used in the treatment of liver problems
31.	<i>Bupleurum longicaule</i> Wall. ex DC. (Syn. <i>Bupleurum himalayense</i> Klotz.)	Long-Stem Thorowax	Herb	-	Forests, Alpine grassland and meadows	Found at altitudes of 3000-4400 m. Flowering: June-September.
32.	<i>Carum carvi</i> L.	Caraway, Persian cumin, Kala Jeera	Herb	-	Temperate Grasslands, Alpine grassland and meadows	Found in moist meadows, arable land and waste places from lowland to mountain elevations. It appears to have its origin in Asia Minor. The evidence of caraway was found in Middle Eastern Asia about 5000 years ago. The plant was well known to the ancient Egyptians and was introduced about 1000 years ago from northern Africa into Europe. It has an economic importance, being used and cultivated in several regions.
33.	<i>Chaerophyllum aromaticum</i> L.	Broad-Leaved Chervil	Herb	-	Sangla	
34.	<i>Chaerophyllum villosum</i> Wall. ex DC.	Hairy Chervil	Herb	-	Forests, Scrublands	Moist shady places at elevations of 2100 - 3500 metres
35.	<i>Ferula jaeschkeana</i> Vatke	Wild Asafoetida, Hing, hingupatri	Herb	Vulnerable	Forests, Temperate Grasslands, Scrublands	It is a tall perennial herb up to 2 m tall, with large 2-3-pinnate leaves with broad oblong, finely toothed leaflets, and large compound umbels of yellow flowers. It is found in the Himalayas, from Pakistan to Himachal Pradesh and C Asia, at altitudes of 2400-3600 m. Flowering: April-June.
36.	<i>Heracleum candicans</i> Wall. ex DC.	Himalayan. Hogweed,	Herb	-	Ralli	It is a common herb rarely cultivated and found in the alpine zone at an altitude ranging from 2500-3200 m. It is generally

		Tookar, Ngonboo Mo				found in dry type of areas such as slopes of mountains and on rocks. The roots are a very good source of xanthotoxin, which is used in the preparation of suntan lotions and to some extent for the treatment of leucoderma. Xanthotoxin isolated from the plant is highly efficacious in the treatment of leucoderma and psoriasis. <i>H. candicans</i> produces furanocumarins, which are converted to xanthotoxin.
37.	<i>Heracleum lanatum</i> Michx.	Cow Parsnip	Herb	Vulnerable	Forests	Traditionally eaten as a green vegetable by native peoples throughout much of its range, it is also called Indian rhubarb or Indian celery.
38.	<i>Heracleum pinnatum</i> C.B. Clarke	Pinnate-Leaved Hogweed, Gandhrayan	Herb	Endemic and Vulnerable	Rarang Panoong	Found at altitudes of 3000-4500 m. Flowering: June-August
39.	<i>Meeboldia achilleifolia</i> (DC.) P.K. Mukh. and Constance (Syn. <i>Pimpinella achilleifolia</i> (DC.) C.B. Clarke)		Herb	-	Forests	Found in forests, grassy slopes at around 3500 m altitude.
40.	<i>Pimpinella acuminata</i> (Edgew.) C.B. Clarke	Aniseed	Herb	Endemic	Forests	
41.	<i>Pimpinella diversifolia</i> DC.		Herb	-	Forests	
42.	<i>Pleurospermum brunonis</i> (DC.) Benth. ex C.B. Clarke	Brown's Paper Cup Flower	Herb	Endemic	Alpine grassland and meadows	Found at altitudes of 3300-4500 m. Flowering: July-September.
43.	<i>Pleurospermum candoleii</i> Benth. ex C.B. Clarke	Paper Cup Flower	Herb	Endemic	Alpine grassland and meadows	Found at altitude range of 3500-4800 m.
44.	<i>Pleurospermum stellatum</i> (D. Don) Benth. ex C.B. Clarke	Starry Milk Parsley	Herb	-	Alpine grassland and meadows	Found on open grassy slopes at about 3500 m altitude. Flowering: June-August.
45.	<i>Pleurospermum stylosum</i> C.B. Clarke		Herb	-	Homte	

46.	<i>Selinum coniifolium</i> (Wall. ex DC.) Benth. and Hook. f.	Milk Parsley	Herb	-	Forests	
47.	<i>Selinum vaginatum</i> (Edgew.) C.B. Clarke	Milk Parsley, Bhutkes hi	Herb	Endemic and Lower Risk Least Concern	Forests, Alpine grassland and meadows, Scrublands	Common on alpine moist slopes and meadows. Flowering: July-September. Root are used as nervine sedative and used as alternative source for <i>Jatamansi</i> .
48.	<i>Selinum wallichianum</i> (DC.) Raizada and H.O. Saxena (Syn. <i>Selinum candollei</i> Edgew., <i>Selinum tenuifolium</i> Wall. ex C.B. Clarke)	Wallich Milk Parsley	Herb	Endemic	Forests, Alpine grassland and meadows	
49.	<i>Seseli thomsonii</i> (C.B. Clarke) Pimenov and Kljuykov (Syn. <i>Eriocycla thomsonii</i> (Cl.) Wolff)	Stone-parsley	Herb	-	Shurting	
50.	<i>Torilis japonica</i> (Houtt.) DC.	Upright Hedge Parsley	Herb	-	Nigulseri, Bari, Kafnu	It is an annual herb occasionally found on waste ground, beside paths at altitudes of 500-3000 m
Apocynaceae						
51.	<i>Cynanchum auriculatum</i> Royle ex Wight	Heart-Leaf Swallow-Wort	Herb	-	Shelti	Heart-Leaf Swallow-Wort is a perennial vine, with stem twining, hollow, hairless except for a band of hairs running along the internodes. Flowers white to yellowish-green, about 6-8 mm long, divided nearly to the base, petals are velvety inside. Found in the Himalayas, from Kashmir to Bhutan, Assam and China, at altitudes of 2000-3700 m. Flowering: July-August.
52.	<i>Vincetoxicum hirundinaria</i> Medik.	Swallow-Wort	Herb	-	Rupi	Swallow-Wort is an erect perennial herb with stem 15-25 cm tall, characterized by broadly elliptic to ovate pointed leaves, and umbels of small yellowish-green

						flowers in leaf axils and at branch ends. It is found in the Himalayas, from Pakistan to SE Tibet, W. Asia and Europe, at altitudes of 2300-3600 m. Flowering: May-July.
	Araceae					
53.	<i>Arisaema flavum</i> (Forssk.) Schott	Yellow Cobra Lily	Herb	-	Forests	Yellow Cobra Lily can be distinguished from all other cobra lilies by its very small yellowish or greenish hood, It is found in the Himalayas, from Afghanistan to SW China, at altitudes of 1800-4500 m. Flowering: May-June.
54.	<i>Arisaema jacquemontii</i> Blume	Jacquemont's Cobra Lily	Herb	-	Forests, Alpine grassland and meadows	Jacquemont's Cobra Lily is a perennial which grows to a height of 0.6m and a width of 30-50 cm. Leaves 1 or 2. Leaflets 5-7, elliptic-ovate or elliptic-lanceolate.
55.	<i>Arisaema tortuosum</i> (Wall.) Schott	Whipcord Cobra Lily, Bagh Jandhra	Herb	-	Forests	The name comes from its cobra like appearance, with a whip-like tongue, upto 12" long, rising up vertically. Native to open Rhododendron forests, scrub and alpine meadows in the Himalaya from India to western China. Native from the Himalaya and western China to southern India and Myanmar (Burma), it is highly variable, as one might expect. Sometimes the spadix-appendage is green, other times it is purple.
	Asparagaceae					
56.	<i>Asparagus adscendens</i> Roxb.	West-Himalayan Asparagus, Dholi moosli, Safed musli	Herb	-	Forests	West-Himalayan Asparagus is an erect, tall, shrub or subshrub, with young branches ash grey to white, branchlets grooved. Flowering: October-November. The tuber root and rhizomes of West-Himalayan Asparagus are beneficial in the

						<p>treatment of infections. Recently, West-Himalayan Asparagus has</p> <p>become revered as an aphrodisiac, which has increased its popularity and cultivation in a number of regions around the world. The plant has also been used in Ayurveda as an immunity booster and as a general health tonic.</p>
57.	<i>Maianthemum purpureum</i> (Wall.) LaFrankie (Syn. <i>Smilacina pallida</i> Royle)	Purple Mayflower	Herb	-	Forests, Scrublands	Purple Mayflower is found in the forest of the Himalayas, from Himachal Pradesh to SW China, at altitudes of 2400-4200 m. Flowering: April-June.
58.	<i>Polygonatum cirrhifolium</i> (Wall.) Royle	Coiling leaf Solomon seal, Coiling leaf Polygonatum	Herb	-	Nichar	Polygonatums or Solomon seals are graceful shade plants. These plants have rhizomes that give rise to long arching unbranched stems. It is an erect perennial plant which grows typically up to 2-3 ft tall, with whorls of leaves and clusters of small drooping white flowers from leaf-axils. Fruit is a red berry, turning to dark purple. This species is native to the Himalayas.
59.	<i>Polygonatum geminiflorum</i> Decne.	Solomon's seal	Herb	-	Alpine grassland and meadows	
60.	<i>Polygonatum multiflorum</i> (L.) All.		Herb	Vulnerable	Forests	Found in woodland, usually on limestone
61.	<i>Polygonatum verticillatum</i> (L.) All.	Whorled Solomon's Seal	Herb	Vulnerable	Forests, Alpine grassland and meadows	Whorled Solomon's Seal is an erect, robust plant, with many whorls of lance-shaped leaves. Flowers are 8-12 mm long, fused into a broad tube below and spreading into short triangular petals on the other end. The plant is prettier in fruit when the hanging flowers are replaced by hanging

						red berries, which eventually turn dark purple. Flowering: May-July.
	Balsaminaceae					
62.	<i>Impatiens amplexicaulis</i> Edgew	Clasping-Leaf Balsam	Herb	-	Forests	It is found in the Himalayas, from Punjab to Nepal, at altitudes of 2700-3200 m. Flowering: July-August
63.	<i>Impatiens brachycentra</i> Kar. and Kir	Spurless Balsam	Herb	-	Pangi	Spurless Balsam is the commonest and probably the smallest flowered, almost spurless balsam of Himalayas. It is an annual herb 15-40 cm tall, branched, hairless. It is found in C. Asia and W. temperate Himalayas, from Kumoan to Kashmir, at altitudes of 1900-3000 m. Flowering: July-August.
64.	<i>Impatiens racemosa</i> DC.	Yellow Long-Tailed Balsam	Herb	-	Forests, Scrublands	Yellow Long-Tailed Balsam is an annual are up to 2 ft tall with yellow flowers which have a long tail. Flowers are borne in 2-10 cm long, 4-10-flowered racemes in leaf axils or at branch ends. It is found in grasslands along canals, mossy or stony slopes in the Himalayas, from Kashmir to Bhutan, Assam, S. Tibet, at altitudes of 1200-3900 m. Flowering: June-August.
65.	<i>Impatiens scabrida</i> DC.	Rugged Yellow Balsam	Herb	-	Forests, Alpine grassland and meadows	Rugged Yellow Balsam is a rather robust often much branched plant with large lemon yellow flowers spotted with brown within. It is found in shrubberies, forests and damp places, at altitudes of 1200-3600 m, from Kashmir to Bhutan. Flowering: May-September.

66.	<i>Impatiens thomsonii</i> Hook. f.	Thomson's Balsam	Herb	-	Forests, Alpine grassland and meadows	Thomson's Balsam is found in temperate Himalayas from Kashmir to Kumaon and eastward to Sikkim, at altitudes of 3000-3700 m. Flowering: July-August.
Berberidaceae						
67.	<i>Sinopodophyllum hexandrum</i> (Royle) T.S. Ying (Syn. <i>Podophyllum hexandrum</i> Royle)	Himalayan May Apple, Ban kakri	Herb	Endangered	Forests, Alpine grassland and meadows	Himalayan May Apple is a perennial herb, 15-40 cm tall, native to the Himalayas. It is low to the ground with glossy green, drooping, lobed leaves on its few stiff branches. It can be propagated by seed or by dividing the rhizome. It is very tolerant of cold temperatures, as would be expected of a Himalayan plant, but it is not tolerant of dry conditions. It is found at altitudes of 2400-4500 m. Flowering: May-August. It has been exploited in several traditional systems of medicine, including Ayurveda, for treatment of a number of ailments such as constipation, cold, bacterial infections, biliary fever, septic wounds and insect bites.
Bignoniaceae						
68.	<i>Incarvillea arguta</i> Royle	Himalayan Gloxinia	Herb	-	Scrublands	Himalayan Gloxinia is a sub-shrub with fern-like foliage and penstemon-like tubular flowers of pallid pink. It grows up to 1.5 m tall. It is found in the Himalayas, from Kumaun to Nepal, Assam, E. Tibet and W. China, at altitudes of 1800-3500 m. Flowering: March-July.
69.	<i>Incarvillea emodi</i> (Royle ex Lindl.) Chatterjee	Himalayan Incarvillea	Herb	-	Nichar	Himalayan Incarvillea is a handsome plant with one-sided clusters of 6-8 large pinkish-purple tubular flowers which are orange yellow inside. It is found in the Himalayas, from

						Afghanistan to W. Nepal, mostly in rock cervices, at altitudes of 600-2500 m. Flowering: March-April.
	Boraginaceae					
70.	<i>Arnebia euchroma</i> (Royle) I.M. Johnst.	Pink Arnebia, Demok, Dremog	Herb	-	Scrublands	Pink Arnebia is an erect hairy perennial. Roots are thick, exuding a purplish dye. It is found in W. & C. Asia, Himalayas, from Kashmir to Nepal and Tibet, at altitudes of 3500-4000 m. Flowering: June-July. The root is antipyretic, cancer, contraceptive, emollient and vulnerary. It is used in the treatment of measles, mild constipation, burns, frostbite, eczema, dermatitis etc.
71.	<i>Arnebia guttata</i> Bunge	Spotted Arnebia	Herb	-	Scrublands	Spotted Arnebia is a perennial or annual, erect to prostrate herb. Roots are slender or up to 2 cm long, branched, exuding a dark purple dye. is found in the Himalayas, from Afghanistan to Ladakh, and C. Asia. Flowering: June-October.
72.	<i>Cynoglossum wallichii</i> var. <i>glochidiatum</i> (Wall. ex Benth.) Kazmi (Syn. <i>Cynoglossum glochidiatum</i> Wall. ex Benth.)	Barbed Forget-Me-Not, Andhahuli, Lichkura	Herb	-	Forests, Temperate Grasslands	
73.	<i>Cynoglossum lanceolatum</i> Forssk.	Lanceleaf Forget-Me-Not, Laksmana	Herb	-	Forests	It is an erect much branched, biennial or perennial herb, growing up to 1.2 m tall. Stem and branches are covered with rigid white hairs 1-2 mm long. Flower throat scales are broader than long. Fruits consist of 4 small nutlets, covered in sticky hairs. It is found in Africa, W. Asia, Himalaya, India, Ceylon, Burma, east to China, Malaysia, at altitudes of 150-3200 m. Flowering: June-August.

74.	<i>Cynoglossum microglochin</i> Benth.	Purple Forget-Me-Not	Herb	-	Forests	Purple Forget-Me-Not is a perennial herb, up to 12 cm tall, with dark purplish-blue flowers like Forget-Me-Not. Stem is simple or branched, hairy, sometime densely so. Purple Forget-Me-Not is found in the Himalayas, from Afghanistan, Kashmir to Kumaon. Flowering: May-June.
75.	<i>Cynoglossum wallichii</i> G. Don	Barbed Forget-Me-Not, Andhahuli, Lichkura	Herb	-	Forests, Alpine grassland and meadows, Scrublands	Barbed Forget-Me-Not is a biennial herb up to 70 cm tall. Stem and branches in lower parts are hairy with spreading white hairs 2-3 mm long. It is found in the Himalayas, from Afghanistan through Kashmir to Sikkim and W. China, at altitudes of 1500-4000 m. Flowering: May-August.
76.	<i>Cynoglossum zeylanicum</i> (Lehm.) Brand	Ceylon Forget-Me-Not, Andhahuli	Herb	-	Temperate Grasslands, Alpine grassland and meadows, Scrublands	Ceylon Forget-Me-Not is an erect, branched herb; branches more or less bristly with bulbous-based hairs. It is commonly found in Western Ghats and Ceylon, but found in small number in Himalayas also. Flowering: June-November.
77.	<i>Eritrichium canum</i> (Benth.) Kitam. (Syn. <i>E. strictum</i> Decne.)	Hoary Forget-Me-Not	Herb	-	Solding, Chitkul	Hoary Forget-Me-Not is a small silky-white perennial herb with several erect or prostrate unbranched stems with many linear leaves, and with branched clusters of tiny blue flowers with yellow center. It is found in the Himalayas, from Afghanistan to C Nepal, Tibet and C Asia, at altitudes of 2400-4000 m. Flowering: June-August.

78.	<i>Eritrichum nanum</i> (L.) Schr. ex Gaudin	Arctic alpine forget-me-not	Herb	Endemic	Rupi	Found at altitudes of 2700 m–3200 m. Peak flowering period lasts longer than a month, from mid-June to the end of July.
79.	<i>Hackelia uncinata</i> (Benth.) C.E.C. Fisch.	Hooked Stickseed, Forget Me Not	Herb	-	Forests, Alpine grassland and meadows	Hooked Stickseed is a perennial herb which looks quite similar to Forget-Me-Not. Flowers are blue. It is found in the Himalayas, from Pakistan to SW China, at altitudes of 2700-4200 m. Flowering: June-August.
80.	<i>Heliotropium strigosum</i> Willd.	Bristly Heliotrope, Chitiphul, Chitiphul, Safedbhanga	Herb	-	Forests	It is a prostrate to rising or erect and up to 28 cm tall perennial herb. Flowers are white with broad, spreading petals. Fruit is globose, depressed or not, 4-lobed, dense pilose.
81.	<i>Lappula barbata</i> (M. Bieb.) Gürke	Stickseeds	Herb	-	Pooh	They are native to the northern hemisphere. These are annual herbs producing funnel-shaped flowers and prickly fruits.
82.	<i>Lasiocaryum munroi</i> (C.B. Clarke) Johnst.		Herb	-	Rekong Peo	Herbs annual, 5-10 cm tall. Stems usually several, erect, slender, pilose. Flowers widely spaced. Calyx lobes erect, broadly lanceolate to oblong-ovate, ca. 2 mm, somewhat enlarged in fruit, sparsely pubescent.
83.	<i>Lepechinella microcarpa</i> (Boiss.) Riedl. (Syn. <i>Paracaryum microcarpum</i> Boiss.)		Herb	-	Roghi	Perennial. Stems many, up to 30 cm tall, branched, densely hairy with erect to suberect hairs, 1.5-2 mm long, often with a rusty tinge, arising from a tuberculate base. Basal leaves petiolate, oblanceolate to oblong-ovate, including lamina 20-50 x 8-18 mm, covered on both surfaces with ± appressed hairs.

84.	<i>Lindelofia macrostyla</i> (Bunge) Popov (Syn. <i>L. anchusoides</i> (Lindl.) Lehm.)	Asian Hound's Tongue	Herb	Endemic	Forests, Alpine grassland and meadows, Scrublands	Asian Hound's Tongue is perennial herb up to about 50 cm tall with softly hairy parts. Flowers are bright blue, funnel-shaped, with triangular blunt petals, clustered at the ends of slender, branched stem, and with narrow lanceshaped, silvery-grey leaves. It is found in the Himalayas, from Afghanistan to Himachal Pradesh, at altitudes of 2100-3600 m. Common in Lahaul and Ladakh. Flowering: June-August.
85.	<i>Lithospermum arvense</i> L.	Corn Gromwell, Bastard Alkanet	Herb	-	Bhabhanagar	It is native to Europe and Asia, as far north as Korea, Japan and Russia, and as far south as Afghanistan and northern Pakistan. It is known in other places as an introduced species. The European Union has granted the refined oil of the seed of <i>Buglossoides arvensis</i> novel food status.
86.	<i>Myosotis sylvatica</i> Ehrh ex Hoffm.	Wood Forget-me-not	Herb	-	Forests, Alpine grassland and meadows	Widely cultivated throughout the temperate world, it is particularly associated with spring bedding schemes involving other spring-flowering subjects, notably daffodils, tulips, wallflowers and primula
87.	<i>Rochelia rectipes</i> Stocks (Syn. <i>R. macrocalyx</i> Bunge)		Herb	-	Rekong Peo	Herbs annual, 2-5 cm. Branches spreading, grayish. Characterized by the enlarged erect calyx lobes. Found in stony gravelly places from 1600–2400 m.
88.	<i>Setulocarya diffusa</i> (Brand) R.R. Mill and D.G. Long (Syn. <i>Lasiocaryum diffusum</i> (Brand) Johnst.)		Herb	-	Boktu	
Brassicaceae						

89.	<i>Alliaria petiolata</i> (M. Bieb.) Cavara and Grande (Syn. <i>A. officinalis</i> Andr. ex DC.)	Garlic Mustard, Hedge Garlic	Herb	-	Boktu, Ribba, Surchoo, Bhabhanagar	It is a herbaceous biennial plant, growing from a deeply growing, thin, white taproot that is scented like horse-radish. The leaves, flowers and fruit are edible as food for humans, and are best when young. They have a mild flavour of both garlic and mustard, and are used in salads and pesto. They were once used as medicine. Garlic Mustard is found in the Himalayas, from Kashmir to Nepal, at altitudes of 2200-3100 m. Flowering: April-August.
90.	<i>Arabidopsis thaliana</i> (L.) Heynn.	Thale Cress	Herb	-	Forests, Alpine grassland and meadows, Scrublands	A winter annual with a relatively short life cycle, <i>A. thaliana</i> is a popular model organism in plant biology and genetics. For a complex multicellular eukaryote, <i>A. thaliana</i> has a relatively small genome of approximately 135 megabase pairs (Mbp). It was the first plant to have its genome sequenced, and is a popular tool for understanding the molecular biology of many plant traits, including flower development and light sensing. <i>A. thaliana</i> readily grows and often pioneers rocky, sandy and calcareous soils. It is generally considered a weed, due to its widespread distribution in agricultural fields, roadside, railway lines, waste ground and other disturbed habitat, but due to its limited competitive ability and small size it is not categorized as a noxious weed. It is edible by humans as a salad or cooked, but it does not enjoy a widespread use as a spring vegetable.
91.	<i>Arabis nova</i> Vill.		Herb	-	Forests, Scrublands	Grows in annual dry grassland on all types of substrates. Annual, 10-30 cm tall,

						pubescent with short stellate hairs, sometimes glabrous above, erect, with single stem and 3-10 distant leaves.
92.	<i>Arabis tibetica</i> Hook. f. and Thomson		Herb	-	Forests	
93.	<i>Brassica nigra</i> (L.) K. Koch.	Black Mustard	Herb	-	Nichar	The plant is often cultivated for its edible seed, though it is going out of favour because it rapidly sheds its seeds once they are ripe and this makes it harder to harvest mechanically than the less pungent brown mustard (<i>Brassica juncea</i>). Black mustard is also grown as a medicinal plant. It is adapted to a wide variety of climatic conditions. It is usually grown in the temperate and subtropical zones, being unsuited to wet tropical lowland areas but is able to be grown as a rainfed crop in tropical areas of low or moderate rainfall.
94.	<i>Brassica oleoreca</i> L.	Field Mustard	Herb	-	Karaba	Widely cultivated subspecies of field mustard
95.	<i>Capsella bursa-pastoris</i> (L.) Medik.	Shepherd's Purse	Herb	-	Forests	Shepherd's Purse is originally from Europe, but has become very common in many parts of the world. Shepherd's Purse grows in gardens, fields, waste grounds, and embankments with soils that are not too dry and that provide enough sunshine. The seeds, leaves, and root of this plant are edible. Flowering: December-January.
96.	<i>Cardamine hirsuta</i> L.	Hairy Bitter Cress	Herb	-	Bhabhanagar	It is a winter annual plant native to Europe and Asia. It has unique foliage that makes it is easy to identify among other weeds. The leaflets on the foliage

						have a club shape, evident on even small seedlings.
97.	<i>Cardamine impatiens</i> L.	Narrow-Leaved Bittercress, Ban laiyya	Herb	-	Forests, Alpine grassland and meadows	It is a slender, biennial herb, that produces sterile leaves in the first year, one to several flowering stems during the next. It grows on walls, open ground in shady places in forests usually disturbed by man. It is found in the Himalayas, at altitudes of 1500-4000 m. Flowering: May-July.
98.	<i>Cardamine macrophylla</i> Willd.	Toothwort	Herb	-	Bhabhanagar	Toothwort is a perennial herb, with prominent lilac, pink or white flowers. Flowers are borne in dense clusters at the end of branches, which elongate in fruit. It is found in the Himalayas, from Pakistan to China, at altitudes of 2100-3600 m. Flowering: May-August.
99.	<i>Chorispora sabulosa</i> Cambess.	Purple Mustard, Blue Mustard, Musk Mustard, Crossflower	Herb	-	Alpine grassland and meadows	It is native to Eurasia but is well known in other parts of the world, particularly in temperate regions, as an introduced species and a noxious weed.
100.	<i>Crucihimalaya himalaica</i> (Edgew.) Al-Shehbaz, O’Kane and R.A. Price (Syn. <i>Arabidopsis himalaica</i> (Edgew.) O.E. Schulz.)	Himalayan Rock-Cress	Herb	-	Kharogla	It is a biennial or perennial herb, growing up to 20-50 cm tall. It is often much branched from the base with branches rising up, usually densely hairy. It is found in the Himalayas, from Afghanistan to Tibet, at altitudes of 2400-3000 m. Flowering: June-August.
101.	<i>Crucihimalaya mollissima</i> (C.A. Mey.) Al-Shehbaz, O’Kane and R.A. Price (Syn. <i>Arabidopsis</i>	Soft Rock-Cress	Herb	-	Alpine grassland and meadows	It is a perennial herb, 10-40 cm tall. Stems are erect, simple or few to many branched at base, densely velvety, rarely hairless. It is found in the Kashmir Himalayas,

	<i>mollissima</i> (C.A. Mey) N. Busch)					Afghanista, Kazakhstan, Kyrgyzstan, Mongolia and Russia, at altitudes of 2600-4400 m. Flowering: June-August.
102.	<i>Descurainia sophia</i> (L.) Webb. ex Prantl	Herb Sophia, Tansy Mustard, Khubkallana	Herb	-	Katgaon, Kalpa, Kuppa, Sangla	It is adventive biennial or annual herb 0.5-2.5 ft tall. It branches occasionally, and is more or less erect. The stems are greyish or bluish green and pubescent, sometimes the lower stem is nearly glabrous and light purplish green. This plant spreads by reseeding itself, the seeds are small enough to be blown about by the wind. It is found in Europe, N. Africa, W. & C. Asia and the Himalayas, at altitudes of 2200-4100 m. Flowering: April-June.
103.	<i>Draba lasiophylla</i> Royle		Herb	-	Alpine grassland and meadows	Perennial herbs, (5–)10–20(–28) cm. Stems erect, simple, tomentose with subsessile stellate trichomes. Found in Nepal, W Himalaya, E Himalaya, Tibetan Plateau, E Asia and C Asia. Found at 3000–5600 m in mountain slopes and crevices. Flowering: June–August.
104.	<i>Draba setosa</i> Royle	Whitlow-grass	Herb	-	Temperate Grasslands	
105.	<i>Erysimum hieraciifolium</i> L. f.	European Wallflower, Tall Wormseed Mustard	Herb	-	Scrublands	European Wallflower is a biennial to perennial herb, 1-3 ft tall, erect, hairy. Stem is often simple, somewhat angular, rarely branched.
106.	<i>Erysimum malicentae</i> Dunn		Herb	-	Surchoo, Sangla	

107.	<i>Lepidium latifolium</i> L.	Tall Whitetop, Perennial Pepperweed	Herb	-	Yangthang	This plant is native to southern Europe, Mediterranean countries and Asia as far east as the Himalayas. The leaves, shoots, and fruits of this plant are all edible. In Ladakh, the spring leaves are prized as a vegetable. The peppery edge or bitterness is removed by first boiling the young shoots and leaves, and then soaking in water for two days. Cooked like spinach, it makes a nutritious vegetable.
108.	<i>Lepidium virginicum</i> L.	Virginia Pepperweed	Herb	-	Scrublands	It is a biennial herb native to the American continents, but widely naturalized elsewhere. Virginia pepperweed's most identifiable characteristic is its flower-raceme, which arise from the plant's highly branched stem.
109.	<i>Litwinowia tenuissima</i> (Pall.) Woronow ex Pavlov (Syn. <i>Euclidium tenuissimum</i> (Pall.) B. Fedtsch.)		Herb	-	Scrublands	Found in roadsides, slopes and barren places, altitude 300-3500 m.
110.	<i>Mattihola flavida</i> Boiss.	Himalayan Stock	Herb	-	Katgaon	It is a rather woody perennial herb with a widely branched flower cluster, and with whitish woolly-haired stems, narrow leaves and widely spaced yellowish or brownish-purple flowers. It is found in the Himalayas, from Pakistan to Kashmir, at altitudes of 2700-4000 m. Flowering: June-July.
111.	<i>Neurotropis platycarpa</i> (Fisch. and C.A. Mey.) F.K. Mey. (Syn. <i>Thlaspi cardiocarpum</i> Hook. f. and Thomson)	Heart-Pod Penny-Cress	Herb	-	Chandriam	The fruits are broadly winged throughout length, but are prominently inverted heart-shaped. The plant is shorter and has much smaller entire leaves barely longer than 3 cm. It is found in C and SW Asia to Afghanistan, Pakistan and NW Himalayas.

112.	<i>Nasturtium officinale</i> R. Br. (Syn. <i>Rorippa nasturtium-aquaticum</i> (L.) Hayek)	Watercress, Chhuch, Jal- indushoor	Herb	-	Katgaon, Sunnam	It is a glossy green, somewhat fleshy-stemmed perennial herb, generally found growing in shallow water. Small white flowers are borne in lax clusters at the end of branches. The plant is edible and has medicinal qualities. It is found in the Himalayas, from Afghanistan to Bhutan, at altitudes of 1500-4000 m. Flowering: April-June.
113.	<i>Rorippa indica</i> (L.) Hiern. (Syn. <i>R. montana</i> (Wall. ex Hook. f. and Thomson) Small)	Indian Field-Cress, Chamsuru	Herb	-	Alpine grassland and meadows	It is a perennial herb with short rhizomes. Stem is erect or sometimes rising, usually branching below, angled. Basal and lower leaves are stalked, elliptical to lanceshaped-oblong, pinnately cut or irregularly toothed.
114.	<i>Sisymbrium officinale</i> (L.) Scop.	Hedge Mustard, Common Hedge Mustard, Wild Mustard	Herb	-	Ponda	It is a plant native of Europe and North Africa, it is now well established throughout the world. It is an annual herb growing to 2 ft by 1 ft. Initially, it forms a low rosette of basal leaves, which is followed by flowering stalks with alternate leaves.
115.	<i>Sisymbrium orientale</i> L.	Indian hedgemustard	Herb	-	Sunnam	It is native to Europe, Asia, and North Africa, and it can be found throughout much of the temperate world as an introduced species and in some areas a common roadside weed. It is an annual herb producing a hairy, branching stem up to about 30 centimeters tall. The basal leaves are divided into deep lobes or toothed leaflets.
116.	<i>Thlaspi arvense</i> L.	Field Penny-Cress	Herb	-	Scrublands	It is a hairless, annual or biennial herb 1-2 ft tall, branching occasionally. Plants form a rosette of leaves up to 6 inches across. These leaves are oblanceolate or obovate

						and have long stalks. It is native to temperate Eurasia, including large parts of China. In India it is found at altitudes of 1000-5000 m. Flowering: March-October.
117.	<i>Turritis glabra</i> L.	Tower Mustard	Herb	-	Kharogla	It is a 1-4 ft tall, slim, grey-green plant with small creamy flowers at the top of the stem. It usually grows on poor chalky or sandy soils, in open situations. It is native to Eurasia. In India it is found in Himalayas. Flowering: May-August.
Campanulaceae						
118.	<i>Campanula alsinoides</i> Hook. f. and Thomson		Herb	-	Shurting	Stems numerous, slender, spreading, pubescent. Leaves oblong-ovate, entire to slightly dentate, hirsute; shortly petioled.
119.	<i>Campanula latifolia</i> L.	Large Bellflower	Herb	-	Alpine grassland and meadows	It is a clump-forming perennial herbaceous plant growing to a height of 60 to 120 centimetres. It is native to Europe and western Asia as far east as Kashmir. Its natural habitat is broad-leaved woodland, coppices, parkland and forest margins. It is found in shrubberies and forests at altitudes of 2100-3600 m.
120.	<i>Campanula pallida</i> Wall. (Syn. <i>C. colorata</i> Wall.)	Pale Bellflower	Herb	-	Alpine grassland and meadows, Scrublands	It is a much branched hairy-stemmed plant, about 15-60 cm tall, bearing lax clusters of small bluish-white or pale-blue flowers. It is found throughout the Himalayas, at altitudes of 1000-4500 m. Flowering: April-October.
121.	<i>Codonopsis rotundifolia</i> Benth.	Roundleaf Bellflower	Herb	Endemic	Alpine grassland and meadows	It is a perennial vine with stems hairless and angled. Flowers are wide-bell shaped, greenish white, veined with purple. It is found in the

						Himalayas, from Pakistan to C. Nepal, at altitudes of 1800-3600 m. Flowering: July-August.
122.	<i>Cyananthus lobatus</i> Wall. ex Benth.	Trailing Bellflower	Herb	Endemic	Alpine grassland and meadows	Trailing Bellflower is a perennial herb with bright blue-purple flowers with a prominent sepal tube covered with black hairs. It is found in the Himalayas, from Himachal Pradesh to SW China, at altitudes of 3300-4500 m. Flowering: July-September.
Cannabaceae						
123.	<i>Cannabis sativa</i> L.	Marijuana, Bhang, Ganja, Charas	Herb	-	Forests, Temperate Grasslands, Scrublands	It is a coarse, rangy annual that grows 6-12 ft in height. The leaves are palmately divided into 3-7 narrow, toothed segments, most about 3-6 in long. The stems are rough and scabrous and the inner bark is fibrous. Its seed, chiefly used as caged-bird feed, is a valuable source of protein, energy, and psychoactive and physiologically active chemical compounds known as cannabinoids that are consumed for recreational, medicinal, and spiritual purposes. When so used, preparations of flowers and leaves, sometimes called marijuana, and preparations derived from resinous extract, sometimes called hashish, are usually consumed by inhaling a vapor released by smoking or heating, or by oral ingestion. Historically, tinctures, teas, and ointments were also common preparations. The Cannabis plant has a

						history of medicinal use dating back thousands of years across many cultures. Its usage in modern times is controversial, and in recent years the American Medical Association, the MMA, the American Society of Addiction Medicine, and other medical organizations have issued statements opposing its usage for medicinal purposes.
	Caprifoliaceae					
124.	<i>Dipsacus inermis</i> Wall. (Syn. <i>Dipsacus mitis</i> D. Don)	Himalayan Teasel, Phulee	Herb	Endemic	Homte, Kharogla, Neugal	It is a robust perennial herb with opposite entire or palmately lobed leaves. The plant can be easily identified by its solitary round flower-heads on long, leafless, channeled flowering stems. It is found in the Himalayas, from Afghanistan to SW China and Burma, at altitudes of 1400-4100 m. Flowering: June-September.
125.	<i>Morina coulteriana</i> Royle	Yellow Whorlflower	Herb	Endemic	Alpine grassland and meadows	Yellow Whorlflower is a plant up to 75 cm tall. Stem is channelled, velvet-hairy to smooth, often hairy at the nodes. It is found in the Himalayas from Kashmir to Garhwal, Tibet, Afghanistan and Pakistan. Flowering: June-July.
126.	<i>Morina longifolia</i> Wall.	Himalayan Whorlflower	Herb	-	Alpine grassland and meadows	It is a beautiful evergreen perennial herb. It is found in the Himalayas, from Kashmir to Bhutan, at altitudes of 3000-4000 m. Flowering: June-September
127.	<i>Valeriana hardwickii</i> Wall.	Indian Valerian, Tagger, Asarun	Herb	-	Sangla	It is a perennial herb, distinguished by its 1-3 pairs of stem-leaves which are

						large, compound, with 3-5 leaflets, and its white or pale pink flowers. It is found in shrubberies and open slopes, at altitudes of 1500-4000 m. Flowering: June-September. It is a well-known and frequently used medicinal herb. It is noted especially for its effect as a tranquilliser and nervine, particularly for those people suffering from nervous overstrain. Valerian has been shown to encourage sleep, improve sleep quality and reduce blood pressure.
128.	<i>Valeriana jatamansi</i> Jones	Jatamansi, Balc hhari, Nihani, Sumaya	Herb	-	Forests	It is a forest perennila herb, 0.5-2 ft tall, velvet-hairy to hairy. Rhizome are elongate, with fibrous roots. Stems are 3-6 in number. Jatamansi is found throughout the Himalayas, from Afghanistan to SW China, at altitudes of 1500-3600 m. Flowering: March-May. It is well-know in traditional Indian medicine. It is supposedly useful in diseases of eye, blood and livers, is used as a remedy for hysteria, hypochondriasis, nervous unrest and emotional stress. Also useful in clearing voice and acts as stimulant in advance stage of fever and nervous disorder.
129.	<i>Valeriana stracheyi</i> C.B. Clarke		Herb	Endemic	Forests, Alpine grassland and meadows	Plant up to 45 cm tall, puberulous to pubescent. Rhizome with many fibrous roots. Found in and the Himalayas, on rocky banks and cliffs from 1300-2800 m. Flowering period: July-August.
Caryophyllaceae						
130.	<i>Arenaria festucoides</i> Benth.	Fescue Sandwort	Herb	Endemic	Alpine grassland and	It is is a densely clustered plant with bristle-like leaves, and short erect

					meadows, Scrublands	flowering stems with white flowers, and prominent white-margined sepals. It is found on rocks and stony ground in the Himalayas, from Pakistan to Uttarakhand, at altitudes of 3000-4500 m. Flowering: June-July.
131.	<i>Arenaria kansuensis</i> Maxim.		Herb	-	Alpine grassland and meadows	It is a perennial herb which forms dense green cushions with white, stemless flowers. Principal roots robust, woody. It is found in alpine meadows, mountain grasslands and gravels at 3500-5300 m altitudes.
132.	<i>Arenaria orbiculata</i> Royle ex Edgew. and Hook. f.	Roundleaf Sandwort	Herb	-	Alpine grassland and meadows	It is a biennial or perennial herb. Stems are erect or prostrate, dichotomously branched, slender, 5-40 cm long, velvet-hairy along 1 side. Leaves are stalkless or stalked, elliptic, ovate, or nearly round. It is found in forests, scrub meadows, alpine meadows, stony valleys of the Himalayas, from Kashmir to Bhutan, at altitudes of 2300-4500 m. Flowering: May-July.
133.	<i>Arenaria serpyllifolia</i> L.	Thyme-Leaved Sandwort	Herb	-	Forests, Alpine grassland and meadows	Thyme-Leaved Sandwort is an annual herb with stems 6-10 inches long that are rising or creeping. Stems are round, dark purple, and finely velvety.
134.	<i>Arenaria tenuifolia</i> L.	Sandwort	Herb	-	Scrublands	
135.	<i>Cerastium cerastoides</i> (L.) Britton	Mountain Chickweed	Herb	-	Alpine grassland and meadows	It is a small perennial herb, only 10-20 cm tall. Stems are creeping in the lower part, rising up in the upper part, branched distally, velvety. It is found in the Himalayas, from Pakistan to Himachal Pradesh, at altitudes of 3000-4800 m. Flowering: May-August.

136.	<i>Cerastium glomeratum</i> Thuill.	Sticky Chickweed	Herb	-	Alpine grassland and meadows	Sticky Chickweed is a cosmopolitan weed found in some hill-stations in North India, which probably came from Eurasia. It is an annual herb 10-35 cm tall. Stem are simple or branched, erect to rising. Stems are hairy, often on one side.
137.	<i>Cucubalus viciferous</i> L.		Herb	-	Bhabhanagar	
138.	<i>Dianthus angulatus</i> Royle	Himalayan Pink	Herb	-	Forests, Alpine grassland and meadows	It is a perennial herb, with short woody stock. Stems are 15-20 cm, slender erect, many arising from the base, simple, hairless. It is found in W. Himalaya, from Kashmir to Kumoan.
139.	<i>Gypsophila cerastioides</i> D. Don	Himalayan Baby's Breath	Herb	-	Forests	It is a charming little wildflower which can be seen peeping out of rocks in the Himalayas. It is a low-growing perennial herb with spreading stems, 8-20 cm long, bearing small, inverted-egg shaped leaves, and with numerous white flowers, often streaked with purple, borne in rounded branched clusters 1-2 cm across. It is found on river-banks, rocks and open slopes in the Himalayas at altitudes of 2100-4700 m. Flowering: May-July.
140.	<i>Minuartia kashmirica</i> (Edgew. and Hook. f.) Mattf.	Kashmir Sandwort	Herb	-	Scrublands	It is a densely clustered perennial herb 5-10 cm in diameter. It is found in the Himalayas, from Afghanistan to Nepal and Tibet in rock crevices at 1500-5000m.
141.	<i>Sagina saginoides</i> (L.) H. Karst.	Sandwort	Herb	-	Kharogla	Small perennial herb with procumbent to ascending stems. Stems, slender, glabrous. It is found in C. & W. Asia, Siberia, W. China, N. Japan, N. America & Mexico. A common plant found amongst stones and rocky slopes from 1759-3200 m.
142.	<i>Silene baccifera</i> (L.) Roth. (Syn. <i>Cucubalus baccifer</i> L.)		Herb	-	Ribba	Herbs perennial. Roots white, long fusiform, cross section yellow. Stems

						and branches spreading. Found in forest margins, scrub and grasslands.
143.	<i>Silene falconeriana</i> Royle	Falconer's Campion	Herb	Endemic	Jangi	It is a biennial or perennial herb, up to 50 cm tall. Stems are more or less leafy, thick, simple or branched, velvety below, hairless above. It is found in W. Himalaya, from Kashmir to Nepal, at altitudes up to 2500 m. Flowering: July-August.
144.	<i>Silene indica</i> var. <i>edgeworthii</i> Boquet. Y.J. Nasir (Syn. <i>Silene</i> <i>edgeworthii</i> Bocquet)	Edgeworth's Campion	Herb	Endemic	Temperate Grasslands	It is a perennial herb, up to 55 cm tall. Stems are usually simple, erect, greyish-green, minutely velvety to rough. It is found in NW and W Himalayas, from Kashmir to Kumaon up to 2700 m. Flowering: June-July.
145.	<i>Silene persica</i> Boiss.	Moorcroft Campion	Herb	-	Ropa	It is a clustered perennial with a woody rootstock and many erect small branched stems. The stems carry one or few white or dull red flowers. It is found in dry areas in the Himalayas, from Afghanistan to C Nepal, at altitudes of 2700-4500 cm. Flowering: June-August.
146.	<i>Silene songarica</i> (Fisch., C.A. Mey. and Avé- Lall.) Bocquet.		Herb	-	Kharogla	
147.	<i>Silene uralensis</i> (Rupr.) Bocquet.		Herb	-	Alpine grassland and meadows	
148.	<i>Silene viscosa</i> (L.) Pers.	White Sticky Catchfly	Herb	-	Forests	It is a perennial herb, about 25-70 cm tall, robust. Stem erect, simple or branched, glabrous near the base, densely tomentose, velvety to viscous towards the apex, rootstock slender, long and stout.
149.	<i>Silene vulgaris</i> (Moench) Garcke	Bladder Campion	Herb	-	Forests, Scrublands	It is a hairless perennial herb, with branched stems 1-3 ft tall. The plant is

						easily distinguished by its few large drooping white or greenish white flowers, with deeply lobed petals, and its avoid, inflated, bladder-like greenish sepal tube with a network of darker veins.
150.	<i>Stellaria media</i> (L.) Vill.	Chickweed, Buch-bucha	Herb	Endemic	Forests, Scrublands	It is an annual, but is somewhat unusual in that it often germinates in the fall (though it also germinates year-round), and hangs on through the winter, flowering and setting seed in the early spring, and dying off by summer.
151.	<i>Stellaria monosperma</i> var. <i>monosperma</i> (Syn. <i>S. crispata</i> Wall. ex D. Don)		Herb	-	Forests	It is a temperate and alpine herb in Western and Nepal Himalaya found in sloping alpine meadow at 3300-3500 m altitude.
152.	<i>Stellaria monosperma</i> Buch.-Ham. ex D. Don	Sticky Stitchwort	Herb	-	Kharogla, Sunnam	It is an erect perennial herb 1-2 ft tall. Stems are shining, branched or not, 4-angled, hairless or velvet-hairy. Upper portion of stem and flower-stalks are densely glandular hairy. It is found in the Himalayas, from Afghanistan to Nepal and SW China, at altitudes of 1200-3300 m. Flowering: July-August.
	Commelinaceae					
153.	<i>Commelina benghalensis</i> L.	Bengal Dayflower, Whiskered Commelina, Kana, Kankawa	Herb	-	Forests, Scrublands	It is a diffuse herb, rooting at lower nodes, rootstock with self-pollinating flowers. Leaves are ovate or elliptic-ovate, base rounded or almost flat, tip blunt or pointed, velvet-hairy, margin frilly. It is a wide-ranging plant, being native to tropical and subtropical Asia and Africa.
	Compositae					
154.	<i>Achillea millefolium</i> L.	Common Yarrow,	Herb	-	Temperate Grasslands, Alpine	It is a herbaceous perennial, most with fragrant lacy foliage and small daisy-

		Gandrain, Puthkanda,Bhu t Kesi			grassland and meadows	like flowerheads borne in rounded corymbs. It has leaves that are grayish green, aromatic, and very finely dissected, like soft dainty ferns. The plant forms dense spreading mats of lacy leaves from rhizomes that creep beneath the ground surface. It is found in the Himalayan region of Jammu & Kashmir, Himachal Pradesh, Uttarakhand in an altitude range of 1050-3600 m. In Anglo-Saxon times it was used as a charm to ward off evil and illness - and as a treatment for wounds. It has been used to stop bleeding by inserting leaves into the nostrils of wounded soldiers.
155.	<i>Ageratum conyzoides</i> (L.) L.	Goat Weed, Visadodi, Semandulu, Gha buti, Bhakumbar	Herb	-	Forests	It is a common tropical annual herbaceous weed. It is an erect softly hairy annual plant which grows up to a height of 2.5 feet. It is native to tropical America, but widely naturalized world over. In India it can be seen in the Himalayas, up to 2000 m altitudes. In alternative medicine, ageratum is used against epilepsy and wounds, also used as an insect repellent. In China it is used to treat a variety of conditions, including common colds, headaches, boils, eczema, bleeding wounds, and burns.
156.	<i>Ageratina adenophora</i> (Spreng.) R.M. King and H. Rob (Syn. <i>Eupatorium</i> <i>adenophorum</i> Spreng.)	Catweed, Mexican devil	Herb	-	Forests	It is native to Central America. It is an erect, bushy, leafy, many-stemmed herb, growing to 2 m tall. It commonly occurs in disturbed areas.
157.	<i>Ainsliaea aptera</i> DC.	Wingless Ainsliaea	Herb	-	Forests, Scrublands	It is a small perennial herb which attracts attention by its dry-looking

						slender sprigs of frilly looking white flowers. These flower spikes make their appearance in early spring.
158.	<i>Ainsliaea latifolia</i> (D. Don) Sch.-Bip.		Herb	-	Sangla	Found in valleys with evergreen forests, mossy sites in evergreen forests by streams, open forests, roadsides, very dry open places in full sunlight or some shade at 800-3600 m.
159.	<i>Anaphalis adnata</i> Wall. ex DC.		Herb	-	Surchoo, Kharogla	
160.	<i>Anaphalis busua</i> (Buch.-Ham.) DC.	Tall Pearly Everlasting	Herb	-	Forests, Scrublands	It is an erect perennial herb, growing up to 1-4 ft tall. It is found in the Himalayas, from Pakistan to Bhutan, at altitudes of 1800-3600 m. Flowering: July-October.
161.	<i>Anaphalis contorta</i> (D. Don) Hook. f.	Eared-Leaf Pearly Everlasting	Herb	-	Forests, Alpine grassland and meadows	It is small herb, usually woody at base, with erect or prostrate stems, 15-40 cm long, usually branched, branches and stem usually dense white woolly. It is found in the Himalayas, from Afghanistan to SW China, at altitudes of 1500-4500 m. Flowering: June-October.
162.	<i>Anaphalis margaritacea</i> (L.) Benth. and Hook. f. (Syn. <i>A. cinnamomea</i> (DC.) C.B. Clarke)		Herb	-	Forests	
163.	<i>Anaphalis nepalensis</i> (Spreng.) Hand.-Mazz.	Nepal Pearly Everlasting	Herb	Endemic	Forests, Alpine grassland and meadows, Scrublands	It is a pretty 5-50 cm tall herb. Stem usually simple, sometimes feebly branched, sparsely or densely whitish or greyish hairy. This plant has lanceolate, silvery gray-green leaves that are covered with thick fuzz. It is native to the Himalayas.
164.	<i>Anaphalis royleana</i> DC.		Herb	-	Forests, Temperate Grasslands, Alpine	It is a perennial herb of height 35 to 50 cm. It is much branched from the base.

					grassland and meadows, Scrublands	Stems are white wooly kind. Leaves are linear oblong, apex with mucro margins. Flowers heads are white are many are arranged in terminal corymb. Found in rock crevices, grassy slopes and shrubberies
165.	<i>Anaphalis triplinervis</i> (Sims) Sims ex C. B. Clarke	Woolly Pearly Everlasting	Herb	-	Forests, Alpine grassland and meadows, Scrublands	It is found in the Himalayas, from Afghanistan to SW China, at altitudes of 1800-3300 m. Flowering: July-October.
166.	<i>Anaphalis virgata</i> Thomson		Herb	-	Roghi	It is found on mountainous dry slopes between 2500-3500 m.
167.	<i>Arctium lappa</i> L.	Greater Burdock, Bardana, Cockle Buttons, Dulavratotu	Herb	-	Scrublands	It is found in the Himalayas, at altitudes of 2100-3700 m, and also in West Asia and Europe. Flowering: July-September.
168.	<i>Artemisia biennis</i> Willd.	Biennial Wormwood	Herb	-	Forests, Alpine grassland and meadows, Scrublands	It is common herb in subalpine regions of Hindukush and N.W. Himalayas from 2-3000 m, found in sandy-clay soils along field borders and cultivated fields as a weed.
169.	<i>Artemisia capillaris</i> Thunb.	Indian Wormwood, Nagdona, Davana	Herb	-	Forests, Alpine grassland and meadows, Scrublands	It is an aromatic shrub, 1-2 m high, yellow or dark red small flowers, grows throughout India in hills up to 2400 m elevation. It is believed that Indian Wormwood drives away insects. So the leaves and flowers are put in boxes and cupboards. In Manipur, leaves are used to prepare a local hair-care lotion <i>Chinghi</i> .
170.	<i>Artemisia dracunculus</i> L.	Estragon	Herb	-	Forests, Scrublands	It is a perennial herb and is widespread in the wild across much of Eurasia and North

						America, and is cultivated for culinary and medicinal purposes.
171.	<i>Artemisia dracunculus</i> var. <i>glauca</i> (Pall. ex Willd.) H.M. Hall and Clem. (Syn. <i>A. glauca</i> Pall. ex Willd.)		Herb	-	Forests, Scrublands	An extract of the plant is used used to relieve toothache, reduce fever, and as a treatment for gastrointestinal problems.
172.	<i>Artemisia dubia</i> Wall.		Herb	-	Forests	It us a bubshrub, 80-120 cm tall, much branched; branches 15-35 cm or more, usually flexuous, pubescent or glabrescent. Found in slopes, steppes, riverbanks, roadsides, valleys, canyons, forest margins; low elevations to 3500 m.
173.	<i>Artemisia gmelinii</i> Weber	Gmelin's Wormwood	Herb	-	Forests, Temperate Grasslands, Alpine grassland and meadows, Scrublands	It is a subshrub, 0.5-1 m tall, arising from woody rhizomes, densely velvety or hairless. Stems are branched from upper parts. Leaves are gland-dotted. It is found in Siberia, C. Asia, Himalaya, Tibet, Mongolia, N. China., at altitudes of 2800-4300 m. Flowering: August-October.
174.	<i>Artemisia indica</i> Willd.		Herb	-	Sering Chey	It is a perennial, Herb or subshrub, 80-150 cm tall, much branched. Found on roadsides, forest margins, slopes, shrublands; low elevations to 2000 m.
175.	<i>Artemisia indica</i> var. <i>elegantissima</i> (Pamp.) Y.R. Ling and Humphries (Syn. <i>A. elegantissima</i> Pamp.)		Herb	Endemic	Ribba, Solding	Its branches are 15-25 cm. Leaves abaxially sparsely tomentose or glabrescent; lobules acuminate apically, winged at midvein. Found on slopes at middle to high elevations.
176.	<i>Artemisia japonica</i> Thunb.	Japanese Wormwood, Pamasi, Ptee	Herb	Endemic	Forests, Scrublands	It is perennial herb, 50-90 cm tall, with solitary or several, branched, almost hairless stems from woody, 1.5-2.5 cm thick, upright rootstock. It is found in Japan, Korea, China, Nepal, India, Pakistan, Eastern Afghanistan and Ussuri. Flowering: July-September.

177.	<i>Artemisia laciniata</i> Willd.	Siberian Wormwood	Herb	-	Forests	It is found at elevations of 2,400 - 3,600 metres in the Himalayas.
178.	<i>Artemisia maritima</i> L.	Sea Wormwood, Old Woman	Herb	-	Forests, Scrublands	Found from Kashmir to Uttarakhand and Himachal Pradesh.
179.	<i>Artemisia mryiantha</i> Wall. ex Besser		Herb	-	Katgaon	Found on slopes, roadsides, shrublands, cultivated fields, thickets, forests, rocky riverbanks, ravines; 800-3500 m
180.	<i>Artemisia nilagirica</i> (C.B. Clarke) Pamp.	Indian Wormwood, Nagdona	Herb	-	Forests, Temperate Grasslands, Scrublands	Found throughout India in hills up to 2400 m elevation.
181.	<i>Artemisia parviflora</i> D. Don		Herb	-	Scrublands	Found in grasslands, slopes, forest margins, roadsides, ravines, field margins; 400-4000 m.
182.	<i>Artemisia persica</i> Boiss.		Herb	-	Boktu, Sangla	Found on rocky slopes and sandy areas at 2900-4000 m.
183.	<i>Artemisia roxburghiana</i> Wall. ex Besser (Syn. <i>A. stronglylocephala</i> Pamp.)		Herb	Endemic	Forests, Alpine grassland and meadows, Scrublands	Found on roadsides, slopes, dry canyons, grasslands, waste areas, terraces; 700-3900 m.
184.	<i>Artemisia scoparia</i> Waldst and Kitam.	Redstem Wormwood, Seeta-bani, Jhau, Lasaj	Herb	-	Forests	Considered as a fodder for goats and a cure for pain in the ear. The smoke of twigs is considered good for burns and their infusion is given as a depurative. It is used in the treatment of jaundice, hepatitis and inflammation of the gall bladder.
185.	<i>Artemisia tournefortiana</i> Rchb.		Herb	-	Scrublands	Found in terraces, dry floodlands, waste fields, steppes, open forests, semi-marshlands at 800-1500 m.
186.	<i>Artemisia vestita</i> Wall. ex Besser	Russian Wormwood, Buer, Drubsha, Seski	Herb	-	Forests, Temperate Grasslands, Scrublands	It is found in India in Himachal, Uttarakhand and Kashmir, at altitudes of 2100-3000 m. It is a common traditional Tibetan medicinal plant which has been used widely in China for treating various inflammatory diseases.

187.	<i>Aster albescens</i> (DC.) Wall. ex Hand.-Mazz.	Fading Himalayan Aster	Herb	-	Forests	It is found in the Himalayas, from Kashmir to SW China and Myanmar, at altitudes of 2100-3600 m. Flowering: June-September.
188.	<i>Aster falconeri</i> (C.B. Clarke) Hutch.	Falconer's Aster	Herb	Endemic	Forests	It is found in W-Himalaya, Kashmir, Poonch, and Pakistani Kashmir, at altitudes of 3000-4200 m. Flowering: July-August.
189.	<i>Aster molliusculus</i> (Lindl. ex DC.) C.B. Clarke	Swaying Himalayan Aster	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Pakistan to Uttarakhand, at altitudes of 1800-3300 m. Flowering: June-July.
190.	<i>Bidens biternata</i> (Lour.) Merr. and Shreff.	Yellow Flowered Blackjack, Chirchitta	Herb	-	Forests	It is a widespread weed of disturbed and cultivated areas. It is used to treat eye and ear affections (leaf juice); applied to skin affections in general, as a haemostatic on wounds, and wrapped around the umbilical cord of babies (rubbed leaves).
191.	<i>Bidens pilosa</i> L.	Beggar Tick, Kumra, Kumur,	Herb	-	Scrublands	Young leaves and shoots of this species are eaten raw or cooked as vegetable with fish in NE India. It is native to the Americas. In India it can be seen in the Himalayas, up to an altitude of 2500 m. It is used in China and NE India in folk medicine. Either the whole plant or different parts, have been reported to be useful in the treatment of more than 40 disorders such as inflammation, immunological disorders, digestive disorders, infectious diseases, cancers, metabolic syndrome, wounds, and many others.
192.	<i>Blumea axillaris</i> (Lam.) DC. (Syn. <i>B. mollis</i> (D.Don) Merr.)		Herb	-	Charang	It is found in open waste fields, hillslopes, roadsides; below 1500 m.
193.	<i>Blumea laciniata</i> (Wall. ex Roxb.) DC.	Cutleaf Blumea	Herb	-	Forests, Scrublands	It is native to India and SE Asia. Flowering: February-March.

194.	<i>Blumea membranacea</i> DC.		Herb	-	Yangpa	It is found in forests, valleys along streams; 300-1400 m.
195.	<i>Brachyactis pubescens</i> Aitch. and C. B. Clarke	Hairy Fleabane	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Kashmir to Nepal, at altitudes of 3200-4000 m. Flowering: July-October.
196.	<i>Brachyactis robusta</i> Benth.		Herb	-	Kharogla	
197.	<i>Carduus edelbergii</i> Rech. f	Edelberg's Cotton Thistle	Herb	-	Ponda	It is found in the Himalayas, from Afghanistan to Kashmir, Ladakh and Himachal Pradesh at altitudes of 2000-4500 m.
198.	<i>Carduus onopordioides</i> Fisch. ex M. Bieb.		Herb	-	Ropa	
199.	<i>Carpesium nepalense</i> Less.		Herb	Endemic	Forests	Found on mountain slopes, forests; 1100-3200 m.
200.	<i>Cephalorhynchus macrorhizus</i> (Royle) Tuisl (Syn. <i>Lactuca macrorhiza</i> (Royle) Hook. f.)	Violet Dandelion	Herb	-	Forests, Temperate Grasslands, Alpine grassland and meadows	It is found in the Himalayas, from Pakistan to Bhutan, at altitudes of 1800-4300 m. Flowering: July-September.
201.	<i>Cirsium arvense</i> (L.) Scop. (Syn. <i>Breea arvensis</i> (L.) Less.)	Creeping Thistle	Herb	-	Forests, Temperate Grasslands, Scrublands	In India it is found in the Himalayas, from Kashmir to C. Nepal, at altitudes of 250-3600 m. Flowering: March-August.
202.	<i>Cirsium wallichii</i> DC.	Wallich's Thistle	Herb	Endemic	Forests, Alpine grassland and meadows, Scrublands	It is found in the Himalayas, from Afghanistan to SW China, at altitudes of 1200-3300 m. Flowering: May-August.
203.	<i>Conyza bonariensis</i> (L.) Cronquist (Syn. <i>E. bonariensis</i> L.)	Flax-leaf Fleabane, Hairy Fleabane	Herb	-	Scrublands	It grows up to 75 cm (29.5 in) in height and its leaves are covered with stiff hairs, including long hairs near the apex of the bracts. Its flower heads have white ray florets and yellow disc florets.
204.	<i>Conyza canadensis</i> (L.) Cronquist (Syn. <i>Erigeron canadensis</i> L.)	Horseweed, butterweed	Herb	-	Forests	Horseweed originated in North America and is very widespread there, but has spread to inhabited areas of most of the temperate zone of Asia, Europe and Australia.

205.	<i>Conyza stricta</i> Willd.	Erect Horseweed	Herb	-	Forests	It is an upright annual herb, up to 1.1 m tall. Stems are simple or branched near the base, covered with long white hairs. Stalkless, narrow leaves get smaller towards the top. Inflorescences are branched, up to 35 cm long. Flower-heads are 3mm, pale yellow, numerous, on short, densely hairy pedicels. Flowering: September-October.
206.	<i>Cousinia thomsonii</i> C.B. Clarke	Thomson's Thistle	Herb	-	Scrublands	It is found on stony ground in the Himalayas, from Afghanistan to W. Nepal and Tibet, at altitudes of 3000-4200 m. It is common in Ladakh and Lahaul. Flowering: July-August.
207.	<i>Cremanthodium arnicoides</i> (DC. ex Royle) R.D. Good.	Himalayan Daisy	Herb	-	Alpine grassland and meadows	Himalayan Daisy is found in the Himalayas, from Pakistan to SW China, at altitudes of 3300-4800 m. Flowering: July-September.
208.	<i>Crepis flexuosa</i> (Ledeb.) Benth. ex C.B. Clarke	Tangled Hawksbeard	Herb	-	Temperate Grasslands	It is found in the Himalayas, from Pakistan to C. Nepal, Tibet and C. Asia, at altitudes of 3000-4200 m. It is prominent in Ladakh. Flowering: June-July.
209.	<i>Crepis multicaulis</i> Ledeb.		Herb	-	Forests, Scrublands	Found in forests, forest margins, open places in forests, grasslands, gravelly areas by streams and water, floodplains at 1600-3600 m.
210.	<i>Emilia sonchifolia</i> (L.) DC. ex DC.	Purple Sow Thistle, Cupid's shaving-brush, Hirankhuri	Herb	-	Ponda	It is found in the Himalayas, up to altitudes of 2100 m.
211.	<i>Erigeron alpinus</i> L.	Alpine Fleabane	Herb	-	Forests	

212.	<i>Erigeron annuus</i> (L.) Pers.	Annual Fleabane, Sweet-Scabious, Whitetop	Herb	-	Solding	It is native to America, grown as a garden plant, and naturalized in the hill stations of north India. Flowering: April-November.
213.	<i>Erigeron borealis</i> (Vierh.) Simmons	Alpine Fleabane	Herb	-	Scrublands	It is found in fell meadows, scree beds, rocky outcrops, and lappish rock faces.
214.	<i>Erigeron multiradiatus</i> (Lindl ex DC.) Benth. ex C.B. Clarke	Himalayan Fleabane	Herb	-	Forests, Scrublands	It is a beautiful perennial with erect hairy stem upto 12-30 cm, and aster-like flowers. Leaves can be inversely ovate or lance-like, pointed or blunt, entire or coarsely toothed.
215.	<i>Erigeron umbrosus</i> (Kar. and Kir.) Boiss.(Syn. <i>Brachyactis roylei</i> (DC.) Wendelbo)		Herb	-	Alpine grassland and meadows	
216.	<i>Filago hurdwarica</i> (Wall. ex DC.) Wagenitz		Herb	-	Forests	Found from plains to 3500 m, among rocks, amongst stones, dry water courses and boulder fields.
217.	<i>Galinsoga ciliata</i> (Raf.) S.F. Blake	Shaggy soldier	Herb	-	Kharogla	Found on waste ground, cultivated areas, roadsides.
218.	<i>Galinsoga parviflora</i> Cav.	Quick Weed, Potato Weed	Herb	-	Forests	It is native to South America, widely naturalized all over the world. In Manipur, extract of leaves with salt is given in fever, diarrhoea and vomiting. Leaves of this plant, along with those of <i>Ageratum conyzoides</i> , <i>Drymaria cordata</i> , ginger are made into a paste and applied as a remedy for snake-bite by the Khasis and Jaintias of Meghalaya.
219.	<i>Gerbera gossypina</i> (Royle) Beauverd	Hairy Gerbera Daisy, Kupheru, Jhulu, Kapas	Herb	-	Bhabhanagar	It is found at altitudes of 1200-2400 m. Flowering: March-June.
220.	<i>Gnaphalium affine</i> D. Don	Cotton Weed, Jersey Cudweed	Herb	-	Forests, Temperate Grasslands	Found at altitudes of 1200-3000 m. Flowering time February-October.

221.	<i>Gynura bicolor</i> (Roxb. ex Willd.) DC.	Okinawan Spinach, Edible Gynura	Herb	-	Chaura	It is native to China, Thailand, and Myanmar but grown in many other places as a vegetable and as a medicinal herb.
222.	<i>Helichrysum luteoalbum</i> (L.) Rchb. (Syn. <i>Gnaphalium luteoalbum</i> L.)	Jersey Cudweed or Cat's paw	Herb	-	Forests	It grows in meadows, wastelands, and edges of forests.
223.	<i>Heteropappus altaicus</i> (Willd.) Novopokr.		Herb	-	Moorang	
224.	<i>Inula cappa</i> (Buch.-Ham. ex D.Don) DC.	Fragrant Inula	Herb	-	Forests	It is found in the Himalayas, from Himachal Pradesh to SW China, at altitudes of 1000-2400 m. Flowering: August-February.
225.	<i>Inula orientalis</i> Lam. (Syn. <i>I. grandiflora</i> Willd.)	Showy Inula	Herb	-	Forests	It is found in the Himalayas, from Pakistan to C. Nepal and W. Asia, at altitudes of 2000-3300 m. Flowering: July-September.
226.	<i>Jurinea ceratocarpa</i> (Decne.) Benth.		Herb	-	Alpine grassland and meadows	
227.	<i>Jurinea dolomiaea</i> Boiss.		Herb	Vulnerable	Alpine grassland and meadows	
228.	<i>Lactuca dissecta</i> D. Don	Split-Leaf Lettuce	Herb	-	Forests, Alpine grassland and meadows, Scrublands	It is an annual herb, 40 cm tall. Stems are solitary, erect, branching from the base, branches slender, hairless.
229.	<i>Lactuca dolichophylla</i> Kitam.	Long Leaved Lettuce	Herb	Endemic	Hoye, Kara	It is found in the Himalayas, from Afghanistan to SW China, at altitudes of 1300-3300 m. Flowering: July-September.
230.	<i>Lactuca orientalis</i> (Boiss.) Boiss.		Herb	-	Forests, Scrublands	Found on mountain slopes and scree, on clay or loamy soil, on lime deposits, on gravel, in dry ravines; below 3800 m.
231.	<i>Launaea aspleniifolia</i> Hook. f.	Dhudhe Jar	Herb	-	Bhabhanagar	
232.	<i>Launaea procumbens</i> (Roxb.) Ramayya and Rajagopal	Creeping Launaea, Jangi gobi	Herb	-	Bhabhanagar, Nichar	It is a perennial herb, 30-60 cm tall. It has smooth, branched stem. The whole plant secretes a yellow juice.

233.	<i>Leontopodium alpinum</i> Colm. ex Cass.	Edelweiss	Herb	-	Scrublands, Alpine grassland and meadows	It is a mountain flower, prefers rocky limestone places at about 1,800–3,000 metres altitude
234.	<i>Leontopodium brachyactis</i> Gand.		Herb	-	Alpine grassland and meadows	Found among rocks, open stony ground; 2200-4100 m.
235.	<i>Leontopodium monocephalum</i> Edgew. (Syn. <i>L. fimbriigerum</i> J.R. Drumm.)		Herb	-	Alpine grassland and meadows	Found on alpine gravelly slopes, meadows; 4000-5000 m.
236.	<i>Leucanthemum vulgare</i> (Vaill.) Lam. (Syn. <i>Chrysanthemum leucanthemum</i> L.)	Oxeye Daisy, Dog Daisy	Herb	-	Bhabhanagar	It is native to West Asia and Europe, and naturalized in the Himalayan region in India.
237.	<i>Ligularia</i> sp.	Leopard plants	Herb	-	Surchoo	
238.	<i>Myriactis nepalensis</i> Less.	Nepal Myriactis	Herb	-	Forests, Alpine grassland and meadows	It is found in the Himalayas, from Afghanistan to SW China, and SE Asia, at altitudes of 1400-3900 m. Flowering: April-November.
239.	<i>Myriactis wallichii</i> Less.	Wallich's Myriactis	Herb	Endemic	Forests, Alpine grassland and meadows	Found in grasslands, forests, on slopes in the Himalayas, from Afghanistan to Bhutan, at altitudes of 2600-3600 m. It is also found in China, Myanmar, Thailand, Vietnam, Caucasus, Iran. Flowering: August-October.
240.	<i>Pentanema indicum</i> (L.) Ling	Sonkadi, Bichhloo	Herb	-	Katgaon	It is an erect annual herb, 1-3 ft tall. Stems are branched in the upper part. Branches are cylindrical and leafy.
241.	<i>Picris angustifolia</i> subsp. <i>angustifolia</i> (Syn. <i>P. hieracioides</i> L.)		Herb	-	Charang	Found in grasslands, mountain slopes, forests, along ditches, fields, wastelands, sandy soils; 200-3600 m.
242.	<i>Prenanthes brunoniana</i> Wall. ex DC.	Himalayan Blue Sow-Thistle, Himalayan Rattlesnake Root	Herb	-	Forests	It is commonly found at altitudes of 1800-3600 m. Flowering July-October.
243.	<i>Prenanthes violaefolia</i> Decne.	Viola-Leaved Blue Sow-Thistle	Herb	-	Forests	It is found in Western Himalayas, from Kashmir to Kumaon, at altitudes of 2700-3600 m.

244.	<i>Saussurea albescens</i> (DC.) Sch.Bip.	Pink Saw-Wort, Pirya	Herb	-	Forests	It is found in the Himalayas, from Pakistan to C. Nepal, at altitudes of 2400-3000 m. Flowering: June-September.
245.	<i>Saussurea auriculata</i> (DC.) Sch.Bip. (Syn. <i>S. hypoleuca</i> Spreng. ex DC.)	Kut	Herb	-	Homte	Kut is native to the Himalayas at 3000-3800 m.
246.	<i>Saussurea caespitosa</i> Wall.		Herb	Endemic	Alpine grassland and meadows	
247.	<i>Saussurea ceratocarpa</i> Decne.		Herb	Endemic	Alpine grassland and meadows	Found at 3500-5000 m.
248.	<i>Saussurea costus</i> (Falc.) Lipsch.	Costus, Kuth	Herb	Endemic and Endangered	Charang	It is frequently cultivated in the Himalayas as a medicinal plant. It is found in the Himalayas, from Pakistan to Himachal Pradesh, at altitudes of 2000-3300 m. Flowering: July-August. It is widely used in several indigenous systems of medicine for the treatment of various ailments, like asthma, inflammatory diseases, ulcer and stomach problems.
249.	<i>Saussurea glanduligera</i> Sch.Bip.		Herb	Endemic	Urni	Found at 3500-5000 m.
250.	<i>Saussurea heteromalla</i> (D.Don) Hand.-Mazz.	Kaliziri, Murang, Kaliziri, Batula	Herb	-	Forests	It is a perennial herb commonly found in Western Himalayas, at altitudes of 550-4000 m. Leaf paste with mustard oil is rubbed on leucoderma and wounds. Root extract is taken for fever and colic. The seeds are carminative and used for horse-bites.
251.	<i>Saussurea jacea</i> (Kl.) C.B. Clarke		Herb	-	Yangthang	Found at 3000-4200 m.
252.	<i>Saussurea obovallata</i> (DC.) Edgew.	Brahm Kamal	Herb	Vulnerable	Alpine grassland and meadows	Found at 3000-4800 m.
253.	<i>Saussurea roylei</i> C.B. Clarke	Royle's Saw-Wort	Herb	Indeterminate	Kafnu	It is found in W. Himalayas, at altitudes of 3000-4300 m. Flowering: July-September.

254.	<i>Saussurea simpsoniana</i> (Fielding and Gardner) Lipsch.	Phen Kamal	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Kashmir to Sikkim, at altitudes of 3800-5600 m. Flowering: July-October. It is a well known medicinal plant of Kashmir. Whole plant is used in treating boils.
255.	<i>Saussurea taraxacifolia</i> Wall. ex DC.	Dandelion Saw-Wort	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Kashmir to Bhutan, at altitudes of 3400-5600 m. Flowering: July-September.
256.	<i>Scorzonera virgata</i> DC.	Himalayan Viper Grass, West-Himalayan Salsify	Herb	-	Forests, Alpine grassland and meadows	It is found in W. Himalayas on dry open slopes and moist slopes amidst grasses, at altitudes of 2500-4500 m, Jammu & Kashmir and Himachal Pradesh, Mongolia and W. Tibet. Flowering: June-September.
257.	<i>Senecio desfontainei</i> Druce		Herb	-	Temperate Grasslands, Scrublands	
258.	<i>Senecio graciliflorus</i> DC.	Graceful Senecio	Herb	-	Karaba, Hoya	It is an erect perennial plant with stem 2-7 ft.
259.	<i>Senecio kashmerianus</i> Balakr.		Herb	-	Ribba	
260.	<i>Senecio krashennikovii</i> Schisch.		Herb	-	Forests	
261.	<i>Senecio kunthianus</i> (Wall. ex DC.) Jeff. and Chenn.		Herb	-	Temperate Grasslands	
262.	<i>Senecio laetus</i> Edgew. (Syn. <i>S. chrysanthemoides</i> DC.)	Cheerful Senecio	Herb	-	Forests, Alpine grassland and meadows, Scrublands	It is a tall perennial herb reaching 2 m in height. The plant is hairless below, hairy above, grooved, much branched.
263.	<i>Senecio nudicaulis</i> Buch.-Ham ex D. Don	Bare-Stem Ragwort, Kakrata, Neelkanthi	Herb	-	Bhabhanagar	It is found in Afghanistan, W. Pakistan, Himalayas, from Kashmir to Bhutan, and SW China, at altitudes of 1100-2300 m. Flowering: March-April. Plant extract and leaves are used in colic, fever and on some skin diseases.

264.	<i>Senecio rufinervis</i> DC.	Red-Nerved Senecio	Herb	-	Nichar	It is found in the Himalayas, in Uttaranchal and Nepal at the altitude of 1800–3000 m. Flowering: July-October.
265.	<i>Serratula pallida</i> DC.		Herb	Endemic	Charang	
266.	<i>Siegesbeckia orientalis</i> L.	St Paul's Wort, Gobariya	Herb	-	Forests	It is found at altitudes of 400-2700 m. Flowering: October-November. The juice of the fresh herb is used as a dressing for wounds, over which, as it dries, it leaves a varnishing coating. A decoction of the leaves and young shoots is used as a lotion for ulcers and parasitic skin diseases.
267.	<i>Solidago virga-aurea</i> L.	European Goldenrod, Woundwort	Herb	-	Forests, Alpine grassland and meadows	
268.	<i>Sonchus oleraceus</i> (L.) L.	Sow Thistle, Milk thistle, Sow thistle, Dudhi	Herb	-	Forests, Scrublands	Plant is useful in liver diseases. Leaves and roots are used in indigestion as febrifuge; stem is used as sedative, tonic; root extract is used in ointments for ulcers and wounds. Gum produced by evaporating latex is used for ascites and hydrothorax.
269.	<i>Sonchus wightianus</i> DC.	Wight's Sow-Thistle	Herb	-	Chaura	It is found in grasslands on mountain slopes, grasslands in forests, forest margins, thickets, beside fields, moist places or near water, wastelands on mountain slopes, gravelly areas by rivers, in the Indian subcontinent at altitudes of 300-2300 m. The plant is good in chronic fevers. Roots are given in jaundice, cough, bronchitis, asthma and pertussis. Leaves are applied on swellings. The root extract is taken both by Marma and Tanchangya for the relief of stomach pain.

270.	<i>Tagetes minuta</i> L.	Wild Marigold, Stinking Roger,	Herb	-	Forests, Scrublands	It is native to the southern half of South America. Ever since Spanish colonization, it has been introduced around the world including Europe, Asia, and Africa. The whole plant is strongly and unpleasantly aromatic.
271.	<i>Tanacetum dolichophyllum</i> (Kitam.) Kitam.	Long-Leaved Tansy, Dhoop, Guggul	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Kashmir to W. Nepal and SW China, at altitudes of 3300-4400 m. Flowering: July-September.
272.	<i>Taraxacum officinale</i> Webb.	Dandelion, Dudhi, Dudh- batthal,	Herb	-	Forests, Temperate Grasslands, Alpine grassland and meadows, Scrublands	It has enormous medicinal value. It has been used in herbal medicine in an attempt to treat infections, bile and liver problems, and as a diuretic. It is used in herbal medicine as a mild laxative, for increasing appetite, and as a plant bitter for improving digestion. The milky latex has been used as a mosquito repellent and as a folk remedy to treat warts.
273.	<i>Tragopogon gracilis</i> D. Don	Slender Salsify	Herb	-	Temperate Grasslands	It is found in the Himalayas, from Afghanistan to Nepal, at altitudes of 1500-3200 m. Flowering: April-June.
274.	<i>Tricholepis elongata</i> DC.	Yellow Cotton Thistle	Herb	Endemic	Forests, Temperate Grasslands, Scrublands	It is found in W. Himalayas, at altitudes of 1300-2800 m, in Jammu & Kashmir, Himachal Pradesh and Uttarakhand. Flowering: May-September.
275.	<i>Waldheimia glabra</i> (Decne.) Regel	Smooth Ground Daisy	Herb	-	Alpine grassland and meadows	It is found in the Himalayas at altitudes of 4000-5500 m. Flowering: July-September.
276.	<i>Waldheimia tomentosa</i> (Decne.) Regel	White-Leaf Ground Daisy	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Pakistan to W. Nepal, at altitudes of 3600-5000 m. Flowering: July-September.
277.	<i>Xanthium strumarium</i> L.	Common Cocklebur, Chota Dhatura, Chota Gokhuru	Herb	-	Tapri	The whole plant, specially root and fruit, is used as medicine. According to Ayurveda, it is cooling, laxative, fattening, anthelmintic, alexiteric, tonic, digestive, antipyretic, and improves appetite, voice,

						complexion, and memory. It cures leucoderma, biliousness, poisonous bites of insects, epilepsy, salivation and fever.
	Crassulaceae					
278.	<i>Rhodiola heterodonta</i> (Hook. f. and Thomson) Boriss.	Toothed Rhodiola	Herb	-	Alpine grassland and meadows	It is a rhizomatous perennial with fleshy grayish green leaves, alternately arranged on unbranched upright stems. Leaves are broadly lanceolate-triangular, with irregularly toothed margin. It is found at altitudes of 3300-5000 m. Flowering: June-August.
279.	<i>Rhodiola imbricata</i> Edgew.	Rose root, Arctic root, Golden root, Shrolo	Herb	Endemic	Alpine grassland and meadows	Found at 3300-3500 m.
280.	<i>Sedum quadrifidum</i> Pall. (Syn. <i>Rhodiola quadrifida</i> (Pall.) Fisch. and C.A. Mey.)		Herb	-	Temperate Grasslands, Alpine grassland and meadows	Grows from 2500 – 3000 m on rocks, crevices, moraine and stony slopes
281.	<i>Sedum roseum</i> (L.) Scop. (Syn. <i>Rhodiola rosea</i> L.)	Golden Root, Rose Root, Aaron's Rod, King's Crown	Herb	-	Temperate Grasslands, Alpine grassland and meadows	It grows naturally in wild Arctic regions of Europe, Asia, and North America. The leaves and shoots are eaten raw, having a bitter flavor, or cooked like spinach, and are sometimes added to salads. An extract is sometimes added as a flavoring in vodkas
282.	<i>Rhodiola tibetica</i> (Hook. f. and Thomson) S.H. Fu	Tibetan Rhodiola	Herb	-	Alpine grassland and meadows	It is a perennial herb found growing on rocks and hilly slopes in the Himalayas. Flowering stems are many on each rhizome, simple, erect, hairless, old flowering stems persistent. Tibetan Rhodiola grows at altitudes of 3000-4800 m in the Himalayas, from Afghanistan to

						NE India and China. Flowering: June-August.
283.	<i>Rhodiola wallichiana</i> (Hook.) S.H. Fu	Wallich's Rhodiola	Herb	-	Alpine grassland and meadows	It is a small succulent herb forming large clumps on rocks and open slopes. The plant has numerous erect stems, covered with numerous overlapping fleshy linear leaves. It is found in the Himalayas, from Kashmir to Bhutan, at altitudes of 3000-4800 m. Flowering: June-September.
284.	<i>Rosularia adenotricha</i> (Wall. ex Edgew.) C.-A. Jansson		Herb	-	Alpine grassland and meadows	Root slender, filiform. Rosulate leaves, sessile, fleshy, spatulate, obovate, round at the apex, entire. Flowering stems 5.5-15 cm high, unbranched, deciduous. Found at 2200 m in Himalayas.
285.	<i>Rosularia alpestris</i> (Kar. and Kir.) Boriss.	Lower Mountain Sedum	Herb	-	Forests, Scrublands	It is found in the Himalayas, China, Kazakstan, Kirghizstan, Uzbekistan, at altitudes of 1500-3800 m. Flowering: June-July.
286.	<i>Rosularia rosulata</i> (Edgew.) H. Ohba	Rosette-Leaf Sedum	Herb	-	Ribba, Kharogla	It is found in the Himalayas, from Kashmir, Kumaun to Nepal, at altitudes of 3000-3250 m. Flowering: April-July.
287.	<i>Sedum ewersii</i> Ledeb. (Syn. <i>Hylotelephium ewersii</i> (Ledeb.) H. Ohba)	Pink Sedum, Pink Stonecrop	Herb	-	Forests, Alpine grassland and meadows	Occurs in the Himalayas at 2700-4500 m altitude. Flowering: July-September.
288.	<i>Sedum multicaule</i> Wall. and Lindl.	Multi-Stem Sedum	Herb	-	Forests	It is found in the Himalayas at altitudes of 1500-3200 m. Flowering: July-September.
289.	<i>Sedum oreades</i> (Decne.) Raym-Hamet	Mountain Sedum	Herb	-	Forests	It grows at altitudes of 3000-4000 m in rock crevices, in the Himalayas, from Kashmir, Lahaul, Uttarakhand to Bhutan, S. Tibet, NE India, Burma and SW China (Yunnan).

290.	<i>Sedum trullipetalum</i> Hook. f. and Thomson		Herb	-	Forests, Alpine grassland and meadows	Found in grassy meadows on alpine summits, grasslands, rocks, rock crevices, dry places at 2700-4400 m.
291.	<i>Sinocrassula indica</i> (Decne.) A. Berger	Indian Sedum	Herb	-	Scrublands	It is found in the Himalayas, from Garhwal to Bhutan, Tibet, SW China, at altitudes of 500-4000 m. Flowering: July-October.
	Droseraceae					
292.	<i>Drosera peltata</i> Thunb.	Shield Sundew	Herb	-	Forests	It is a carnivorous plant which grows up to 9-32 cm. Basal leaves are densely whorled, which can be absent in many cases. Upper leaves are the strangest leaves one would get to see.
293.	Ericaceae					
294.	<i>Gaultheria nummularoides</i> D. Don		Herb	-	Forests, Scrublands	
295.	<i>Gaultheria trichophylla</i> Royle	Himalayan Snowberry, Creeping Snowberry	Herb	-	Alpine grassland and meadows	It is found growing on rocks and banks in the Himalayas, from Pakistan to SW China, at altitudes of 2700-4500 m. Flowering: May-July.
	Euphorbiaceae					
296.	<i>Euphorbia hispida</i> Boiss.	Bristly Spurge	Herb	-	Temperate Grasslands	It is found in the Himalayas, from Afghanistan to NW India, at altitudes of 700-2700 m. Flowering: June-November.
297.	<i>Euphorbia maddenii</i> Boiss.		Herb	-	Surchoo, Sangla	Found in N.W. India. Prefers clay loam in cornfields, on dry hillsides, earthy cliffs, in thin forest and by forest paths; 2100 - 3100 m.
298.	<i>Euphorbia pilosa</i> L.		Herb	-	Pangi	Found in alpine meadows, steppes and margins of open forests.
	Gentianaceae					
299.	<i>Comastoma tenellum</i> (Rottb.) Toyok. (Syn. <i>Gentiana tenella</i> Rottb.,		Herb	-	Alpine grassland and meadows	Found in hillsides and wet places at around 2600 m altitude.

	<i>Gentianella tenella</i> (Rottb.) Börner)					
300.	<i>Gentiana argentea</i> (Royle ex D. Don) Royle ex D. Don	Silvery Gentian	Herb	-	Temperate Grasslands	It is found in the Himalayas, from Kashmir to Nepal, at altitudes of 1600-4400 m. Flowering: April-June.
301.	<i>Gentiana capitata</i> Buch.-Ham ex D. Don(Syn. <i>G. marginata</i> Wall.)	Clustered Gentian	Herb	-	Alpine grassland and meadows	Clustered Gentian is found in the Himalayas, from Pakistan to SE Tibet, at altitudes of 1500-4500 m.
302.	<i>Gentiana kurroo</i> Royle	Himalayan Gentian, Chireta, Kadu, Kutki,	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Pakistan to Uttarakhand, at altitudes of 1800-2700 m. Flowering: August-October. The root of this plant has a long history of use as a herbal bitter in the treatment of digestive disorders and is an ingredient of many proprietary medicines. It is especially useful in states of exhaustion from chronic disease and in all cases of debility, weakness of the digestive system and lack of appetite. It is one of the best strengtheners of the human system, stimulating the liver, gall bladder and digestive system, and is an excellent tonic to combine with a purgative in order to prevent its debilitating effects. It is taken internally in the treatment of liver complaints, indigestion, gastric infections and anorexia. It should not be prescribed for patients with gastric or duodenal ulcers.
303.	<i>Gentiana stipitata</i> Edgew.	Large Pale Gentian	Herb	-	Alpine grassland and meadows	Large Pale Gentian is found on stony slopes in the Himalayas, from Uttarakhand to C. Nepal, E. Tibet and China, at altitudes of 3600-4500 m. Flowering: August-October.
304.	<i>Gentiana tianshanica</i> Rupr. ex Kusn.		Herb	-	Alpine grassland and meadows	Found along streams, grassland slopes, forests; at 1200-3900 m altitudes.

305.	<i>Gentiana tubiflora</i> (G. Don) Griseb.		Herb	-	Alpine grassland and meadows	Found on grassy hillsides, dry hillsides, alpine meadows; 4200-5300 m.
306.	<i>Gentiana venusta</i> (G. Don) Wall. ex Griseb.	Charming Gentian	Herb	-	Alpine grassland and meadows	It is found on open slopes, peaty ground, in the Himalayas, from Pakistan to C. Nepal, at altitudes of 3000-5800 m. Flowering: August-October.
307.	<i>Gentianella aurea</i> (L.) Harry Sm.		Herb	-	Alpine grassland and meadows	
308.	<i>Gentianopsis detonsa</i> (Rottb.) Ma		Herb	-	Alpine grassland and meadows	
309.	<i>Halenia elliptica</i> D. Don	Spurred Gentian	Herb	-	Kharogla	Spurred Gentian is found in forests and open slopes of the Himalayas, from Kashmir to SW China, at altitudes of 1800-4500 m. Flowering: July-October.
310.	<i>Lomatogonium carinthiacum</i> (Wulfen) Richb.	Blue Feltwort	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Afghanistan to SW China, at altitudes of 3000-4800 m. Flowering: August-October.
311.	<i>Lomatogonium spathulatum</i> (A. Kern) Fernald		Herb	-	Alpine grassland and meadows	
312.	<i>Swertia angustifolia</i> Buch.-Ham ex D. Don	Narrow-Leaved Swertia	Herb	-	Karcham	It is an annual herb, 20-80 cm tall. Roots are yellow, fibrous. Stems are erect, subquadrangular, narrowly winged on angles, branched
313.	<i>Swertia ciliata</i> (D. Don ex G. Don) B. L. Burtt	Ciliated Swertia	Herb	-	Forests, Alpine grassland and meadows	It is found in the Himalayas, from Kashmir to Sikkim, at altitudes of 2800-4000 m. Flowering: July-September.
314.	<i>Swertia cordata</i> (Wall. ex G. Don) C.B. Clarke	Heart-Leaf Swertia, Charaita	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Kashmir to Bhutan and NE India. Flowering: September-October.
315.	<i>Swertia petiolata</i> Royle ex D. Don	Stalked-Leaf Swertia	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Afghanistan to W Nepal and SE Tibet, at altitudes of 3300-4500 m. Flowering: July-August.

316.	<i>Swertia speciosa</i> D. Don	Showy Swertia	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Pakistan to Bhutan, at altitudes of 2700-4000 m. Flowering: July-September.
Geraniaceae						
317.	<i>Erodium cicutarium</i> (L.) L'Her.	Common Storksbill	Herb	-	Scrublands	It s found in meadows, flood plains, gravel areas, disturbed areas in parts of the Himalayas, at altitudes of 700-2200 m. Flowering: June-July.
318.	<i>Geranium aconitifolium</i> L'Her.		Herb	-	Solding	
319.	<i>Geranium collinum</i> Stephan ex Willd.	Hill Geranium	Herb	-	Forests, Scrublands	It is found in C. & S. Russia, W. Siberia, Romania, Turkey, Iran, Caucasus, C. Asia, Afghanistan and NW Himalayas, Ladakh, at altitudes of 2800-4800 m. Flowering: July-August.
320.	<i>Geranium himalayense</i> Klotzsch	Himalayan Geranium, Lilac Cranesbill	Herb	-	Forests, Alpine grassland and meadows, Scrublands	It is found in the Himalayas, from Afghanistan to C. Nepal, at altitudes of 2100-4300 m. Flowering: June-August.
321.	<i>Geranium nepalense</i> Sweet	Nepal Geranium, Nepalese crane's bill	Herb	-	Forests, Scrublands, Alpine grassland and meadows	Found in the Himalayas, from Afghanistan to NE India, at altitudes of 1500-2900 m. Flowering: April-September.
322.	<i>Geranium pratense</i> L.	Meadow Geranium	Herb	-	Forests, Alpine grassland and meadows	It is found in the Himalayas, from Kashmir to Nepal, at altitudes of 2200-3500 m. Flowering: July-August.
323.	<i>Geranium robertianum</i> L.	Robert geranium	Herb	-	Surchoo	
324.	<i>Geranium rotundifolium</i> L.	Roundleaf Geranium, Round-leaved crane's bill	Herb	-	Temperate Grasslands, Scrublands	It is found Europe, Siberia, Turkey, Iran, Mediterranean area, Africa, Afghanistan, temperate and tropical Himalaya, at elevations of 900-1400 m. Flowering: JUne-July.

325.	<i>Geranium sibiricum</i> L.	Siberian Cranesbill	Herb	-	Alpine grassland and meadows	It is found in open woodlands, areas along the foundation of buildings, and waste areas. It also occurs in boreal meadows.
326.	<i>Geranium wallichianum</i> D. Don ex Sweet	Wallich Geranium, Lal Jari, Ratanjot, Chowhri	Herb	-	Temperate Grasslands, Scrublands, Forests, Alpine grassland and meadows	It is a perennial herb with paired rose-pink to red-purple flowers with pale centers. Flowers are large, 2.5-4 cm across. Sepals are bristly haired on veins.
Hypoxidaceae						
327.	<i>Hypoxis aurea</i> Lour.	Golden Star Grass, Bhui khajur, Golkya	Herb	-	Rupi	It is a small hairy tuberous plant, found in the Himalayas, from Pakistan to Bhutan, SE Asia and Japan, at altitudes of 1500-2800 m.
Iridaceae						
328.	<i>Iris ensata</i> Thunb.	Japanese water iris	Herb	-	Alpine grassland and meadows	It prefers a boggy or marshy environment and soil with a low (acidic) pH.
329.	<i>Iris hookeriana</i> Foster	Hooker's Iris	Herb	Endemic	Alpine grassland and meadows	It is a perennial herb found growing in the Himalayas, Pakistan, Kashmir and Himachal Pradesh, at altitudes of 2400- 3300 m. Flowering: April-July.
Lamiaceae						
330.	<i>Ajuga integrifolia</i> Buch.- Ham. (Syn. <i>A. bracteosa</i> Wall. ex Benth.)	Bracted Bugleweed, Neelkanthi	Herb	-	Forests	It is found in E. Afghanistan, Pakistan, Kashmir, Himalayas to Bhutan, Burma, China, Malaysia, at altitudes of 1000-4000 m. Flowering: March-December.
331.	<i>Ajuga parviflora</i> Benth.	Small- Flowered Bugleweed	Herb	-	Forests, Temperate Grasslands, Scrublands	It is found in Afghanistan, Pakistan, and in the Himalayas from Kashmir to Nepal, at altitudes of 600-1500 m. Flowering: March-June.
332.	<i>Clinopodium umbrosum</i> (M. Bieb.) Kuntze (Syn. <i>Calamintha umbrosa</i> (M. Bieb.) Fisch and C.A. Mey.)	Shady Calamint, Transvaal caldelabra tree, Birch	Herb	-	Forests	It is found in the Himalayas, from Afghanistan to SE Asia, at altitudes of 1000-3400 m. Flowering: April- October. In Nepal, juice of the leaves is applied to cuts and wounds.
333.	<i>Clinopodium vulgare</i> L.	Cushion Calamint, Wild Basil, Dog mint	Herb	-	Forests, Scrublands	It is a plant 9-18 inches in height. Flowers are pink to violet. Plant has a distinctive aroma when crushed.

334.	<i>Elsholtzia ciliata</i> (Thunb.) Hyl. (Syn. <i>E. cristata</i> Willd.)	Crested Late-Summer Mint	Herb	-	Forests, Scrublands	It is common in traditional medicine, as it is carminative and astringent. Flowering: August-October.
335.	<i>Elsholtzia eriostachya</i> (Benth.) Benth.	Fuzzy Himalayan Mint	Herb	-	Forests, Alpine grassland and meadows, Scrublands	It is found in the Himalayas, from Pakistan to SW China, at altitudes of 3000-4500 m. Flowering: July-August.
336.	<i>Elsholtzia pilosa</i> (Benth.) Benth.		Herb	-	Forests	Prefers forest margins, hilly grasslands, riverbanks, marshy meadow margins, pine forests at 1100-3200 m.
337.	<i>Elsholtzia strobilifera</i> (Benth.) Benth.	Pinecone Mint, Pothi	Herb	-	Kharogla	It is found in the Himalayas, from Kashmir to Bhutan, NE India, Tibet, Burma, China, at altitudes of 1900-4800 m. Flowering: May-October.
338.	<i>Hyssopus officinalis</i> L.	Hyssop	Herb	-	Scrublands	The plant is commonly used by beekeepers to produce a rich and aromatic honey. Leaves are used as an aromatic condiment. Medicinally, it has soothing, expectorant, and cough suppressant properties. The plant also includes the chemicals thujone and phenol, which give it antiseptic properties.
339.	<i>Lamium album</i> L.	White Dead Nettle	Herb	-	Urni	It is a perennial herb found in damp places in Western Himalayas, at altitudes of 1500-3700 m. The plant also has a number of uses in herbal medicine. Bees are attracted to the flowers which contain nectar or pollen, hence the plant is sometimes called the Bee Nettle. Flowering: April-July. It is an astringent and demulcent herb that is chiefly used as a uterine tonic, to arrest intermenstrual bleeding and to reduce excessive menstrual flow. It is a traditional treatment for abnormal vaginal discharge and is sometimes taken to relieve painful periods.

340.	<i>Leonurus cardiaca</i> L.	Motherwort, Lion's Ear, Lion's Tail	Herb	-	Hoye, Pangi, Chansu	It is probably native to the southeastern part of Europe and central Asia where it has been cultivated since ancient times. Its natural habitat is beside roadsides, in vacant fields, waste ground, rubbish dumps and other disturbed areas.
341.	<i>Leucas lanata</i> Benth.	Woolly Leucas	Herb	-	Wangtoo	It is a softly desnely wooly-haired perennial herb found on stony slopes in the Himalayas at altitudes of 700-3000 m.
342.	<i>Mentha longifolia</i> (L.) L.	Himalayan Horsemint, Horse Mint, Poudina	Herb	-	Forests, Temperate Grasslands, Scrublands	It is found in the Himalayas, from Afghanistan to C Nepal, at altitudes of 1500-3800 m. Flowering: July-August. In Jammu and Kashmir, the essential oil is used for flavoring confectionery. A tea from the leaves is taken as a cooling medicine. In Uttarakhand, the herb is used for gastrointestinal disorders, cough, colds, and chronic fever. In Nepal, the leaf juice is applied to cuts and wounds as an antiseptic; a leaf decoction is taken to relieve sore throat.
343.	<i>Micromeria biflora</i> (Buch.-Ham. ex D. Don) Benth.	Lemon Savory, English lavender, Ban ajwain, Gorakhopan	Herb	-	Forests, Temperate Grasslands, Scrublands	It is globally distributed in South Africa, Arabia, Afghanistan, Pakistan, India, Nepal, Bhutan and Burma between an altitude range of 1000-3000 m. Within India, it found in tropical and temperate Himalayas from Kashmir to Bhutan and in Punjab, Bihar, N. Circars, western ghats and hills of South India ascending up to 2100 m. Flowering: all year.
344.	<i>Nepeta discolor</i> Royle ex Benth.		Herb	Endemic	Forests, Alpine grassland and meadows	High alpine species, usually growing on exposed rocky slopes.

345.	<i>Nepeta erecta</i> (Royle ex Benth.) Benth.	Erect Catmint	Herb	Endemic	Forests, Alpine grassland and meadows, Scrublands	It is a wildflower found in the forests and open slopes of the Himalayas, at altitudes of 2100-3600 m.
346.	<i>Nepeta eriostachya</i> Benth.		Herb	-	Forests, Alpine grassland and meadows	
347.	<i>Nepeta floccosa</i> Benth.	Woolly Catmint	Herb	Endemic	Scrublands	It is found in the Himalayas, from Pakistan to Uttarakhand, at altitudes of 2700-4400 m. Flowering: June-September.
348.	<i>Nepeta glutinosa</i> Benth.		Herb	-	Alpine grassland and meadows, Scrublands	
349.	<i>Nepeta hindostana</i> (Roth.) Haines	North Indian Catmint, Billilotan	Herb	Endemic to India	Chetetang Tee	Found in Punjab, Upper Gangetic plains, Bihar, West Bengal, Madhya Pradesh, Rajasthan and Deccan Plateau upto an altitude of 2400 m in the Himalayas.
350.	<i>Nepeta laevigata</i> (D. Don) Hand.-Mazz.	Smooth Catmint	Herb	-	Scrublands	It is found on the open slopes of drier areas in the Himalayas, from Afghanistan to SW China, at altitudes of 2000-4500 m. Flowering: July-October.
351.	<i>Nepeta linearis</i> Royle ex Benth.	Narrow-Leaved Catmint	Herb	-	Sangla	It is found in Pakistan, Kashmir, and NW Himalayas. Flowering: May-June.
352.	<i>Nepeta nervosa</i> Royle ex Benth.	Blue Moon	Herb	-	Hoye	
353.	<i>Nepeta podostachys</i> Benth.	Long Stalked Catmint	Herb	-	Forests	It is found in the Himalayas, from Afghanistan to Himachal Pradesh, at altitudes of 2700-4300 m. Flowering: July-September.
354.	<i>Ocimum americanum</i> L. (Syn. <i>O. canum</i> Sims.)	Hoary Basil, Wild basil, Lemon basil, Kali tulasi	Herb	-	Sangla	It is found in the Himalayas from Kumaon to NE India, till altitudes of 1000 m. It is also found in Western Ghats and parts of Africa and SE Asia. The leaves are made into a paste that is used in the treatment of skin diseases. The paste is also applied to wounds and burns that do not heal well.
355.	<i>Origanum vulgare</i> L.	Oregano, Wild marjoram, Ban tulsi, Sathra	Herb	-	Forests, Temperate Grasslands, Alpine grassland and meadows, Scrublands	It is found in Europe and Asia. In India it is found in the Himalayas at altitudes of 1500-3600 m. It has been used as a culinary and medicinal herb for thousands of years. The leaves and flowering stems are strongly antiseptic, antispasmodic, carminative, cholagogue, diaphoretic, emmenagogue, expectorant, stimulant, stomachic and mildly tonic. The plant is taken internally in the treatment of colds, influenza, mild feverish illnesses, indigestion, stomach upsets and painful menstruation.
356.	<i>Phlomis bracteosa</i> Royle ex Benth.	Purple Jerusalem Sage	Herb	-	Alpine grassland and meadows	

357.	<i>Prunella vulgaris</i> L.	Common Self-heal, Heart-of-the-earth, Carpenter's herb	Herb	-	Solding, Rupi, Yangpa	Found throughout Europe, Asia and North America, as well as most temperate climates on roadsides, gardens, waste-places and woodland edges.
358.	<i>Salvia coccinea</i> Buc'hoz ex Etl.	Texas Sage, Tropical Sage, Blood Sage	Herb	-	Alpine grassland and meadows	Texas sage occurs naturally in dry soils and waste places from South Carolina to Florida and west to Texas and Central America, and in the West Indies. It is used as a garden plant in India.
359.	<i>Salvia moorcroftiana</i> Wall. ex Benth.	Kashmir Salvia, Thuth	Herb	Endemic	Forests	It is found in the Himalayas, from Pakistan to W. Nepal, at altitudes of 1500-2700 m. Flowering: May-June.
360.	<i>Salvia mukerjeei</i> Bennet and Raizada	Woolly Sage	Herb	-	Forests, Temperate Grasslands, Scrublands	It is found in the Himalayas, from Pakistan to W. Nepal, at altitudes of 1500-3000 m. Flowering April-June.
361.	<i>Salvia nubicola</i> Wall. ex Sweet	Himalayan Yellow Sage	Herb	-	Temperate Grasslands, Scrublands, Forests, Alpine grassland and meadows	It is found in the Himalayas at altitudes of 2100-4300 m. Flowering: June-August.
362.	<i>Scutellaria prostrata</i> Jacquem ex Benth.	Prostrate Skullcap	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Kashmir to Nepal, at altitudes of 2400-4500 m. Flowering: June-September.
363.	<i>Stachys melissaefolia</i> Benth.		Herb	-	Forests	Found in Himalaya (Kashmir to Bhutan) at 100-4000 m.
364.	<i>Stachys sericea</i> Cav.		Herb	Endemic	Alpine grassland and meadows	Found in Afghanistan, Chitral, W. Pakistan, Himalaya (Kashmir to Bhutan), at 2400-3900 m.
365.	<i>Thymus linearis</i> Benth.	Himalayan Thyme, Jangli ajwain	Herb	-	Forests, Temperate Grasslands, Scrublands, Alpine grassland and meadows	It is found on rocky slope in the Himalayas, from Afghanistan to China, at altitudes of 1500-4300 m. Flowering: April-September. It contains essential oils including thymol which is a strong antiseptic that is gentle on the skin. In addition, it is known to be an expectorant, antispasmodic and carminative (relieves digestive gas). It has been used to treat gastrointestinal problems, respiratory disorders and against hookworm.
Leguminosae						
366.	<i>Astracantha strobilifera</i> (Benth.) Podlech (Syn. <i>Astragalus strobiliferus</i> Benth.)		Herb	-	Leo, Moorang	Found in Western Himalayas from Kashmir to Kinnaur in temperate to alpine regions at elevations from 2,400 - 3,900 metres.
367.	<i>Astragalus amherstianus</i> Benth.		Herb	-	Scrublands	Found in Pakistan, Kashmir and western Himalayan part of India at 2700 to 4700 m.

368.	<i>Astragalus chlorostachys</i> Lindl.	Green-Flowered Milk Vetch	Herb	-	Pangi	It is found in the Himalayas, from Pakistan to Bhutan, at altitudes of 1800-3700 m. Flowering: July-August.
369.	<i>Astragalus graveolens</i> Benth.		Herb	-	Forests, Scrublands	Found in stony slopes, light coniferous forests at 500-2700 m.
370.	<i>Astragalus peduncularis</i> Royle	White Milk-Vetch	Herb	-	Alpine grassland and meadows	Found in the Himalayas, from Afghanistan to Kashmir and Lahaul, at altitudes of 1100-3700 m. Flowering: June-July.
371.	<i>Astragalus rhizanthus</i> subsp. <i>candolleanus</i> (Benth.) Podlech. (Syn. <i>Astragalus candolleanus</i> Benth.)	Candolle's Milk-Vetch	Herb	Endemic	Forests, Alpine grassland and meadows, Scrublands	Found in the Himalayas, from Pakistan to C. Nepal, at altitudes of 2700-4500 m. Flowering: May-August.
372.	<i>Astragalus rhizanthus</i> subsp. <i>rhizanthus</i> Benth. (Syn. <i>Astragalus melacophyllus</i> Bunge)		Herb	-	Forests	Distributed in the temperate to alpine regions of the Himalaya with the main center of diversity in the cold deserts of Lahul-Spiti (Himachal Pradesh) and Leh and Ladakh (Jammu and Kashmir)
373.	<i>Chesneya cuneata</i> (Benth.) Ali	Wedge-Leaf Chesneya	Herb	-	Alpine grassland and meadows	Found on stony slopes in the Himalayas, from Pakistan to Kashmir and Himachal Pradesh, at altitudes of 2400-4300 m. Flowering: June-September.
374.	<i>Dolichos tenuicaulis</i> (Baker) Craib		Herb	-	Shudhrang	Prefers grassy areas at 2000-2300 m in Bhutan, India, Laos, Myanmar, Nepal and Thailand.
375.	<i>Hedysarum microcalyx</i> Baker	Long-Keel Sweetvetch	Herb	Endemic	Forests	Found in Western Himalayas, Pakistan, Kashmir, N.Punjab, Garhwal, at altitudes of 2700-4400 m. Flowering: June-August
376.	<i>Indigofera dosua</i> D. Don		Herb	Endemic	Forests, Alpine grassland and meadows	Found on valley slopes at 1800-2500 m. in Bhutan, India, Indonesia, Laos, Myanmar, Nepal, Thailand and Vietnam.
377.	<i>Lathyrus emodi</i> (Fritch.) Ali	Peavines, Vet chlings	Herb	-	Forests, Scrublands	

378.	<i>Lespedeza elegans</i> Cambess.	Bush Clover	Herb	-	Sharbo	
379.	<i>Lespedeza juncea</i> (L.f.) Pers.	Bush Clover	Herb	-	Forests	Found in mountain slopes and thickets upto below 1500 m altitude.
380.	<i>Lotus corniculatus</i> L.	Common Birdsfoot Trefoil	Herb	-	Forests, Alpine grassland and meadows	It is found at altitudes of 1500-4000 m. Flowering: May-September.
381.	<i>Medicago falcata</i> L.	Sickle Medick, Yellow Lucerne, Yellow Clover	Herb	-	Scrublands	It is found in the Himalayas, from Afghanistan to C. Nepal and Temperate Eurasia, at altitudes of 2700-4000 m. Flowering: May-August.
382.	<i>Medicago lupulina</i> L.	Black Medic, Hop Clover	Herb	-	Urni, Pangi	It is found throughout Europe, north Africa, the near east, and most of Asia, including India, China, and Korea. It is resistant to cold and can be found on mountains up to 1,800 meters.
383.	<i>Melilotus officinalis</i> (L.) Pall. (Syn. <i>Medicago</i> <i>officinalis</i> (L.) E.H.L.Krause)	Yellow Sweet Clover, Kings- Clover,	Herb	-	Forests, Scrublands	In India, it is found in Kashmir and Himachal Pradesh. It is considered to be an antibacterial, anticoagulant, astringent, laxative, carminative and emollient. It can improve blood circulation, and be of great help in treatments of varicose veins and hemorrhoids. It can also be helpful in treatments of wounds, cuts and bruises.
384.	<i>Medicago sativa</i> L.	Alfalfa, Buffal herb, Lucerne, Lusan Ghas	Herb	-	Scrublands	Alfalfa is widely grown throughout the world as forage for cattle, and is most often harvested as hay. Alfalfa has the highest feeding value of all common hay crops, being used less frequently as pasture. Flowering: May-July.
385.	<i>Oxytropis humifusa</i> Kar. and Kir.		Herb	-	Alpine grassland and meadows	Found in sun-facing slopes, floodplains, gravelly areas in valleys at 4000-4400 m.

386.	<i>Oxytropis mollis</i> Benth.	Soft Locoweed	Herb	Endemic	Forests	It is found in the Himalayas, from Pakistan to C. Nepal, at altitudes of 2700-3600 m. Flowering: May-September.
387.	<i>Parochetus communis</i> D. Don	Blue Oxalis, Shamrock pea	Herb	-	Rekong Peo	This is a tuberous, prostrate perennial that is dormant during the winter. Flowering: May-November.
388.	<i>Phaseolus coccineus</i> L.	Runner Bean, Scarlet Runner Bean, Butter Bean	Herb	-	Forests	
389.	<i>Pisum sativum</i> L.	Pea, Green Pea, Matar	Herb	-	Hoye	A pea, although treated as a vegetable in cooking, is botanically a fruit; the term is most commonly used to describe the small spherical seeds or the pods of the legume <i>Pisum sativum</i> . It is cultivated on large scale in Kinnaur district.
390.	<i>Thermopsis barbata</i> Benth.	Black Pea	Herb	-	Forests, Alpine grassland and meadows	It is found in the northern parts of Himachal Pradesh and Garhwal, on open slopes and high meadows, at altitudes of 3200-4500 m. Flowering: May-July.
391.	<i>Trifolium pratense</i> L.	Red Clover	Herb	-	Forests, Temperate Grasslands, Alpine grassland and meadows	It is found in meadows. A tea from the flower has long been considered an antispasmodic and mild sedative and has been used for various lung and throat problems. Externally it is used as a salve for burns and sores.
392.	<i>Trifolium repens</i> L.	White Clover	Herb	-	Temperate Grasslands, Alpine grassland and meadows	It is a species of clover native to Europe, North Africa, and West Asia. It has been widely introduced elsewhere in the world as a pasture crop. It is a herbaceous perennial plant. Besides making an excellent forage crop for livestock, clovers are a valuable survival food: they are high in protein, widespread, and abundant.

						Dried flowerheads and seedpods can also be ground up into a nutritious flour and mixed with other foods.
393.	<i>Trigonella emodi</i> Benth.	Himalayan Fenugreek	Herb	-	Alpine grassland and meadows	It is a perennial herb 20-60 cm, found on ravine shores or meadow by woods of the Himalayan valleys.
394.	<i>Medicago edgeworthii</i> Sirj. (Syn. <i>Trigonella pubescens</i> Baker)	Medick, Burclover	Herb	Endemic	Forests	Found in grasslands, open fields and roadsides at 2500-3500 m.
395.	<i>Vicia bakeri</i> Ali	Wood Vetch	Herb	Endemic	Sangla	It is found in the Himalayas, from Chitral to C. Nepal, at altitudes of 2700-3200 m. Flowering: July-September.
396.	<i>Vicia faba</i> L.	Broad Bean, Horse Bean, Bakla	Herb	-	Sangla	The exact origin of the fava bean is unknown, but it is believed to be native to Central Asia and the Eastern Mediterranean. It has long been cultivated and has spread across all populated continents as a food plant.
397.	<i>Vicia hirsuta</i> (L.) Gray	Tiny Vetch, Jhunjhuni Ankari, Masuri	Herb	-	Pangi	It is found in Europe, Africa and Asia. It is found in the Himalayas, at altitudes of 200-2700 m.
398.	<i>Vicia pallida</i> Hook. and Arn.		Herb	-	Pangi, Sangla	It is a sprawling annual herb, with hollow, four-sided, hairless to sparsely hairy stems which can reach two meters in maximum length.
399.	<i>Vicia sativa</i> L.	Common Vetch, Garden Vetch	Herb	-	Forests	
400.	<i>Vigna vexillata</i> (L.) A. Rich.	Zombi Pea, Wild Mung, Wild Cowpea, Janglee Mung	Herb	-	Rarang Panoong	The whole plant is used in Ayurvedic medicine. It is effective for joint disorders, arthritis, swellings in joints. As a hemostatic it checks hemorrhaging thus prolongs life in individuals suffering from internal bleeding while building their strength with its nutritive action.
	Liliaceae					
401.	<i>Gagea lutea</i> (L.) Ker.Gawl.	Yellow Star of Bethlehem	Herb	-	Scrublands	It is a delicate bulbous plant with grass like leaves and small yellow star shaped flowers. The flowers are long-stalked, and greenish or reddish brown on the outside of the petals.

402.	<i>Lilium polyphyllum</i> D. Don	White Himalayan Lily, Kalihari, Ksirakakoli	Herb	-	Ralli	It is found in the Himalayas, from Afghanistan to Nepal, at altitudes of 1800-3700 m. Flowering: June-July. The tuberous roots are used as a tonic in emaciation and as a source of energy, after dry roasting.
403.	<i>Notholirion thomsonianum</i> (Royle) Stapf	Rosy Himalayan Lily, Thomson's Lily	Herb	-	Karcham	It is found in the Himalayas, from Afghanistan to Uttarakhand, at altitudes of 800-1800 m. Flowering: March-April.
Linaceae						
404.	<i>Linum perenne</i> L.	Lewis Flax, Blue Flax	Herb	-	Chulling	It grows on ridges and dry slopes, from sea level up to 3,400 m
Malvaceae						
405.	<i>Malva neglecta</i> Wallr.	Common Mallow, Chee seweed, Sonchala	Herb	-	Scrublands, Alpine grassland and meadows, Temperate Grasslands, Forests	It is native to the American continents, but naturalized widely world over. In the Himalayas it can be found even at 4000 m elevation.
406.	<i>Malva pusilla</i> Sm. (Syn. <i>M. rotundifolia</i> L.)	Small Mallow	Herb	-	Sangla	It is native to Europe, naturalized in hill stations of India. The leaves are demulcent, which can be used as a soothing agent to relieve minor pain and membrane inflammation. The seed of the <i>Malva pusilla</i> can be used in the treatment of coughs, bronchitis, ulcers, and hemorrhoids. It can also be applied externally to treat diseases of the skin.
407.	<i>Malva sylvestris</i> L.	High Mallow, Gurchanti, Socholi	Herb	-	Kalpa	It is widespread in Africa, Europe and Asia. Within India it is found in the Himalayas, from Kashmir to Kumaon up to an altitude of 2400 m. It possesses the properties common to mucilaginous herbs,

						and an infusion thereof forms an excellent demulcent in coughs, irritations of the air-passages, flux, affections of the kidney and bladder, etc.
408.	<i>Malva verticillata</i> L.	Chinese Mallow, Mikanchi	Herb	-	Nichar	It is found in the Himalayas, from Pakistan to Bhutan, at altitudes of 2100-3300 m. Flowering: June-September. The seeds are used in Tibetan medicine, where they are considered to have a sweet and astringent taste plus a heating potency. They are used in the treatment of renal disorders, the retention of fluids, frequent thirst and diarrhoea. The root is used to cause vomiting in the treatment of whooping cough.
	Melanthiaceae					
409.	<i>Trillium govanianum</i> Wall. ex D. Don (Syn. <i>Trillidium govanianum</i> (Wall. ex D. Don) Kunth.	Himalayan Trillium, Nag Chhatri	Herb	-	Forests, Alpine grassland and meadows	It is a high value medicinal herb and is mainly distributed from Pakistan to Bhutan between the altitudinal ranges of 2500–4000 metres above sea level across Himalayan region. It is a native species of the Himalayas, usually preferring shady areas in forest for its profused growth. Its rhizome contains trillarin and upon hydrolysis yield 2.5% diosgenin (a corticosteroid hormone) which is used for preparation of steroidal and sex hormones.
	Nyctaginaceae					
410.	<i>Boerhavia diffusa</i> L.	Punarnava, Red Spiderlin, Spreading Hogweed	Herb	-	Pangi	It is used for rejuvenating or renewal of the body in Ayurveda.

411.	<i>Oxybaphus himalaicus</i> Edgew.		Herb	-	Forests	Found in thickets, grasslands, dry and warm river valleys, riversides, rock crevices, rock walls at 700-3400 m
Onagraceae						
412.	<i>Circaea alpina</i> L.	Alpine Enchanter's Nightshade	Herb	-	Alpine grassland and meadows	Found in forests, thickets, grassy alpine areas, cool, moist, and wet places, on moss-covered rocks and logs; near sea level to 5000 m.
413.	<i>Circaea alpina</i> subsp. <i>imaicola</i> (Asch. and Magnus) Kitam. (Syn. <i>Circaea imaicola</i> (Asch.-Mazg) Hand.- Mazz.)	Himalayan Enchanter's Nightshade	Herb	-	Alpine grassland and meadows	Occurs in cool moist places along streams, in thickets and coniferous forests and in grassy openings between 2000-4000 m.
414.	<i>Epilobium angustifolium</i> L.	Fireweed, Great Willowherb, Rosebay Willowherb	Herb	-	Alpine grassland and meadows	It is particularly abundant on recently disturbed ground in coniferous or mixed forest ecosystems and is a common weed of roadsides and waste areas.
415.	<i>Epilobium chitralense</i> P.H. Raven		Herb	-	Alpine grassland and meadows, Scrublands	Found in western Himalaya from Chitral to Baltistan (Karakoram)
416.	<i>Epilobium cylindricum</i> D. Don	Willowherb	Herb	-	Alpine grassland and meadows	Found in disturbed wet places along rivers, streams, and lakes, often along roadside ditches in mountains at 1300-3200 m.
417.	<i>Epilobium hirsutum</i> L.		Herb	-	Yangpa	Found in temperate and montane Eurasia and Africa; common in temperate areas throughout the Himalayan region. It typically grows in wet or damp habitats without dense tree-cover up to 2,500 metres above sea-level.
418.	<i>Epilobium latifolium</i> L.	Dwarf Fireweed	Herb	Endemic	Forests, Alpine grassland and meadows	Grows on moist gravelly areas along rivers and in mountains at 1600-5200 m.

419.	<i>Epilobium roseum</i> (Schreb.) Schreb.		Herb	-	Forests, Alpine grassland and meadows	Found at damp areas near streams, roadsides, ditches in mountains; 1500-2200 m.
420.	<i>Epilobium royleanum</i> Hausskn.	Royle's Willow-Herb	Herb	-	Forests	Found in moist weedy places in valleys, along roads and streams, sometimes in high mountain meadows at 1400-3300 (-4300) m.
421.	<i>Oenothera rosea</i> L'Her. ex Aiton	Rose evening primrose	Herb	-	Forests	Found in disturbed habitats along creeks and in low weedy places; 1000-2000 m.
422.	<i>Raimannia drummondii</i> Rose	Beach Evening-Primrose	Herb	-	Sering Chey	Useful for treating sore throat and eye diseases.
Orchidaceae						
423.	<i>Calanthe plantaginea</i> Lindl.	Plantain Calanthe	Herb	-	Rupi	Found in broad-leaved forests at 1800-2500 m.
424.	<i>Cephalanthera longifolia</i> (L.) Fritsch. (Syn. <i>C. ensifolia</i> Rich.)	Narrow-leaved Helleborin, Sword-leaved Helleborine	Herb	-	Kharogla	Northern hemisphere, Himalaya eastwards to Bhutan, S.E.-Tibet, Burma. In eastern Himalaya up to 3200 m.
425.	<i>Dactylorhiza hatagirea</i> (D. Don) Soo	Salam Panja, Hatta Haddi, Panchaule	Herb	Critically Endangered	Forests, Alpine grassland and meadows	It is a species of orchid generally found growing in the Himalayas, from Pakistan to SE Tibet, at altitudes of 2,800–4,000 metres. The juice extracted from tuber is used as tonic and also used for the treatment of pyorrhea (inflammation of the gum & teeth). Root paste is externally applied as poultice on cuts and wounds and extract is given in intestinal disorders. The term Hatta Haddi is probably coined because it is used for treating bone fractures.
426.	<i>Epipactis gigantea</i> Douglas ex Hook.	Stream Orchid	Herb	-	Forests	
427.	<i>Epipactis helleborine</i> (L.) Crantz	Broad-leaved Helleborine	Herb	-	Forests	Found in woods and hedge-banks and often not far from paths near human activity

428.	<i>Epipactis helleborine</i> subsp. <i>Helleborine</i> (Syn. <i>Epipactis latifolia</i> (L.) All.)	Broad-leaved Helleborine	Herb	-	Forests	Found at 2400-3200 m;
429.	<i>Epipactis veratrifolia</i> Boiss. and Hohen.	Eastern Marsh Helleborine, Scarce Helleborine	Herb	-	Shurting	Found in forests, forest margins at 2700-3400 m.
430.	<i>Goodyera repens</i> (L.) R. Br.	Creeping Lady's-Tresses, Dwarf Rattlesnake Plantain	Herb	-	Forests	Found in isolated spots in the forests and bogs.
431.	<i>Herminium lanceum</i> (Thunb. ex Sw.) Vuijkj	Lanceleaf Herminium	Herb	-	Yangpa	Found in mixed forests, coniferous forests, bamboo forests, thickets, grasslands at 700-3600 m.
432.	<i>Malaxis muscifera</i> (Lindl.) Kuntze.	Fly Bearing Malaxis	Herb	Threatened (Vulnerable)	Sangla	It is distributed throughout hilly areas in India, upto 4000 meter above msl. It is found in forests, shrubberies and grassy slopes. This plant is one of the threatened medicinal orchids inhabiting hills in India.
433.	<i>Neottia listeroides</i> Lindl.	Listera-Like Neottia	Herb	-	Kharogla	Found in forests, grassy slopes; (1500-) 2500-3900 m.
434.	<i>Spiranthes sinensis</i> (Pers.) Ames.	Chinese Spiranthes	Herb	-	Solding	It is a species of orchid occurring in much of eastern Asia, west to the Himalayas, south and east to New Zealand, and north to Siberia. Found in open and moist areas in forests, thickets, wet grasslands, meadows, marshes at 200-3400 m.
Orobanchaceae						
435.	<i>Euphrasia himalayica</i> Wettst.	Eyebright	Herb	-	Forests, Alpine grassland and meadows	Found at 3200-4200 m; Afghanistan, Himalaya (Kashmir to Bhutan).
436.	<i>Euphrasia platyphylla</i> Pennell	Eyebright	Herb	-	Alpine grassland and meadows	Found in Jammu & Kashmir (Kashmir), NW-India, Nepal

437.	<i>Leptorhabdos parviflora</i> (Benth.) Benth.	Leptorhabdos	Herb	-	Forests, Scrublands	Found in Cucusus, C. Asia, Himalaya (Kashmir to Nepal), W. Tibet, at altitudes of 1700-3300 m. Flowering: July-August.
438.	<i>Orobanche alba</i> Stephen	Thyme Broomrape	Herb	-	Forests, Alpine grassland and meadows, Scrublands	It is found in Europe, Afghanistan, Pakistan, Himalayas (Kashmir to Nepal), and Tibet, at altitudes of 2300-3400 m. Flowering: June-August.
439.	<i>Orobanche epithymum</i> DC.		Herb	-	Hoye	
440.	<i>Pedicularis bicornuta</i> Klotzsch		Herb	Endemic	Forests	The flowers are used in Tibetan medicine, they are said to have a bitter taste and a cooling potency. They are used in the treatment of vaginal and seminal discharges
441.	<i>Pedicularis longiflora</i> Rudolph		Herb	-	Forests, Alpine grassland and meadows	Found in alpine meadows, along streams, springs, seeps; 2100--5300 m.
442.	<i>Pedicularis pectinata</i> Wall. ex Benth.	Kashmir Lousewort	Herb	Endemic	Alpine grassland and meadows	It is a perennial herb found in the Himalayas, from Pakisan to Kashmir, at altitudes of 2700-4500 m.
443.	<i>Pedicularis porrecta</i> Wall.	Paired Flower Lousewort	Herb	-	Forests	
444.	<i>Pedicularis tenuirostris</i> Aitch.	Slender-Beak Lousewort	Herb	Endemic	Kharogla	It is found in the Western Himalayas, from Pakistan to Uttarakhand and Himachal Pradesh, at altitudes of 2400-3700 m. Flowering: July-August.
Oxalidaceae						
445.	<i>Oxalis acetosella</i> L.	Common Wood Sorrel	Herb	-	Sangla	
446.	<i>Oxalis corniculata</i> L.	Creeping Wood Sorrel, Amrul	Herb	-	Forests, Temperate Grasslands, Scrublands	It is also found in the Himalayas, at altitudes of 300-3000 m. Flowering: February-October. It is used in the treatment of influenza, fever, urinary tract infections, enteritis, diarrhoea, traumatic injuries, sprains and poisonous snake bites. The juice of the plant, mixed with butter, is applied to muscular swellings, boils and pimples. An infusion can be used as a wash to rid children of hookworms. The plant is a good source of vitamin C and is used as an antiscorbutic

						in the treatment of scurvy. The leaves are used as an antidote to poisoning by the seeds of <i>Datura</i> spp, arsenic and mercury. The leaf juice is applied to insect bites, burns and skin eruptions. It has an antibacterial activity.
	Papaveraceae					
447.	<i>Corydalis cashmeriana</i> Royle	Kashmir Corydalis	Herb	-	Temperate Grasslands	It is common in shrubberies, open slopes and scree, from Kashmir to SE Tibet, at altitudes of 3000-4500 m. Flowering: May-August.
448.	<i>Corydalis cornuta</i> Royle	Horned Corydalis	Herb	-	Forests, Alpine grassland and meadows	It is found in the Himalayas, from Pakistan to Sikkim, at altitudes of 2300-3600 m. Flowering: July-September.
449.	<i>Corydalis gowaniana</i> Wall.	Gowan's Corydalis	Herb	Endemic	Hilly	Found in the Himalayas at altitudes of 2400-4800 m. Flowering: May-August.
450.	<i>Corydalis meifolia</i> Wall.	Threadleaf Corydalis	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Himachal Pradesh to SE Tibet. Flowering: June-August.
451.	<i>Corydalis moorcroftiana</i> Wall. ex Hook. f. and Thomson	Moorcroft's Corydalis	Herb	-	Forests	It is found in the Himalayas, from SW Xizang to Ladakh and Kashmir, at altitudes of 4000-5400 m. Flowering: July-August.
452.	<i>Corydalis vaginans</i> Royle (Syn. <i>C. ramosa</i> Hook. f. and Thomson)	Glaucous Corydalis	Herb	-	Alpine grassland and meadows	It is found in NW Himalayas, from Afghanistan to Lahaul. Flowering: May-August.
453.	<i>Fumaria indica</i> (Haussk.) Pugsley	Indian Fumitory, Papara, Papra	Herb	-	Karaba, Boktu	It is found throughout the Himalayas, up to altitudes of 2400 m. It is also found in Western Ghats. Flowering: April-May. The plant is sold under the name pitpapra in Ayurvedic bazaars. It is also used in the Unani system of medicine and incorporated into trifala shahtara. It is used in aches and pains, diarrhoea, fever, influenza and liver complaints. A cold infusion of the plant is used to treat wasting diseases of children and to help cooling during fever and in the treatment of constipation and dyspepsia. It is used as a blood purifier for skin diseases and applied externally in leucoderma and as a fomentation for swollen joints. The dried plant is also used as an anthelmintic, diuretic and diaphoretic and, in combination with black pepper, for jaundice.
454.	<i>Meconopsis aculeata</i> Royle	Blue Poppy, Vanita, Kanta	Herb	Endemic and Vulnerable	Alpine grassland and meadows	It is found from Kumaon to Kashmir at elevations of 3,000 to 4,500 meters. A postal stamp was issued by the Indian Postal Department, to commemorate this flower.
455.	<i>Papaver dubium</i> L.	Long-headed Poppy	Herb	-	Katgaon	
456.	<i>Papaver nudicaule</i> L.	Iceland Poppy	Herb	-	Sangla	All parts of this plant are likely to be poisonous, containing (like all poppies) toxic alkaloids. In

						particular, it has been shown to contain the benzophenanthidine alkaloid, chelidonine. It also contains (+)-amurine, (-)-amurensinine, (-)-O-methylthalisopavine, (-)-flavinantine and (-)-amurensine.[
457.	<i>Papaver somniferum</i> L.	Opium Poppy	Herb	-	Forests	It is the species of plant from which opium and poppy seeds are derived and is a valuable ornamental plant, grown in gardens. Its native range is probably the eastern Mediterranean, but is now obscured by ancient introductions and cultivation, being naturalized across much of Europe and Asia.
	Parnessiaceae					
458.	<i>Parnassia laxmanii</i> Pall. ex Schult.		Herb	-	Alpine grassland and meadows	Found in <i>Picea</i> forest margins, shaded places, meadows by streams in valleys at 2500-2600 m.
459.	<i>Parnassia nubicola</i> Wall. ex Royle	Himalayan Bog Star, Phutkya	Herb	-	Forests	It is found in the Himalayas, from Afghanistan to Kumaon, at altitudes of 2900-4300 m. Flowering: July-September.
	Phrymaceae					
460.	<i>Lancea tibetica</i> Hook. f and Thomson	Depgul, Chinese Milkwort, Raikse (Ladakhi)	Herb	-	Nako	Found in the Himalayas, from Kashmir to Bhutan, Tibet and W. China, at altitudes of 3300-4400 m. Flowering: May-July.
461.	<i>Mazus surculosus</i> D. Don	Suckering Mazus	Herb	-	Forests	It is a perennial herb with small beautiful flowers which are pale blue or white. It produces sucker like runners.
	Phytolacaceae					
462.	<i>Phytolacca acinosa</i> Roxb.	Indian Pokeweed, Himalayan Pokeberry	Herb	-	Nichar, Sangla	It is found in the Himalayas, from Kashmir to SW China and SE Asia, at altitudes of 1500-3000 m. Flowering: June-September.
	Piperaceae					
463.	<i>Peperomia tetraphylla</i> (G. Forst.) Hook. and Arn.	Four-Leaf Peperomia	Herb	-	Wangtoo	Found in the Himalayas, from Kashmir to Bhutan and SE Asia, at altitudes of 1000-2500 m.
	Plantaginaceae					
464.	<i>Hemiphragma heterophyllum</i> Wall.	Nash Jhaar	Herb	-	Rupi	It is a hairy creeping plant often found carpeting the ground in forests and shrubberies of the Himalayas, from Uttarakhand to NE India and SE China, at altitudes of 1800-3600 m.
465.	<i>Hippuris vulgaris</i> L.	Common Mare's-tail	Herb	-	Rupi	It is a common aquatic plant of Eurasia and North America ranging from Greenland to the Tibetan Plateau to Arizona. It prefers non-acidic waters.
466.	<i>Picrorhiza kurroo</i> Royle ex Benth.	Kutki, Kardi, Karoi, Karu	Herb	Endemic and Endangered	Alpine grassland and meadows	It is found in the Himalayas, from Pakistan to Uttarakhand, at altitudes of 3300-4300 m. Flowering: June-August. It is a well-known herb in the Ayurveda and has been used to treat disorders of the liver and upper respiratory tract, chronic diarrhea, and scorpion sting.

467.	<i>Plantago depressa</i> Willd.	Plantains, Fleaworts	Herb	-	Forests, Temperate Grasslands, Alpine grassland and meadows	Usually found under tree shade on waste ground, 1700 - 1900 metres in the Himalayas
468.	<i>Plantago erosa</i> Wall.	Fleaworts	Herb	-	Sangla	Found on mountain slopes, riverbanks, ravines, fields, roadsides; 400-3800 m.
469.	<i>Plantago himalaica</i> Pilg.	Himalayan Plantain, Ashwakarn	Herb	-	Temperate Grasslands, Scrublands	It is found at altitudes of 2900 m and above in the Himalayas, from Kashmir to Nepal. Leaves slightly bruised, are applied on wounds. Oil from the seeds is antimicrobial, for chronic diarrhoea and shigellosis, a bacillary dysentery.
470.	<i>Plantago major</i> L.	Broad Leaf Plantain, Lahuriya	Herb	-	Forests	It is a perennial herb, variable with short stout, erect, truncate, rootstocks and numerous adventitious roots. Leaves appear in rosettes, spirally arranged, stalked, sometimes not clearly distinguished into stalk and the blade.
471.	<i>Veronica agrestis</i> L.	Green Field-speedwell	Herb	-	Kuppa	Found in fields, wasteland, gardens, flower-beds.
472.	<i>Veronica beccabunga</i> L.	Brooklime, Mossy Speedwell, European Speedwell	Herb	-	Alpine grassland and meadows	It is found in Europe, W Asia, Kashmir and China, at altitudes of 1200-2500 m. Flowering: April-September.
473.	<i>Veronica biloba</i> L.	Twolobe Speedwell	Herb	-	Kalpa	Found in W. & C. Asia, Himalayas, Tibet, W. China, at altitudes of 2300-4200 m. Flowering: April-August.
474.	<i>Veronica hederifolia</i> L.	Ivy-leaved Speedwell	Herb	-	Rekong Peo	It is native to Eurasia and it is present in other places as an introduced species and a common weed.
475.	<i>Veronica lanosa</i> Royle ex Benth.		Herb	Endemic	Alpine grassland and meadows	
476.	<i>Veronica persica</i> Poir.	Bird's Eye Speedwell	Herb	-	Sangla	It is native to Eurasia and is widespread as an introduced species in the British Isles, North America, and eastern Asia.
	Poaceae					
477.	<i>Imperata cylindrica</i> (L.) Raeusch.	Cogon Grass, Cotton Grass, Thatch Grass, Uloo, Sirhu, Dabh, Khans	Herb		Temperate Grasslands	It is a perennial rhizomatous grass native to east and southeast Asia, India, Micronesia and Australia.
	Polemoniaceae					
478.	<i>Polemonium caeruleum</i> L.	Himalayan Jacob's Ladder	Herb	-	Chansu	Found in forests, open slopes and damp places in the Himalayas, from Pakistan to West Nepal, at altitudes of 2400-3700 m. Flowering: June-September.
	Polygalaceae					
479.	<i>Polygala hottentotta</i> C. Presl (Syn. <i>P. abyssinica</i> R. Br. ex Fresen.)	Small Purple Broom	Herb	-	Wangtoo	It is native to Africa, probably naturalized in India.
	Polygonaceae					

480.	<i>Bistorta vacciniifolia</i> (Wall. ex Meisn.) Greene (Syn. <i>Polygonum vacciniifolia</i>)	Rose Carpet Knotweed	Herb	-	Alpine grassland and meadows	Native to the Himalayas, Kashmir to Bhutan.
481.	<i>Fagopyrum esculentum</i> Moench	Buckwheat, Kotu, Kuktu, Phaphra	Herb	-	Forests, Scrublands	Buckwheat seed is also used for making flour. It is similar to the sunflower seed, with a single seed inside a solid outer hull. Flowering: May-September. Used to treat high blood pressure associated with fragile capillaries, and for frostbite, chilblains, retinal haemorrhages, and radiation damage. In Chinese medicine, it is prescribed for traumatic injuries, lumbago, period pains, bites, and stings.
482.	<i>Fagopyrum tataricum</i> (L.) Gaertn.	Tartary Buckwheat, Duckwheat, India buckwheat, India wheat	Herb	-	Sangla	It is a domesticated food plant, related to Common Buckwheat. It is often counted as a cereal, but unlike the true cereals the buckwheats are not members of the grass family.
483.	<i>Fallopia dumetorum</i> (L.) Holub (Syn. <i>Polygonum dumetorum</i> L.)	Climbing false buckwheat	Herb	-	Forests	It is native to temperate Eurasia
484.	<i>Oxyria digyna</i> (L.) Hill	Mountain Sorrel, Wood sorrel, Alpine sorrel, Alpine mountainsorrel	Herb	-	Forests, Alpine grassland and meadows, Scrublands	Commonly found on open slopes and grazing grounds of the Himalayas, from Pakistan to SW China, at altitudes of 2400-5000 m. Flowering: May-July.
485.	<i>Persicaria amplexicaulis</i> (D. Don) Ronse Decr. (Syn. <i>Polygonum amplexicaule</i> D. Don)	Mountain Fleece	Herb	-	Forests	It is native to China, the Himalayas, and Pakistan
486.	<i>Persicaria capitata</i> (Buch.-Ham. ex D. Don) H. Gross (Syn. <i>Polygonum capitatum</i> Buch.-Ham. ex D. Don)	Pink Knotweed	Herb	-	Forests	Pink knotweed is a mat-forming perennial herb from the Himalayas. Found in the Himalayas, at altitudes of 600-3500 m.
487.	<i>Persicaria hydropiper</i> (L.) Delarbre (Syn. <i>Polygonum hydropiper</i> L.)	Water Pepper	Herb	-	Forests	Found in the Himalayas, at altitudes of 900-2300 m. It is also found in other parts of India. Flowering: April-September.
488.	<i>Persicaria nepalensis</i> (Meisn.) Miyabe (Syn. <i>Polygonum nepalense</i> Meisn.)	Nepal Knotweed	Herb	-	Forests	Found in the Himalayas, from Pakistan east to China and Japan, Malaysia, at altitudes of 1200-4100 m. It is also found in Tropical Africa, Afghanistan.
489.	<i>Persicaria vivipara</i> (L.) Ronse Decr. (Syn. <i>Polygonum viviparum</i> L.)	Alpine Bistort, Alpine Knotweed, Harerug	Herb	-	Forests, Alpine grassland and meadows, Scrublands	Found in the Himalayas, from Pakistan to SW China, at altitudes of 3300-5000 m. Flowering: June-July.
490.	<i>Polygonum affine</i> D. Don	Himalayan Fleeceflower	Herb	-	Alpine grassland and meadows	It is a herbaceous perennial

491.	<i>Polygonum aviculare</i> L.	Common Knotgrass, Birdweed, Bannalia, Endrani, Hisonali, Kuwar	Herb	-	Forests, Alpine grassland and meadows, Scrublands, Temperate Grasslands	It is a weed found worldwide, with origin uncertain. In India it is found in the Himalayas, at altitudes of 2200-3800 m. Flowering: March-September.
492.	<i>Polygonum cognatum</i> Meisn.	Indian knotgrass, Madimak	Herb	-	Scrublands	Prefers gravelly mountain slopes, dry riverbeds at 1400-4600 m.
493.	<i>Polygonum glaciale</i> var. <i>glaciale</i> (Syn. <i>P. glaciale</i> (Meissn.) Hook. f.)		Herb	-	Katgaon	Found on grassy slopes, wet valleys at 1300-4300 m.
494.	<i>Polygonum molliforme</i> Boiss.		Herb	-	Scrublands	Found at 4000-5000 m.
495.	<i>Polygonum paronychioides</i> C.A. Mey.	Fuzzy Knotweed	Herb	Endemic	Forests, Temperate Grasslands, Scrublands	Found in the Himalayas, from Afghanistan to Himachal Pradesh, at altitudes of 2700-4300 m. Flowering: June-September.
496.	<i>Polygonum plebeium</i> R. Br.	Small Knotweed, Machechi	Herb	-	Scrublands	Found in India from sea level to 2200 m in the Himalayas. It is also found natively throughout much of South Asia and in Madagascar.
497.	<i>Polygonum pubescens</i> Blume (Syn. <i>Persicaria pubescens</i> (Blume) Hara)	Drooping Knotweed	Herb	-	Forests	Found India, China, Nepal, at altitudes of 800-2100 m. Flowering: September-October.
498.	<i>Polygonum tortuosum</i> D. Don	Twisted Knotweed, Nyolo	Herb	-	Alpine grassland and meadows, Scrublands	Found in the Himalayas, from Afghanistan, N India, Nepal, to SW Asia, at altitudes of 3600-4900 m. Flowering: July-August.
499.	<i>Polygonum rottboellioides</i> Jaub. and Spach (Syn. <i>P. tubulosum</i> Boiss.)		Herb	-	Forests, Alpine grassland and meadows	Grows between 1500-4500 m.
500.	<i>Rheum australe</i> D. Don	Himalayan Rhubarb, Red-veined pie plant	Herb	Vulnerable	Forests, Alpine grassland and meadows	It is a plant which has dark reddish-purple flowers, in dense branched clusters, in a long inflorescence which can be 1 ft long. Native to India, Myanmar, Nepal, Pakistan and Sikkim
501.	<i>Rheum webbianum</i> Royle.	Indian Rhubarb, Small Himalayan Rhubarb, Hind-Revand-Chini, Archa	Herb	Endemic	Alpine grassland and meadows	It is a tall, stout perennial herb, growing from 1 ft to 7 ft tall. It is very common in the Himalayas, from Pakistan to W. Nepal, at altitudes of 2400-4300 m. Flowering: June-July.
502.	<i>Rumex acetosa</i> L.	Common Sorrel, Spinach Dock, Narrow-leaved Dock, Chuk	Herb	-	Chansu	It is a perennial herb with stem erect, up to 4 ft high, leafy. Leaves are arrowshaped of variable size. It is found in the Himalayas, from Kashmir to Nepal, at altitudes of 2100-4100 m. It is also found in Europe, W. Asia, Tibet, Siberia, China, Japan, N. America.
503.	<i>Rumex hastatus</i> D. Don	Arrowleaf Dock, Yellow Sock, Curled Sock, Churki, Churka	Herb	-	Alpine grassland and meadows	It is a fairly common small shrub, growing on dry slopes, rocks and walls between 700-2500 m, typically in north-Indian hill stations. It is a bushy shrub with many

						ascending stems. Stems woody at base, leaves narrow and arrow shaped with a pair of narrow spreading basal lobe.
504.	<i>Rumex nepalensis</i> Spreng.	Nepal Dock	Herb	-	Forests, Temperate Grasslands, Alpine grassland and meadows, Scrublands	It is a herbaceous, perennial plant producing erect, branched stems 50 - 180cm tall from a large rootstock. The plant is sometimes harvested from the wild for local use as a food, medicine and source of tannins. Found in cultivated areas and grazed ground, 1,200 - 4,300 metres.
505.	<i>Rumex patientia</i> subsp. <i>orientalis</i> (Bernh. ex Schult. and Schult. f.) Danser (Syn. <i>R. orientalis</i> Benth. ex Schult. and Schult. f.)	Patience Dock, Garden Patience, Monk's Rhubarb	Herb	-	Alpine grassland and meadows	It is a herbaceous perennial plant. In spring it is often consumed as a leaf vegetable.
Portulacaceae						
506.	<i>Portulaca oleracea</i> L.	Purslane, Khursa, Lunia, Badi-noni	Herb	-	Forests	Purslane can be found growing in cold climate areas as well as warm areas. It has been used in salads and as a medicinal plant (for people) for hundreds of years Purslane is a good edible and is eaten throughout much of Europe and Asia. It can be eaten fresh or cooked and has no bitter taste at all. Since it has a mucilaginous quality it is great for soups and stews.
Primulaceae						
507.	<i>Androsace globifera</i> Duby	Cushion Rock Jasmine	Herb	-	Alpine grassland and meadows	It is a perennial herb, forming dense cushions of silvery-leaved rosettes. Shoots are dark brown, internodes 3-8 mm. Leaf rosettes are spherical, 4-8 mm in diameter. It is found in the Himalayas, from Pakistan to Bhutan, at altitudes of 3600-4500 m. Flowering: June-July.
508.	<i>Androsace lanuginosa</i> Wall.	Woolly Rock Jasmine	Herb	-	Forests, Alpine grassland and meadows	Named for its woolly silver-green leaves, this mounding Himalayan native produces clusters of delicate pink and white florets, with eyes sometimes crimson, sometimes green.
509.	<i>Androsace rotundifolia</i> Hardw.	Roundleaf Rock Jasmine	Herb	-	Forests	Roundleaf rock jasmine is a lovely species growing to 15 cm tall. The beautiful plant is found at altitudes of 1500-3600 m. Flowering: June-July.
510.	<i>Androsace sarmentosa</i> Wall.	Common Rock Jasmine	Herb	-	Rupi, Kharogla	This flower is native to the Himalayas, from Sikkim to Kashmir. The entire plant is used in Tibetan medicine, it is said to have a bitter taste and a cooling and coarsening potency. A resolutive, it dries up serous fluids. It is used in the treatment of disorders from tumours, inflammations of fluids and other serous fluid disorders.
511.	<i>Primula denticulata</i> Sm.	Drumstick Primrose	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Afghanistan to Burma, at altitudes of 1500-4500 m. Flowering: April-June.
512.	<i>Primula floribunda</i> Wall.	Buttercup Primrose, Profusely Flowering Primrose	Herb	Endemic	Temperate Grasslands	It is found on shady damp cliffs, in the Himalayas at altitudes of 800-2000 m. Flowering: April-June.

513.	<i>Primula macrophylla</i> D. Don	Large Leaf Primrose, Sulumentok, Kalche-karpa	Herb	-	Alpine grassland and meadows	Found in the Himalayas, from Afghanistan to SE Tibet, at altitudes of 3300-4800 m. Flowering: June-August.
514.	<i>Primula sessilis</i> Royle ex Craib	Stalkless Primrose	Herb	Endemic	Sangla	Found in the Himalayas, from Kashmir to West Nepal, at altitudes of 2100-3600. It is common in the Kullu Valley. Flowering: April-May.
Ranunculaceae						
515.	<i>Aconitum heterophyllum</i> Wall. ex Royle	Indian Atees, Arand, Ateicha, Atis, Atvika	Herb	Endemic and Endangered	Alpine grassland and meadows	Indian Atees is found in the Himalayas, from Pakistan to C. Nepal, at altitudes of 2400-400 m. Flowering: August-September. The dried root of Indian Atees is the part which is believed to have analgesic, anti-inflammatory, antipyretic, anti-periodic, aphrodisiac, astringent properties according to Ayurveda.
516.	<i>Aconitum rotundifolium</i> Kar and Kir	Roundleaf Monkshood	Herb	-	Alpine grassland and meadows	It is found in the Himalayas, from Afghanistan, Kashmir to Nepal, and C. Asia, at altitudes of 2700-4400 m. Flowering: August-September.
517.	<i>Aconitum violaceum</i> Jacquem ex Stapf	Violet Monkshood, Dudhia-bis, Mitha Telia, Telia Kachnag, Tilla	Herb	Endemic and Vulnerable	Alpine grassland and meadows	Found in the Himalayas, from Pakistan to C. Nepal, at altitudes of 3600-4800 m. Flowering: July-September. The entire plant is used in Tibetan medicine, it is said to have a bitter taste and a cooling potency. Antidote, anti-inflammatory and febrifuge, it is used in the treatment of snake and scorpion bites, contagious infections and inflammation of the intestines.
518.	<i>Adonis aestivalis</i> L.	Pheasant's Eye, Summer Adonis	Herb	-	Forests, Scrublands	It is found from Pakistan to Nepal and Temperate Eurasia, at altitudes of 1200-3000 m. Flowering: April-June.
519.	<i>Anemone obtusifolia</i> D. Don		Herb	-	Forests	It is a herbaceous woodlander, up to 15 cms high, prefers moist, well drained soil.
520.	<i>Anemone rivularis</i> Buch.-Ham. ex DC.	River Anemone, River Windflower, Angeli, Mirchilee, Ageli, Charbini, Maruiri	Herb	-	Forests, grassland and meadows	It is an erect silky-haired perennial plant found on forest margins, grassy slopes, streamsides and lakesides in the Himalayas. It is 30-90 cm tall. In Nepal, wounds are cleaned regularly with a decoction of the roots of River Anemone. The roasted seeds are added to pickles. Sniffing crushed leaves is said to relieve headache. In India, the paste of the roots is applied on boils to exude pus.
521.	<i>Aquilegia fragrans</i> Benth.	Fragrant Columbine	Herb	Endemic	Forests, Scrublands	Found at higher altitudes from NW Frontier Province to Kashmir and Himachal Pradesh, at altitudes of 2400-3600 m. Flowering: June-August.
522.	<i>Aquilegia pubiflora</i> Wall. ex Royle	Himalayan Columbine, Hairy-flowered Columbine	Herb	-	Forests	An enchanting sight in the Himalayas is a carpet of blue-violet Columbines, and a breeze gently rippling through them, turning their delicate heads this way and that rather like butterflies fluttering in the breeze. Columbines grow at a height of 2500-3300 m on open slopes and semi-shaded groves in the Himalayas all along from the west to the east.

523.	<i>Caltha palustris</i> L.	Marsh Cowflock, Marigold, Cowslip, Kingcup	Herb	-	Alpine grassland and meadows	Found in the Himalayas, from Pakistan to Bhutan, at altitudes 2400-4000 m. Flowering: May-August.	
524.	<i>Ceratocephala falcata</i> (L.) Pers. (Syn. <i>Ranunculus falcatus</i> L.)		Herb	-	Rekong Peo, Sangla	Found at dry places, dry stones, often a weed of cultivation.	
525.	<i>Delphinium brunonianum</i> Royle	Musk Larkspur, Makhoti, Mushk Dana	Herb	-	Alpine grassland and meadows	It is a high altitude plant, found at 4300-5500 m. Flowering: July-September.	
526.	<i>Delphinium cashemirianum</i> Royle	Kashmir Larkspur	Herb	Endemic	Alpine grassland and meadows	Found in Himalayan region from Pakistan, Kashmir to Tibet, Common at 2940-4800 m.	
527.	<i>Delphinium denudatum</i> Wall. ex Hook. f. and Thomson	Jadwar, Nirbishi, Nirvisi	Judwar, Nirbisi,	Herb	Endemic	Forests	Found in the Himalayas, from Pakistan to C. Nepal, at altitudes of 1500-2700 m. Flowering: June-August. It is one of the important drugs used as indigenous medicine in India, especially in Unani medicine. The roots of the plant are reported to be useful in a variety of ailments such as aconite poisoning, brain diseases, fungal infection, piles and toothache as analgesic and astringent.
528.	<i>Delphinium vestitum</i> Wall. ex Royle	Clothed Delphinium , Juha, Kalulu	Herb	Endemic	Alpine grassland and meadows	Found in the Himalayas, from Pakistan to E. Nepal, at altitudes of 2700-4300 m. Flowering: August-September.	
529.	<i>Ranunculus brotherusii</i> Freyn.	Cutleaf Buttercup	Herb	-	Forests	Found in the Himalayas, from Pakistan to W China. at altitudes of 3300-5000 m. It is common in Lahaul. Flowering: May-August.	
530.	<i>Ranunculus hirtellus</i> Royle	Softly Hairy Buttercup, Piryali, Simariya	Herb	-	Forests, Alpine grassland and meadows	Found in the Himalayas, from Kashmir to Sikkim, Tibet and W. China, at altitudes of 2800-5500 m. Flowering: May-July.	
531.	<i>Ranunculus distans</i> Royle (Syn. <i>R. laetus</i> Wall. ex Royle)		Herb	-	Forests`	Found on grassy slopes, forests, by streams; 2000--3800 m.	
532.	<i>Thalictrum chelidonii</i> DC.		Herb	-	Katgaon, Ribba	Found in montane forests at around 2600 m	
533.	<i>Thalictrum cultratum</i> Wall.	Knife-like Meadow Rue	Herb	-	Forests, Alpine grassland and meadows	It is a herbacious plant found in the Himalayas, at altitudes of 2400-4200.	
534.	<i>Thalictrum foetidum</i> L.		Herb	-	Forests	Found on slopes, grasslands, damp rocky ledges at 900-4500 m.	
535.	<i>Thalictrum foliolosum</i> DC.	Leafy Meadow-Rue, Mamera	Herb	-	Forests, Temperate Grasslands, Scrublands	Once upon a time, the newborn infant was placed upon a pillow filled with Meadow-Rue to ensure a prosperous life. Flowers yellowish white, tinged with pink, in lax branched clusters at the end of branches. It is used in several eye disorders.	
536.	<i>Thalictrum minus</i> L.	Lesser Meadow-rue	Herb	Endemic	Forests, Alpine grassland meadows, Scrublands	It is a perennial herb that is native to Europe, Northwest Africa, Yemen, Ethiopia, South Africa, Southwest Asia, and Siberia. It grows on sand dunes, shingle, coastal rocks or calcareous grassland, cliffs and rocky gullies at up to 1,600-3,000 m.	
537.	<i>Thalictrum pauciflorum</i> Royle		Herb	-	Forests	Found at 3200 m, in Himalaya from Kashmir to Nepal.	

538.	<i>Thalictrum platycarpum</i> (Trel.) Greene		Herb	-	Forests, grassland meadows	Alpine and	Found in Himalaya, from Kashmir eastward to Nepal, W. Tibet, at 3300-4300 m.
539.	<i>Thalictrum reniforme</i> Wall.	Purple Meadow Rue	Herb	-	Forests		Found in Bhutan, Nepal, Sikkim and parts of China, at altitudes of 3100-3700 m. Flowering: July-October.
Rosaceae							
540.	<i>Acomastylis elata</i> (Wall. ex G. Don) F. Bolle (Syn. <i>Geum elatum</i> Wall. ex G. Don)	High Avens	Herb	Endemic	Forests, grassland meadows	Alpine and	It is a pretty wildflower found high in the Himalayas. found in the alpine meadows of the Himalayas, in Bhutan, Kashmir, Nepal, Sikkim and parts of China, at altitudes of 3500--5400 m. Flowering: June-August.
541.	<i>Agrimonia aitchisonii</i> Schonbeck-Temesy		Herb	-	Nigulseri, Rupi		Widely distributed in the hilly region at an altitude of 2100-2400 m of India. It is used for curing liver, gastrointestinal and respiratory related disorders.
542.	<i>Agrimonia pilosa</i> Ledeb.	Hairy Agrimony, Downy Agrimony	Herb	-	Alpine grassland and meadows		It is found in the Himalayas at altitudes of 1000-3000 m. Flowering: June-September. The plant is used in the treatment of abdominal pain, sore throat, headaches, bloody and mucoid dysentery, bloody and white discharge and heat-stroke.
543.	<i>Duchesnea indica</i> (Andrews) Focke (Syn. <i>Fragaria indica</i> Andrews)	Indian Strawberry, Mock Strawberry, Kiphaliya	Herb	-	Forests		It is found in the Himalayas, at altitudes of 700-2500 m. Flowering: March-October.
544.	<i>Filipendula vestita</i> (Wall. ex G. Don) Maxim.	Himalayan Meadowsweet	Herb	-	Forests, grassland meadows	Alpine and	It is found in the Himalayas at an altitude of 2100-3300 m. Flowering: July-August.
545.	<i>Fragaria nubicola</i> (Hook. f.) Lindl. ex Lacaita	Himalayan Strawberry	Herb	-	Forests, grassland meadows, Scrublands	Alpine and	It is found in the Himalayas, from Pakistan to Burma, at altitudes of 1800-3800 m. Flowering: April-June.
546.	<i>Fragaria vesca</i> L.	Woodland Strawberry, Alpine strawberry, European Strawberry	Herb	-	Forests, Scrublands		It is a perennial herbaceous plant that grows naturally throughout much of the Northern Hemisphere, and that produces edible fruits.
547.	<i>Geum roylei</i> F. Bolle	Royle's Avens	Herb	-	Yangpa		Found in forests and shrubberies of the Himalayas, from Afghanistan to C. Nepal, at altitudes of 1800-3600 m. Flowering: June-August.
548.	<i>Geum urbanum</i> L.	Wood Avens, Herb Bennet	Herb	-	Surchoo		It is a perennial plant, which grows in shady places.
549.	<i>Potentilla anserina</i> L.	Silverweed Cinquefoil, Common Silverweed, Moon grass	Herb	-	Nako		Found in the Himalayas, from Pakistan to Bhutan and the N. Temperate Zone, at altitudes of 2400-4800 m. Flowering: June-August.
550.	<i>Potentilla argrophylla</i> Wall. ex Lehm.	Silver-Leaved Cinquefoil, Himalayan Cinquefoil, Vajardanti	Herb	-	Forests, grassland meadows, Scrublands	Alpine and	Found in the Himalayas, from Afghanistan, Kashmir, Nepal, Pakistan, to Sikkim. Flowering: June-August.
551.	<i>Potentilla atosanguinea</i> Lodd., G. Lodd. and W. Lodd.	Himalayan Cinquefoil, Ruby Cinquefoil	Herb	-	Forests, Grasslands, Alpine grassland meadows	Temperate and	It is found in the Himalayas, from Kashmir to Nepal, at altitudes of 2400-4200 m. Flowering: June-August.

552.	<i>Potentilla bifurca</i> L.	Forked-Leaf Cinquefoil	Herb	-	Temperate Grasslands, Alpine and meadows	Found in the Himalayas, from Pakistan to Bhutan and SW China, at altitudes of 2700-4800 m. Flowering: May-October.
553.	<i>Potentilla cuneata</i> Wall. ex Lehm.	Five Finger Cinquefoil, Cuneate	Herb	-	Alpine grassland and meadows	Found in the Himalayas, from Kashmir to SW China, at altitudes of 2400-4500 m. Flowering: June-September.
554.	<i>Potentilla cuneifolia</i> (Rydb.) Th. Wolf	Vajardanti	Herb	-	Alpine grassland and meadows	Generally found on grassy slopes on open hillsides between 3,000 and 4,000 m.
555.	<i>Potentilla fragarioides</i> L.		Herb	-	Scrublands	Found in thinned forests, thickets, meadows, ditches, field banks at 300-2400 m.
556.	<i>Potentilla fruticosa</i> var. <i>arbuscula</i> (D. Don) Maxim. (Syn. <i>P. arbuscula</i> D. Don)	Shrubby Cinquefoil	Herb	-	Alpine grassland and meadows	Found in the Himalayas, from Pakistan to Bhutan, at altitudes of 2400-5500 m. Flowering: June-September.
557.	<i>Potentilla gerardiana</i> Lindl. ex Lehmann	Strawberry Cinquefoil	Herb	-	Bhabhanagar	
558.	<i>Potentilla leucochroa</i> Lindl.		Herb	-	Forests, Temperate Grasslands	
559.	<i>Potentilla multifida</i> L.		Herb	Endemic	Nako	Found in forest margins, meadows, grassy mountain slopes, alpine valleys, ravines, sandy river banks at 700-5000 m.
560.	<i>Potentilla nepalensis</i> Hook.	Nepal Cinquefoil, Crimson Cinquefoil, Laljharhi, Ratanjot	Herb	-	Forests, Alpine and meadows	A bank of blooming Nepal cinquefoil is one of the most beautiful sights in the Himalayas. This flower grows at heights of 2100-2700 m from Kashmir to Nepal.
561.	<i>Potentilla parviflora</i> Desf.		Herb	-	Forests, Alpine grassland and meadows	
562.	<i>Potentilla sundaica</i> Kuntze		Herb	-	Forests, Alpine grassland and meadows	
563.	<i>Sibbaldia cuneata</i> Hornem. ex Kuntze	Wedge Leaf Sibbaldia	Herb	-	Alpine grassland and meadows	Found in the Himalayas, from Afghanistan to SW China, at altitudes of 3000-4500 m. Flowering: June-August.
564.	<i>Sibbaldia parviflora</i> Willd.		Herb	-	Temperate Grasslands, Alpine grassland and meadows	Found on rocks and grassy slopes.
Rubiaceae						
565.	<i>Agrostemma verticillatum</i> L.		Herb	-	Wangtoo	Found in south India, Himalayas, North East India and Myanmar.
566.	<i>Asperula oppositifolia</i> Regel and Schmalh.		Herb	-	Alpine grassland and meadows	Found at gravel on mountain slopes at around 3700 m.
567.	<i>Galium verum</i> L.	Yellow Bedstraw	Herb	-	Forests, Alpine and meadows	It is a herbaceous perennial plant, native to Europe and Asia. It is a low scrambling plant, with the stems growing

						to 60-120 cm long, frequently rooting where they touch the ground.
	Rutaceae					
568.	<i>Boenninghausenia albiflora</i> (Hook.) Rchb. ex Meisn.	White Himalayan Rue	Herb	-	Chaura	Found in the Himalayas, from Kashmir to Bhutan, at altitudes of 600-3300 m. Flowering: August-October.
569.	<i>Dictamnus albus</i> L.	Burning Bush, Gas plant, Fraxinella	Herb	-	Pangi	It is a herbaceous perennial, native to warm, open woodland habitats in southern Europe, north Africa and much of Asia.
	Santalaceae					
570.	<i>Arceuthobium minutissimum</i> Hook. f.	Himalayan Dwarf Mistletoe	Herb	Endemic	Forests	Confined to the Himalayan mountains, at 2500-3500 m altitude.
571.	<i>Thesium multicaule</i> Ledeb.	Sandalwood	Herb	-	Forests	It is a sandalwood plant species described. It is included in the genus spider herbs, and the family sandalwood plants.
	Saxifragaceae					
572.	<i>Bergenia ciliata</i> (Haw.) Sternb.	Frilly Bergenia, Hairy Bergenia	Herb	Endemic	Forests	It is found in the Himalayas, from Afghanistan to SE Tibet, at altitudes of 1800-4300 m. Flowering: March-July.
573.	<i>Bergenia stracheyi</i> (Hook. f. and Thomson) Engl.	Himalayan Bergenia, Pashanbheda	Herb	-	Forests, Temperate Grasslands, Alpine grassland and meadows	Found in the Himalayas, from Afghanistan to Uttarakhand, at altitudes of 3300-4500 m, quite common in W. Himalayas. Flowering: June-August.
574.	<i>Saxifraga diversifolia</i> Wall. ex Ser.	Diverse-Leaved Saxifrage	Herb	-	Alpine grassland and meadows	Found in the Himalayas, from Kashmir to Bhutan, S. Tibet, W. China, at altitudes of 2400-4800 m.
575.	<i>Saxifraga jacquemontiana</i> Decne.	Jacquemont's Saxifrage	Herb	Endangered	Alpine grassland and meadows	Found in the Himalayas, from Pakistan to SE Tibet, altitudes of 4000-5200 m. It is common in Kashmir. Flowering: July-September.
576.	<i>Saxifraga parnassifolia</i> D. Don	Himalayan Saxifrage	Herb	-	Alpine grassland and meadows	Found in alpine Himalayas, from Kashmir to Sikkim.
	Scrophulariaceae					
577.	<i>Scrophularia decomposita</i> Royle ex Benth.	Fern-Leaf Figwort	Herb	-	Alpine grassland and meadows	It forms clumps in open valleys, usually in alpine meadows, at altitudes of 2000-4000 m, through the Western Himalayas from Afghanistan, Kashmir, Ladakh, Himachal to Kumaun. Flowering: May-September.
578.	<i>Scrophularia koelzii</i> Pennell	Koelz's Figwort	Herb	Endemic	Forests	Found in Western Himalayas, from Afghanistan to Kashmir, at altitudes of 2600-5100 m. Flowering: July-September.
579.	<i>Scrophularia polyantha</i> Royle ex Benth.	Many-Flowered Figwort	Herb	-	Chulling	Found in Western Himalayas, at altitudes of 800-3000 m. Flowering: June-September.

580.	<i>Verbascum thapsus</i> L.	Great Mullein, Adam's Flannel, Hag's Taper, Jupiter's Staff, Velvet Plant	Herb	-	Forests, Temperate Grasslands, Alpine grassland and meadows, Scrublands	Widely distributed plant, being found all over Europe and in temperate Asia as far as the Himalayas, and in North America it is exceedingly abundant. It is found growing on hedge-banks, by roadsides and on waste ground, more especially on gravel, sand or chalk. It has been used as an alternative medicine for centuries, and in many countries throughout the world, the value of Great Mullein as a proven medicinal herb is now backed by scientific evidence. Some valuable constituents contained in Mullein are Coumarin and Hesperidin, they exhibit many healing abilities. An infusion is taken internally in the treatment of a wide range of chest complaints and also to treat diarrhoea and bleeding of the lungs and bowels. Mullein oil is a very medicinal and valuable destroyer of disease germs. An infusion of the flowers in olive oil is used as earache drops, or as a local application in the treatment of piles and other mucous membrane inflammations.
Solanaceae						
581.	<i>Datura stramonium</i> L.	Jimsonweed, Thornapple, Jamestown-weed, Devil's apple	Herb	-	Scrublands	It is a type of Datura. It is thought to be native of Mexico and South America, now widely naturalized. It is found wild in the Himalayas
582.	<i>Hyoscyamus niger</i> L.	Henbane, Stinking Nightshade, Khurasani Ajwain	Herb	-	Scrublands	Found in the Himalayas at altitudes of 2100-3300 m. Flowering: May-September. It is used in Homoeopathic medicine.
583.	<i>Nicandra physalodes</i> (L.) Gaertn.	Shoofly Plant, Apple of Peru	Herb	-	Solding	It is a coarse, erect annual that is native to Peru. The large alternate leaves reach up to 1 foot long and somewhat resemble Datura leaves. Plants will reach 3 to 8 feet in height and are about half as wide.
584.	<i>Physalis divaricata</i> D. Don		Herb	-	Bhabhanagar	Found from Afghanistan and eastward to Nepal. It is a fairly common field weed in the monsoon season, found from 610-981 m.
585.	<i>Physochlaena praealta</i> (Walp.) Miers.	Tall Physochlaina, Langthang	Herb	-	Nako	Found in the Himalayas, from Pakistan to Nepal, S. Tibet, at altitudes of 3500-4600 m. Flowering: June-July.
586.	<i>Solanum americanum</i> Mill. (Syn. <i>S. nigrum</i> L.)	Black nightshade, Poisonberry, Mokoi	Herb	-	Forests, Scrublands	It is used for skin diseases, rheumatism, and gout. Juice of the herb is given in chronic enlargement of the liver. It can cure ear, and eye diseases. It is sometimes prescribed to "remove the effect of old age."
587.	<i>Solanum viarum</i> Dunal	Tropical Soda Apple	Herb	-	Bhabhanagar	It is a perennial shrub native to Brazil and Argentina with a prickly stem and prickly leaves. The fruit is golf ball sized with the

						coloring of a watermelon. It has become naturalized in many parts of the world, including India.
	Urticaceae					
588.	<i>Elatostema monandrum</i> (Buch.-Ham. ex D. Don) H. Hara (Syn. <i>E. surculosum</i> Wight.)	One-Stamen Elatostema	Herb	-	Surchoo	Found in the Himalayas, from Himachal Pradesh to Bhutan, Western Ghats, Ceylon, Burma, Indo-China, W. China, at altitudes of 800-3000 m. Flowering: June-October.
589.	<i>Girardinia ardens</i> Blume		Herb	-	Forests	
590.	<i>Girardinia diversifolia</i> (Link) Friis	Bichchhoo, Indian Stinging Nettle, Bichchhoo	Herb	-	Forests	This is a much despised plant in the hills of north India due to is very virulent stinging hairs. The plant grows to heights of 3 or 4 feet and is often used as fencing to keep out cattle. The popular hindi name Bichchhoo means scorpion.
591.	<i>Girardinia palmata</i> (Forssk.) Gaudich.		Herb	-	Forests	
592.	<i>Gonostegia hirta</i> (Blume ex Hassk.) Miq.	Hairy Pouzol's Bush	Herb	-	Chaura	Found in the Himalayas, Western Ghats, Burma, east to S. China and S. Japan, Malaysia, Australia. 500-2400 m; Flowering: May-July.
593.	<i>Pilea scripta</i> (Buch.-Ham. ex D. Don) Wedd.	Himalayan Clearweed	Herb	-	Bhabhanagar	It is an erect, hairless perennial herb, growing up to 30-120 cm tall. The plant is woody at the base.
594.	<i>Pilea umbrosa</i> Blume	Shady Himalayan Clearweed	Herb	-	Forests	Found in Himalayan forests at altitudes of 1200-2500 m. Flowering: June-August.
595.	<i>Pouzolzia zeylanica</i> (L.) Benn. and R. Br.	Graceful Pouzol's Bush	Herb	-	Forests	Found in Eastern Himalayas, SE Asia, China, Western Ghats and some other countries, at altitudes of 100-1300 m. Flowering: June-October.
596.	<i>Urtica ardens</i> Link.	Himalayan Nettle	Herb	-	Forests	It is found in the Himalayas, from Pakistan to Sikkim and W. China, at altitudes of 1000-4500 m. Flowering: March-August.

597.	<i>Urtica dioica</i> L.	Stinging Nettle, Bichchhu, Bichchhu buti	Herb	-	Temperate Grasslands	Found in the Himalayas, from Pakistan to SW China, at altitudes of 1000-2500 m. Flowering: August-September.
598.	<i>Urtica parviflora</i> Roxb.		Herb	-	Nichar	Found in forests and amongst taller herbaceous vegetation, 1700 - 2800 metres in Temperate Himalayas and the Nilgiris.
Violaceae						
599.	<i>Viola betonicifolia</i> J. Sm.	Arrowhead Violet, Showy Violet, Mountain Violet	Herb	-	Alpine grassland and meadows, Scrublands	Found in the Himalayas, from Pakistan to SW China, at altitudes of 1000-3000 m. Flowering: April-May.
600.	<i>Viola biflora</i> L.	Yellow Wood Violet	Herb	-	Alpine grassland and meadows	Found on open slopes, shrubberies and forests in the Himalayas, at altitudes of 2400-4500 m. Flowering: May-July.
601.	<i>Viola canescens</i> Wall.	Himalayan White Violet	Herb	-	Forests, Alpine grassland and meadows, Scrublands	It is a nearly prostrate herb found in the Himalayas, from Kashmir to NE India, at altitudes of 1500-2400 m.
602.	<i>Viola kashmiriana</i> W. Becker		Herb	-	Bhabhanagar	
603.	<i>Viola pilosa</i> Blume	Smooth-Leaf White Violet	Herb	-	Forests	It is found in the Himalayas, from Afghanistan to SW China, Burma and SE Asia, at altitudes of 1200-3000 m. Flowering: March-May.
604.	<i>Viola pilosa</i> Blume var. <i>canescens</i> (Wall.) Hook. f. and Thomson		Herb	-	Temperate Grasslands, Alpine grassland and meadows	
Xanthorrhoeaceae						
605.	<i>Eremurus himalaicus</i> Baker	Himalayan Desert Candle, Himalayan Foxtail Lily	Herb	Endemic	Scrublands	Found on rocky slopes of the drier areas of Himalayas, from Afghanistan to Himachal Pradesh, at altitudes of 2100-3300 m. Flowering: May-June.
Zingiberaceae						

606.	<i>Hedychium spicatum</i> Sm.	Spiked Ginger Lily, Sandharlika, Kapur Kachri	Herb	-	Forests	Found from Himachal Pradesh to Arunachal Pradesh, at altitudes of 1800-2800 m. Flowering: July-August. Rootstocks are used in medicine.
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Table 3: SHRUBS, GRASSES, SEDGES AND RUSH FOUND IN KINNAUR

S.No.	Species	Common Name	Habit	Status	Habitat/Locality	Additional Information
Adoxaceae						
1.	<i>Viburnum cotinifolium</i> D. Don	Smoketree Leaved Viburnum, Bhatnoi, Bhutool, Dab	Shrub	-	Forests	Found in the Himalayas, from Kashmir to Bhutan, at altitudes of 2100-3600 m. Flowering: March-May.
2.	<i>Viburnum foetens</i> Decne		Shrub	-	Rupi, Katgaon	Found in Himalayas region. It is an undershrub of coniferous forests, it is also found in oak forests from 1500 - 3300 metres.
3.	<i>Viburnum grandiflorum</i> Wall. ex DC.	Grand Viburnum	Shrub	-	Surchoo	Found in the Himalayas, from Kashmir to SE Tibet, at altitudes of 2700-3600 m. Flowering: April-May.
Anacardiaceae						
4.	<i>Cotinus coggygria</i> Scopoli (Syn. <i>Rhus cotinus</i> L.)	Smoke Tree, Wig Tree	Shrub	-	Ponda	It is a rounded, broadly spreading shrub, or rarely a small tree, that grows to 15 ft tall. The plant has broadly elliptic blunt to nearly rounded leaves with prominent lateral veins.
Asparagaceae						
5.	<i>Asparagus filicinus</i> Buch.-Ham. ex D. Don	Fern Asparagus, Chiriya-Kanda, Sahasimuli, Sharanoi	Shrub	-	Forests	Found in Pakistan, Himalayas, from Kashmir to Bhutan, China, Myanmar and Thailand, at altitudes of 1200--3000 m. Flowering: May-July.
Berberidaceae						
6.	<i>Berberis asiatica</i> Roxb. ex DC.	Asian Barberry, Daruhaldi, Kasmal	Shrub	-	Sering Chey	Found in the Himalayas, from Uttarakhand to SW China, at altitudes of 1200-2500 m. Flowering: March-May. The roots are used in treating ulcers, urethral discharges, ophthalmia, jaundice, fevers etc. The bark and wood are crushed in Nepal then boiled in water, strained and the liquid evaporated until a viscous mass is obtained. This is antibacterial, laxative and tonic. It is taken internally to treat fevers and is used externally to treat conjunctivitis and other

						inflammations of the eyes. Tender leaf buds are chewed and held against affected teeth for 15 minutes to treat dental caries. The fruit is cooling and laxative.
7.	<i>Berberis chitria</i> Buch.-Ham. ex Lindl.		Shrub	Endemic	Forests, Scrublands	Found almost throughout the Himalayas at 2000-3700 m.
8.	<i>Berberis coriaria</i> Royle ex Lindl.	Barberry	Shrub	Endemic	Sangla	
9.	<i>Berberis jaeschkeana</i> C. K. Schneid	Jaeschke's Barberry	Shrub	-	Forests, Scrublands	Found in the Himalayas, from Kashmir to Nepal), at altitudes of 3100-3500 m. Flowering: May-June.
10.	<i>Berberis kunawurensis</i> Royle		Shrub	Endemic	Roghi	This is often found in dense patches in open places in Himalayas from Pakistan, Kashmir, Chamba and Tehri.
11.	<i>Berberis lycium</i> Royle	Indian Barberry, Boxthorn Barberry, Darhaldi, Chatrol	Shrub	Endemic	Forests, Scrublands	It is a semi deciduous shrub, 2-4 m high, leaves lanceolate or narrowly obovate-oblong, entire or with a few large spinous teeth, arranged alternately on stem. Inflorescence a raceme. Flowering: March-June Its roots are used as remedy for swollen and sore eyes, broken bones, wounds, gonorrhea, curative piles, unhealthy ulcers, acute conjunctive and in chronic opthalmia, also used as bitter tonic astringent, diaphoretic and febrifuge. Leaves are given in jaundice.
12.	<i>Berberis pachyacantha</i> Bien ex Koehne		Shrub	-	Forests, Alpine grassland and meadows	
13.	<i>Berberis pseudo-umbellata</i> R. Parker		Shrub	Endemic and Indeterminate	Forests	A very variable species of dry forest undergrowths. It has rigid, usually obovoid-globose berries, often entire or few spinulose leaves, and 3, sessile ovules only.
	Buxaceae					

14.	<i>Sarcococca pruniformis</i> Lindl. (Syn. <i>S. saligna</i> Müll.Arg.)	Willow-Leaf Sweet-Box, Geru, Piruli, Tiliara	Shrub	Endemic	Forests	Found in moist and shady places in the Himalayas, from Aghanistan to W. Nepal, at altitudes of 1200-2400 m. Flowering: September-May.
	Capparaceae					
15.	<i>Capparis spinosa</i> L.	Alpine Caper Bush, Kabra	Shrub	Endemic	Sunnam, Ka	It is found from the Mediterranean region eastwards to central Asia, India, Himalayas and Nepal, up to altitudes of 3600 m. Flowering: March-September.
	Caprifoliaceae					
16.	<i>Abelia biflora</i> Turcz.	Abelia	Shrub	-	Forests	It is an evergreen shrub with arching branches and a rounded shape, which can grow up to 10 ft tall, and as wide as 12 ft.
17.	<i>Abelia triflora</i> R. Br. ex Wall.	Himalayan Abelia	Shrub	-	Ralli, Shurting	Found in the Himalayas, from Afghanistan to C. Nepal, at altitudes of 1500-4200 m. Flowering: May-July.
18.	<i>Lonicera asperifolia</i> Hook. f. and Thomson		Shrub	-	Alpine grassland and meadows, Scrublands	Found in C. Asia, Hindukush, Afghanistan, Himalaya eastward to India and China. Found in dry valleys of inner Himalaya from 3000-4000 m.
19.	<i>Lonicera karelinii</i> Bunge ex P. Kir. (Syn. <i>L. heterophylla</i> Decne.)	Honeysuckle	Shrub	-	Forests, Scrublands	Found in Himalaya, Karakoram, W. Tibet. It is a small rigid shrub found in alpine zone above 3500 m on dry rocky slopes.
20.	<i>Lonicera hispida</i> Pall. ex Roem. and Schult.	Hairy Honeysuckle	Shrub	-	Forests, Scrublands	Found in the Himalayas, from Pakistan to W China, at altitudes of 2900-4500 m. Flowering: May-July.
21.	<i>Lonicera hypoleuca</i> Decne.	Yellow Himalayan Honeysuckle	Shrub	-	Forests, Scrublands	Found on stony slopes and rocks in the Himalayas, from Afghanistan to C. Nepal and Tibet, at altitudes of 2700-4200 m. Flowering: June-July.
22.	<i>Lonicera japonica</i> Thunb.	Japanese honeysuckle	Shrub	-	Bhabhanagar	Native to eastern Asia including China, Japan, and Korea. It is a twining vine able to climb up to 10 m high or more in trees, with opposite, simple oval leaves 3–8 cm long and 2–3 cm broad.

23.	<i>Lonicera myrtillus</i> Hook. f. and Thomson	Myrtle Honeysuckle	Shrub	-	Forests, Alpine grassland and meadows, Scrublands	Found in the Himalayas, from Afghanistan to SW China. Flowering: May-July.
24.	<i>Lonicera obovata</i> Royle	Blueberry Honeysuckle, Small Leaved Honeysuckle	Shrub	-	Forests	It is a dwarf shrub, to 1 m long, with prostrate or nearly erect branches. Flowers often appear with new leaves. The flowers tube widens above, and is also distinctly swollen at the base. Stamens nearly protruding. Dark bluish-purple, nearly spherical berries are born in pairs. Flowering: May-July.
25.	<i>Lonicera orientalis</i> Lam.	Oriental Honeysuckle	Shrub	-	Forests	
26.	<i>Lonicera quinquelocularis</i> Hardw.	Translucent Honeysuckle	Shrub	-	Forests	Found in the Himalayan region, from Afghanistan to S.W. China, at altitudes of 1800-3000 m. Flowering: April-July.
27.	<i>Lonicera spinosa</i> Jacq. ex Walp.	Spiny Honeysuckle	Shrub	Endemic	Alpine grassland and meadows, Scrublands	Found in the Himalayas, from Kashmir to Sikkim and Tibet, at altitudes of 3600-4600 m. Flowering: June-July.
Coriariaceae						
28.	<i>Coriaria nepalensis</i> Wall.	Masuri Berry, Tanner's Tree, Gangara, Makola, Masurya	Shrub	-	Forests	Endemic to the Indo-Pakistan subcontinent, in the Himalayas from Indus eastward to Bhutan, usually between 800-2700 m. Flowering: February-April.
Cyperaceae						
29.	<i>Carex cruenta</i> Nees	Cross Grass, Cross Sedge, Bengal Sedge	Sedge	-	Alpine grassland and meadows	Found in forest margins, grasslands, roadsides, at altitudes of 300-2500 m, in S China, Bhutan, India, Indonesia, Japan, Nepal, Thailand, Vietnam, Madagascar. Flowering: July-August.
30.	<i>Carex haematostoma</i> Nees	Cross Grass	Sedge	Endemic	Alpine grassland and meadows	Alpine meadows in thickets, forest margins; 2000-3700 m.

31.	<i>Carex muricata</i> L.	Rough sedge	Sedge	-	Alpine grassland and meadows	
32.	<i>Carex nivalis</i> Boott.	Alpine Sedge	Sedge	-	Alpine grassland and meadows	Found high in the Himalayas, from Afghanistan to Sikkim, at altitudes of 3800-4900 m. Flowering: June-July.
33.	<i>Carex nubigena</i> D. Don ex Tilloch and Taylor		Sedge	-	Forests	Found on streamsides, forest margins and roadsides on slopes, grassy slopes, wet places at 1100 to 3700 m.
34.	<i>Carex setigera</i> D. Don		Sedge	-	Forests	Found on wet places at riversides, forests on mountain slopes, grasslands at 2300-4100 m.
35.	<i>Carex wallichiana</i> Sprengel		Sedge	-	Alpine grassland and meadows	Found on wet places at forest margins on mountain slopes.
36.	<i>Cyperus alulatus</i> Kern.		Sedge	-	Temperate Grasslands	Prefers wet places, found upto 1500 m.
37.	<i>Cyperus niveus</i> Retz.	Snow White Sedge	Sedge	-	Forests	Found throughout the Himalayas, at altitudes of 600-2900 m. Flowering: April-June.
38.	<i>Cyperus paniceus</i> (Rottb.) Boeckeler		Sedge	-	Bari, Nigulseri	Found in Australia, Bangladesh, Bhutan, India, Myanmar, Nepal, Pakistan, Sri Lanka & Thailand upto 2000 m altitude.
39.	<i>Echinochloa crusgalli</i> (L.) P. Beauv	Cockspur, Barnyard millet, Japanese millet, Water grass	Sedge	-	Surchoo	This species is apparently native to an area stretching from southern Europe east through the Middle East to the Indian sub-continent, but it has been introduced to virtually the rest of the world.
40.	<i>Eriophorum comosum</i> (Wall.) Nees	Hairy Cottongrass	Sedge	-	Forests	Found growing in crevices on rock or cliffs, and on grassland slopes, at altitudes of 500-2800 m. It is found in parts of China, Afghanistan, Bangladesh, Bhutan, N India, Indonesia, Kashmir, N Myanmar, Nepal, Pakistan, Vietnam and SW Asia. Flowering: May-November.
41.	<i>Isolepis setacea</i> (L.) R. Br. (Syn. <i>Scirpus setaceus</i> L.)	Bristle Club-rush, Bristleleaf Bulrush	Sedge	-	Alpine grassland and meadows	The native distribution of this species extends from western Europe south to South Africa and east through the Middle East and the Indian sub-continent to China; it has apparently been introduced to Tasmania, New Zealand and parts of North America upto 2500 m altitude.

42.	<i>Isolepis cernua</i> (Vahl) Roem. and Schult. (Syn. <i>Scirpus cernuus</i> Vahl)	Low Bulrush, Slender Club-rush, Fiberoptic Grass	Sedge	-	Solding	It is widespread, being native to many regions of the world, including parts of Australasia, Eurasia, Africa, and North and South America.
43.	<i>Kobresia nepalensis</i> (Nees) Kük.		Sedge	-	Temperate Grasslands	Found on scree slopes, dry grassy slopes, on rocks, alpine shrubby meadows, damp rocky cliffs at 3600-4600 m.
44.	<i>Pycnus flavidus</i> (Retz.) T. Koyama (Syn. <i>Cyperus flavidus</i> Retz.)		Sedge	-	Solding	Found at swamps, shallow water, river margins, shady wet places, meadows, water margins, ditch margins, paddy field margins at 100-3400 m.
45.	<i>Pycnus sanguinolentus</i> (Vahl) Nees (Syn. <i>Cyperus sanguinolentus</i> Vahl)		Sedge	-	Solding	Found on sparse forest margins, grasslands on mountain slopes, meadows, swamps, lake margins, sunny places at river margins or shallow water, valleys, wet places along trails, field margins, old fields at 100-3400 m.
Elaeagnaceae						
46.	<i>Elaeagnus parvifolia</i> Wall. ex Royle	Autumn Olive, Giwain, Kankal	Shrub	-	Surchoo, Hoye, Akpa, Sangla, Katgaon	Found in the Himalayas, from Kashmir to Bhutan, Assam and W. China, at altitudes of 1300-3000 m.
47.	<i>Hippophae tibetana</i> Schltdl.	Tibetan Sea Buckthorn	Shrub	-	Scrublands	Found on open sunny places in montane areas, rarely found below 3000 metres.
Ericaceae						
48.	<i>Cassiope fastigiata</i> (Wall.) D. Don	Himalayan Heather	Shrub	-	Alpine grassland and meadows	Found in the Himalayas at altitudes of 2800-4500 m. Flowering: June-August.
49.	<i>Rhododendron anthopogon</i> D. Don	Dwarf Rhododendron, Atarasu, Talis, Talisiri	Shrub	Vulnerable	Alpine grassland and meadows	This species is globally distributed in the Himalayan range across Pakistan, India, Nepal, Bhutan and SE Tibet between an altitude range of 3000-4800 m. Within India, it has been recorded in Jammu & Kashmir, Himachal Pradesh, Uttar Pradesh, Sikkim and Arunachal Pradesh. In Nepal, Dwarf Rhododendron is used in making an essential oil. Anthopogon oil, as it is usually referred to in Nepal, is obtained by steam distillation of the aerial part of this shrub. It is a fluid liquid of pale yellow colour

						and sweet-herbal, faintly balsamic aroma. Rhododendron can be used in gouty rheumatic conditions. The essential oil is a stimulant and affects fibrous tissue, bones and nervous system.
50.	<i>Rhododendron campanulatum</i> D. Don	Bell Rhododendron, Burans, Semru	Shrub	-	Forests, Alpine grassland and meadows, Scrublands	It is a wild species of rhododendron found in the Himalayan alpine regions of Northern India, Bhutan, and Nepal. It grows on the stony alpine slopes and ledges at altitudes of 3000-4400 m. Flowering: April-June.
51.	<i>Rhododendron lepidotum</i> Wall. ex G. Don	Pink Scaly Rhododendron, Atarasu, Sumral, Simris, Talshi	Shrub	-	Alpine grassland and meadows	It is a low shrublet, growing to about a meter tall. The people of Manang district, central Nepals, take the juice of the plant, believing it purifies the blood. Pounded leaves are boiled in water and spread on cots, beds, and mats to kill bugs.
Grossulariaceae						
52.	<i>Ribes alpestre</i> Wall. ex Decne.	Asian Gooseberry	Shrub	-	Scrublands	Found in the Himalayas, from Afghanistan to SW China, at altitudes of 2400-3600 m. Flowering: May-June.
53.	<i>Ribes orientale</i> Desf.	Oriental Gooseberry	Shrub	-	Scrublands	Found in the Himalayas, from Afghanistan to W Nepal, at altitudes of 2100-4000 m. Flowering: May-June.
Hydrangeaceae						
54.	<i>Deutzia compacta</i> Craib	Compact Deutzia	Shrub	-	Kharogla, Yangpa	Found in the Himalayas, from Kashmir to SW China, at altitudes of 2100-3300 m. Flowering: June-July.
55.	<i>Deutzia staminea</i> R. Br. ex Wall.	Long-Stamen Deutzia, Ghugtai, Dalochi	Shrub	-	Forests	Found in NW Himalayas, Kashmir, Nepal and N China, at 1000-3000 m altitude. It is often found in open grassy fields, on banks and sunny hillsides. Flowering: April-May.
Hypericaceae						
56.	<i>Hypericum elodeoides</i> Choisy	Himalayan St Johns Wort	Shrub	-	Ponda	Found in the Himalayas, from Kashmir to SW China and Burma, at altitudes of 1500-3500 m. Flowering: July-September.

57.	<i>Hypericum oblongifolium</i> Choisy	Pendant St Johns Wort	Shrub	-	Nigulseri	Found in the Himalayas, from Pakistan to C. Nepal, at altitudes of 800-2100 m. Flowering: March-August.
Juncaceae						
58.	<i>Juncus articulatus</i> L.	Jointleaf rush, Jointed rus	Rush	-	Kharogla	Found upto 2400 m.
59.	<i>Juncus articulatus</i> subsp. <i>articulatus</i> (Syn. <i>J. lampocarpus</i> Ehrh. ex Hoffm.)		Rush	-	Hango	
60.	<i>Juncus himalensis</i> Klotzsch	Himalayan Rush	Rush	-	Alpine grassland and meadows	It occurs in the Himalayas at altitudes of 3000-5000 m. Flowering: June-August.
61.	<i>Juncus thomsonii</i> Ten.	Thomson's Rush	Rush	-	Chansu	It occurs in the Himalayas at altitudes of 3000-5200 m. Flowering: June-September.
Lamiaceae						
62.	<i>Isodon rugosus</i> (Wall. ex Benth.) Codd. (Syn. <i>Plectranthus rugosus</i> Wall. ex Benth.)	Wrinkled Leaf Isodon	Shrub	-	Forests, Scrublands	Wrinkled Leaf Isodon is an aromatic, much branched shrub, 1-5 ft tall. Stems are erect with rather slender quadrangular leafy branches.
Leguminosae						
63.	<i>Astragalus himalayanus</i> Klotzsch (Syn. <i>Astragalus maddenianus</i> Baker)	Himalayan Milk Vetch	Shrub	Endemic	Kharogla	Found in the Himalayas, from Kashmir to E. Nepal, at altitudes of 2400-4500 m. It is common in Kashmir. Flowering: June-September.
64.	<i>Astragalus oplites</i> Benth. ex R. Parker		Shrub	Endemic	Scrublands	Found in Himalayas from 3000 to 4200 m.
65.	<i>Astragalus rhizanthus</i> Benth.	Root-Flower Milk-Vetch	Shrub	Endemic	Forests, Alpine grassland and meadows, Scrublands	Found in the Himalayas. Flowering: June-July.

66.	<i>Caragana brevispora</i> Royle	Long-Stalked Peashrub	Shrub	-	Scrublands	Found in the Himalayas, from Kashmir to C. Nepal, at altitudes of 2400-3200 m. Flowering: May-June.
67.	<i>Caragana gerardiana</i> Benth.	Peashrub	Shrub	Endemic	Alpine grassland and meadows, Scrublands	Native of the north-western Himalaya up to 13,000 ft. This shrub is remarkable for its long, slender spines, and the dense woolly covering, which gives the whole plant a greyish-white aspect.
68.	<i>Colutea nepalensis</i> Sims	Peashrub	Shrub	-	Scrublands	Found on mountain slopes, riverside gravel, among shrubs in Afghanistan, China, India & Pakistan.
69.	<i>Desmodium elegans</i> DC.	Elegant Desmodium, Chamlai	Shrub	Endemic	Forests, Temperate Grasslands, Scrublands	Found in the Himalayas, from Afghanistan to SW China, at altitudes of 1200-3000 m. Flowering: June-September.
70.	<i>Desmodium multiflorum</i> DC. (Syn. <i>D. sambuense</i> (D. Don) DC.)	Many-Flowered Desmodium	Shrub	-	Katgaon, Nigulseri	Found in the Himalayas, from Kashmir to Bhutan, Assam, SE Asia and China, at altitudes of 1800-2600 m. Flowering: June-September.
71.	<i>Desmodium nutans</i> Wall.	Chamlai	Shrub	-	Rarang Panoong, Bhabhanagar	Found in the Himalayas, from Afghanistan to SW China, at altitudes of 1200-3000 m.
72.	<i>Desmodium triflorum</i> (L.) DC.	Creeping Tick Trefoil, three-flower beggarweed, matty desmodium, Kudaliya, motha	Shrub	-	Katgaon	It is a much branched, mat-forming creeping herb, with clover-like leaves. Leaves are divided into 3 leaflets, the lower leaves sometimes undivided. Leaflets are inverted-egg shaped, to inverted-heart shaped, rounded and notched at the tip.
73.	<i>Indigofera cedrorum</i> Dunn	Indigo	Shrub	Endemic and Indeterminate	Forests, Alpine grassland and meadows	
74.	<i>Indigofera hebepetala</i> Baker	Fuzzy Petal Indigo	Shrub	-	Scrublands	Found in the Himalayas, from Pakistan to Bhutan, at altitudes of 2400-3200 m. Flowering: May-August.

75.	<i>Indigofera heterantha</i> Brandis	Himalayan Indigo	Shrub	-	Forests	Found in the Himalayas, from Afghanistan to Bhutan and China, at altitudes of 1500-3000 m. Flowering: May-June.
76.	<i>Piptanthus nepalensis</i> (Hook.) D. Don	Evergreen Laburnum	Shrub	-	Kharogla	Found in the forests and shrubberies of the Himalayas, from Himachal Pradesh to SW China, at altitudes of 2100-3600. Flowering: March-May.
77.	<i>Sophora mollis</i> (Royle) Baker	Soft Sophora, Peeli Sakina	Shrub	Endemic	Forests	Found in the Himalayas, from Pakistan to Nepal, at altitudes of 1700 m. Flowering: Feruary-March.
Linaceae						
78.	<i>Reinwardtia indica</i> Dumort.	Yellow Flax, Golden girl, Basanti	Shrub	-	Nigulseri	Found in the Himalayas, from Pakistan to SW China, at altitudes of 500-2300 m. It is a common wildflower of north-Indian hill-stations. It is also found in Western Ghats. Flowering: November-May.
Melastomataceae						
79.	<i>Osbeckia stellata</i> Buch. -Ham. ex Ker.Gawl.	Starry Osbeckia	Shrub	-	Tapri	Found in Bhutan, Cambodia, Laos, NE India, Myanmar, Nepal, Thailand, Vietnam, at altitudes of 200-2300 m. Flowering: July-November.
Olacaceae						
80.	<i>Olax scandens</i> Roxb.	Parrot Olax, Sprawling olax, Dheniani	Shrub	-	Karcham	It has round, smooth, rather zigzag branches. Leaves, carried on very short stalks, are rather leathery, nearly 2 inches long. In Ayurvedic medicine, the bark is used in anaemia and as a supporting drug in diabetes; also in the treatment of fever.
81.	<i>Jasminum humile</i> L.	Yellow Jasmine, Italian Jasmine, Peeli Chameli	Shrub	-	Forests	Found in the Himalayas, from Afghanistan to NE India and China, at altitudes of 1800-4000 m. Flowering: April-June. The flowers are astringent and a tonic for the heart and bowels. A paste made frm the flowers is considered effective in the treatment of intestinal problems. The juice of the root is used in the treatment of ringworm. The milky juice of the plant is used

						for destroying the unhealthy lining walls of chronic sinuses and fistulas.
82.	<i>Syringa emodi</i> Wall. ex Royle	Himalayan Lilac	Shrub	-	Forests	Found in the Himalayas, from Afghanistan to C. Nepal, at altitudes of 2100-3600 cm. Flowering: June-July.
	Phyllanthaceae					
83.	<i>Leptopus cordifolius</i> Decne. (Syn. <i>Andrachne</i> <i>cordifolia</i> (Decne.) Müll. Arg.)	Heart-Leaf Maiden-Bush, Bharti, Bhartoi, Durlu, Karkan, Mandhiara	Shrub	-	Bhabhanagar	Found in the Himalayas, from Kashmir to Nepal, Tibet, Burma and S. China, at altitudes of 1200-2100 m. Flowering: June-October.
	Poaceae					
84.	<i>Agrostis canina</i> L.	Velvety Bentgrass, Brown Bent	Grass	-	Alpine grassland and meadows	It is found in most of Europe and temperate parts of Asia, and extends from sea level to the alpine zone. It is sensitive to drought, but is common in damp places, including ditches and lake margins.
85.	<i>Agrostis munroana</i> Aitch. and Hemsl.		Grass	Endemic	Temperate Grasslands	Found on grassy slopes, moist meadows at around 3700 m in China, Afghanistan, NW India, Kashmir, Nepal & N Pakistan.
86.	<i>Agrostis pilosula</i> Trin.		Grass	-	Alpine grassland and meadows	Found on grassy mountain slopes at 3600-4200 m in China, Bhutan, India, Nepal, Pakistan & Sri Lanka.
87.	<i>Alopecurus arundinaceus</i> Poir	Creeping Meadow Foxtail, Creeping Foxtail	Grass	-	Temperate Grasslands, Scrublands	It is a rhizomatous perennial species, native to Eurasia and northern Africa, and widely introduced elsewhere, this sod forming grass is useful as a forage and for erosion control. It grows in damp or saline grasslands and banks of waterways, and on mountains up to 1,200 m.
88.	<i>Andropogon munroi</i> C.B. Clarke		Grass	-	Katgaon, Kafnu	It is found in Himalayan region from Kashmir to NE India, through Nepal and southern Tibet.
89.	<i>Apluda mutica</i> L.	Mauritian Grass, Tachula, Tachhila, Pongta, Poleda,	Grass	-	Urni	It is very common in the plains and at low elevation in the Himalayas. In hedges and bushy places it usually assumes a climbing habit. It often constitutes a large part of the

		Bhongta, Bhongla				undergrowth in forests. Flowering: August- November.
90.	<i>Arundo donax</i> L.	Giant Reed, Spanish cane, Colorado river reed, Baranal, Doka, Nal	Grass	-	Scrublands	Found widely, from the Mediterranean region eastwards to North Africa, India, Pakistan. It is also found in the Himalayas, up to altitudes of 2100-2440 m.
91.	<i>Brachypodium distachyon</i> (L.) P. Beauv.	Purple False Brome, Stiff Brome	Grass	-	Alpine grassland and meadows	It is native to southern Europe, northern Africa and southwestern Asia east to India. It is related to the major cereal grain species wheat, barley, oats, maize, rice, r ye, sorghum and millet.
92.	<i>Brachypodium sylvaticum</i> (Huds.) P. Beauv.	False-Brome, Slender Ffalse Brome, Wood False Brome	Grass	-	Scrublands	It is a perennial grass native to Europe, Asia and Africa. It has a broad native range stretching from North Africa to Eurasia. The bunchgrass is most commonly found in forests and woodlands, preferring the shaded canopy, but may grow in open areas. It prefers well drained neutral and calcerous soils, and avoids wet conditions.
93.	<i>Bromus arvensis</i> L.	Field Brome, Schrader 's Brome	Grass	-	Forests	It grows along roadsides, in disturbed areas, and in fields. It is native to southern and central Europe, but is now naturalized as a weed throughout temperate regions including North America and Asia. The grass is a soil improver and is useful for erosion control.
94.	<i>Bromus catharticus</i> Vahl (Syn. <i>B. uniloides</i> Kunth.)	Rescue Grass, Prairie grass, Brome grass	Grass	-	Surchoo	Natively belongs to South America, naturalized worldwide
95.	<i>Bromus japonicus</i> Thunb.	Japanese Brome	Grass	-	Kalpa	Found in Europe, Africa and Asia. In India it is found in NW Himalayas, at altitudes up to 3700 m.
96.	<i>Bromus lanceolatus</i> Roth		Grass	-	Shyasu Khud	Found on forest margins, slopes, thickets, grasslands at 300-1800 m in Afghanistan, China, India, Pakistan, Turkmenistan; N Africa, SW Asia & S Europe.

97.	<i>Bromus pectinatus</i> Thunb.		Grass	-	Forests, Alpine grassland and meadows, Scrublands	Prefers slopes, grassy places, ditch banks at 700-1400 m in Afghanistan, Bhutan, India, China, Nepal, Pakistan, Tajikistan; Africa, SW Asia & Europe.
98.	<i>Calamagrostis pseudophragmites</i> (Haller) Koeler		Grass	-	Kafnu, Kharogla	It occurs along water, canals and rivers in Europe. It is a perennial species, blooming in June and July.
99.	<i>Chrysopogon gryllus</i> (L.) Trin. (Syn. <i>C. echinulatus</i> (Nees) W. Watson)	Scented Grass	Grass	-	Forests, Alpine grassland and meadows	Found on mountain slopes in the Himalayas, from Himachal to NE India, at altitudes of 800-2900 m. It is also found in S. Europe and N. Africa.
100.	<i>Cymbopogon distans</i> (Nees ex Steud.) W. Watson		Grass	-	Scrublands	Found on mountain slopes, valleys, open grassy places at 2000-3500 m in NW India, Nepal, Pakistan & China.
101.	<i>Cymbopogon jawarancusa</i> (Jones) Schult	Lemongrass	Grass	-	Rarang Panoong	Found in Turkey, Middle East, Arabian Peninsula, Iraq, Iran, Afghanistan, Indian Subcontinent, Tibet, Sichuan, Yunnan & Vietnam.
102.	<i>Cymbopogon martinii</i> (Roxb.) W. Watson	Palmarosa Grass, Geranium grass, Ginger grass, GandhabelMakora, Mirchagandh	Grass	-	Katgaon	Found in the Himalayas till 2000 m elevations, and in Peninsular India. Flowering: September-November. In traditional medicine both the plant and its oils are used to treat rheumatism, hair loss, arthritis, lumbago and spasms. The essential oil is a strong fungicide.
103.	<i>Cymbopogon pospischilii</i> (K. Schum.) C.E. Hubb. (Syn. <i>C. stracheyi</i> (Hook. f.) Raizada and S.K. Jain)		Grass	-	Forests, Scrublands	Found in Himalayan region of India, Pakistan, Nepal; eastern Africa from Ethiopia and Somalia to the Cape.
104.	<i>Cynodon dactylon</i> (L.) Pers.	Bermuda Grass, Dubari, Durba, Doob, Dobri	Grass	-	Forests, Temperate Grasslands, Scrublands	Native to north Africa, Asia and Australia and southern Europe. The name "Bermuda Grass" derives from its abundance as an invasive species on Bermuda; it does not occur naturally there.

105.	<i>Dactylis glomerata</i> L.	Cock's-Foot, Orchard Grass, Cat Grass	Grass	-	Forests, Temperate Grasslands, Alpine grassland and meadows	Occurs from sea level to 4,000 m. It can be found in meadows, pasture, roadsides, and rough grassland.
106.	<i>Danthonia cachemyriana</i> Jaub. ex Spach.		Grass	-	Alpine grassland and meadows	Found on rock crevices at 3800 m. It is a grass of the NW Himalayas from the Hindu Kush to Kashmir.
107.	<i>Danthonia cumminsii</i> Hook. f. (Syn. <i>D. jacquemontii</i> Bor)		Grass	-	Forests, Alpine grassland and meadows, Temperate Grasslands, Scrublands	Found on alpine steppe-meadows, upland forests and stony ground near streams at 3000-4500 m. This is an important component of alpine pasture, providing good forage for yaks.
108.	<i>Digitaria ciliaris</i> (Retz.) Koeler (Syn. <i>Digitaria adscendens</i> (Kunth) Henrard)	Wild Crabgrass, bamboo grass, crabgrass	Grass	-	Forests, Alpine grassland and meadows, Scrublands	It is a tufted or creeping annual grass. Stems are rising, 20-100 cm long, base prostrate, rooting at the lower nodes. Leaf sheath is keeled
109.	<i>Digitaria cruciata</i> (Nees) A. Camus		Grass	-	Temperate Grasslands, Alpine grassland and meadows	Found in upland grasslands at 1000-2700 m. in Bhutan, N India, Myanmar, Nepal & China. <i>Digitaria cruciata</i> var. <i>esculenta</i> Bor is a minor cereal cultivated in the Khasi hills of NE India. It has longer racemes than the wild form, and a turgid, persistent grain.
110.	<i>Digitaria stricta</i> Roth		Grass	-	Forests	Found in grasslands, below 1800 m in Bhutan, India, Myanmar, Nepal, Pakistan, Sri Lanka & China.
111.	<i>Elymus nutans</i> Griseb.		Grass	-	Scrublands	Found on mountain slopes, grasslands, riverside sands and pebbles at 2800-3400 m. in Bhutan, India, Japan, Mongolia, Nepal, China.
112.	<i>Elymus semicostatus</i> (Nees ex Steud.) Melderis		Grass	-	Scrublands	Found at 1000-4000 m from Pakistan, Afghanistan and the Himalayas eastwards to Sikkim.

113.	<i>Festuca undata</i> Stapf	Fescue grass	Grass	-	Surchoo	
114.	<i>Festuca valesiaca</i> Schleich. ex Gaudin	Volga fescue	Grass	-	Alpine grassland and meadows	It is native to Europe and Asia. It was introduced to North America when it was deliberately planted
115.	<i>Helictotrichon junghuhnii</i> (Buse) Henrard (Syn. <i>H. virescens</i> (Nees ex Steud.) Henrard)		Grass	-	Sangla	Found on grassy mountain slopes, forests, damp places at 2000-3900 m in Bhutan, India, Indonesia, Myanmar, Nepal, Pakistan and China.
116.	<i>Heteropogon contortus</i> (L.) P. Beauv. ex Roem. and Schult	Black Speargrass, Tanglehead Grass, Bunched Spear Grass,	Grass	-	Nichar	It is mainly used as fodder when it is young. It can be grazed or cut for hay or silage.
117.	<i>Koeleria royleana</i> (L.) Pers.	Hair-grass	Grass	-	Scrublands	
118.	<i>Koeleria macrantha</i> (Ledeb.) Schultes	Prairie June Grass, Crested Hair-grass	Grass	-	Moorang	It is widespread across much of Eurasia and North America. It occurs in a large number of habitat types, especially prairie.
119.	<i>Koeleria pyramidata</i> (Lam.) P. Beauv. (Syn. <i>K. cristata</i> (L.) Pers.)	Prairie June Grass	Grass	-	Forests, Alpine grassland and meadows, Scrublands	Prairie June grass has nice foliage and fantastic flowers, which are excellent in dried flower arrangements.
120.	<i>Melica persica</i> Kunth		Grass	-	Scrublands	It is a plant of steep slopes and rocky places from 1500-4900 m.
121.	<i>Microstegium nudum</i> (Trin.) A. Camus		Grass	-	Solding	Found on moist mountainsides, forest undergrowth at around 3000 m in Bhutan, India, Japan, Nepal, Pakistan, China, Philippines, Vietnam, Africa, Australia.
122.	<i>Muhlenbergia duthieana</i> Hack.		Grass	-	Alpine grassland and meadows	Known from the Himalayan regions of India, Nepal and Pakistan, and into southern China (Yunnan).

123.	<i>Muhlenbergia himalayensis</i> Hack. ex Hook. f.		Grass	-	Forests	Found on moist ground of mountain slopes, valleys, ditches, under thickets at 2000–2900 m in Afghanistan, Bhutan, India, China & Nepal.
124.	<i>Neyraudia arundinacea</i> (L.) Henr.	Burma Reed, Silk Reed, Cane Grass, False Reed	Grass	-	Scrublands	It is a tall, perennial, large-plumed grass native to subtropical Asia, but invasive in southern Florida in the United States. It occurs in bogs, in open savannahs, on upland cliffs, and along forest and road edges, and from sea level to altitudes of 2,000 m.
125.	<i>Oplismenus compositus</i> (L.) P. Beauv.	Running Mountain Grass	Grass	-	Forests, Scrublands	Found in the Himalayas at altitudes of 300-2800 m, and is wide spread in several continents. Flowering: August-September.
126.	<i>Oryzopsis aequiglumis</i> Duthie ex Hook. f.		Grass	-	Forests, Alpine grassland and meadows	Found in Pakistan, eastern Afghanistan, along the Himalayas through Himalayas to China. Found in juniper tracts and coniferous forests between 1300 and 3300 m.
127.	<i>Oryzopsis munroi</i> Stapf ex Hook. f.		Grass	-	Forests, Scrublands	Found at 3800-4600 m in W. Himalaya, Nepal & Tibet.
128.	<i>Oryzopsis vicaria</i> Grig. (Syn. <i>O. microcarpa</i> Pilg., <i>Piptatherum microcarpum</i> (Pilg.) Tzvelev)		Grass	-	Mulling, Jangi	Found in Himalayan region of India, Pakistan and Afghanistan, also found in Iran and southern USSR, in deciduous woodland and open vegetation between 500 and 2800 m.
129.	<i>Pennisetum flaccidum</i> Griseb.	Himalayan Fountain Grass, Phark, Phirki	Grass	-	Forests, Temperate Grasslands	Found in the Himalayas, from Jammu and Kashmir, Nepal to Tibet, at altitudes of 1700-4300 m.
130.	<i>Pennisetum glaucum</i> (L.) R. Br. (Syn. <i>Setaria glauca</i> (L.) P. Beauv.)	Bajra, Pearl Millet	Grass	-	Forests	Bajra is the most widely grown species of millet, grown in India and Africa since prehistoric times. It is now generally accepted that pearl millet originated in Africa and that it was introduced into India from there.
131.	<i>Pennisetum lanatum</i> Klotzsch		Grass	-	Forests, Alpine grassland and meadows, Scrublands	Found on dry mountain slopes; above 1500 m in Himalayan region of Afghanistan, NW India, Nepal, China and Pakistan.

132.	<i>Pennisetum orientale</i> Rich.	Oriental Fountain Grass, Pink Fountain Grass, White fountain grass	Grass	-	Bhabhanagar, Katgaon	It is an unusually low-growing and compact fountain grass. The gracefully cascading clump of dense foliage are only about 1 ft tall. It grows in a mound that grows outward slowly via short underground rhizomes.
133.	<i>Phacelurus speciosus</i> (Steud.) C.E. Hubb		Grass	-	Urni	Found in western Himalayan region of India, Pakistan, Afghanistan and Nepal.
134.	<i>Phleum alpinum</i> L.	Alpine Cat Tail, Alpine timothy	Grass	-	Alpine grassland and meadows	Found in wet alpine meadows, damp soil around bushes, riversides in the Himalayas, at altitudes of 2500-3900 m. This grass is found worldwide. Flowering: July-September.
135.	<i>Phleum himalaicum</i> Mez		Grass	-	Forests	Found in western Himlaayan region upto 600-3000 m.
136.	<i>Phragmites karka</i> (Retz.) Trin. ex Steud.	Tall Reed, Narkul, Nal, Doka-ghas, Kilak	Grass	-	Forests	It is a perennial reed, with creeping rhizomes. Culms are erect, up to 10 m tall. Leaf-blades are 30-80 cm long and 1.2-4 cm wide, hairless, rough to touch beneath, the tips flat and stiff
137.	<i>Poa annua</i> L.	Annual Bluegrass, Annual Meadow Grass	Grass	-	Forests	It is a widespread low-growing, tufted, annual plant in temperate climates. It is one of the sweetest grasses for green fodder, but less useful as hay. It has a slightly creeping, fibrous, rootstock.
138.	<i>Poa polycolea</i> Stapf		Grass	-	Forests	Common in alpine rocky slopes, mountain slopes, meadows among thickets, coniferous and Quercus forests on slopes at 3000-5000 m in Himlayaan region.
139.	<i>Poa supina</i> Schrad.		Grass	-	Forests	
140.	<i>Polypogon fugax</i> Nees ex Steud.		Grass	-	Forests	Found in moist places, near farmlands at 100–3600 m in Bhutan, N India, Japan, Kazakhstan, Korea, Kyrgyzstan, Myanmar, Nepal, Pakistan, Russia, Tajikistan, Turkmenistan, Uzbekistan; SW Asia & China; introduced elsewhere.
141.	<i>Saccharum filifolium</i> Steud.		Grass	-	Sangla	Found in Himalayan region from Afghanistan to the western Himalayas.

142.	<i>Schizachyrium exile</i> (Hochst.) Pilg.		Grass	-	Forests, Temperate Grasslands	Found on poor, dry, disturbed, gravelly soils, open places and bordering bush and woodland in Tropical Africa to India, Myanmar and Thailand.
143.	<i>Setaria pumila</i> (Poir.) Roem and Schult.	Yellow Foxtail, Yellow Bristle- Grass, Pigeon grass	Grass	-	Forests	It is native to Europe, but it is known throughout the world as a common weed. It grows in lawns, sidewalks, roadsides, cultivated fields, and many other places. This annual grass grows 20 centimeters to well over a meter in height, its mostly hairless stems ranging from green to purple-tinged in color.
144.	<i>Setaria viridis</i> (L.) P. Beauv.	Green Foxtail, Green Bristlegrass, Green Foxtail Millet	Grass	-	Kafnu	It is native to Eurasia, but it is known on most continents as an introduced species and often a noxious weed.
145.	<i>Stipa brandisii</i> Mez		Grass	-	Forests	A widespread species between 1200 and 2500 m which has a reputation for being poisonous to stock. However, its toxicity is not so severe that cattle, sheep and goats cannot learn to avoid it before coming to too much harm.
146.	<i>Themeda anathera</i> (Nees ex Steud.) Hack.		Grass	-	Forests	Found on mountain slopes, usually in forests at 1500-3000 m in Afghanistan, N India, Nepal, Pakistan & China.
147.	<i>Themeda arundinacea</i> (Roxb.) A. Camus		Grass	-	Forests, Alpine grassland and meadows	Found on mountain slopes, valley grasslands at 700-2000 m in Bangladesh, Bhutan, N India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Philippines, Thailand, Vietnam & China.
148.	<i>Themeda triandra</i> Forssk.	Kangaroo Grass, Red Grass, Red Oat	Grass	-	Temperate Grasslands	It is native to Africa, West Asia, India and Australia. Flowering: October-July.
149.	<i>Trisetum klarkei</i> (Hook. f.) R.R. Stewart		Grass	-	Forests, Alpine grassland and meadows	Found in montane forests, among bushes, moist grassy mountainsides at 1900–4300 m in E Afghanistan, NW India, China & Pakistan.

150.	<i>Trisetum spicatum</i> (L.) K. Richt.	Spike Trisetum, Spike False Oat	Grass	-	Forests, Alpine grassland and meadows	Grassy mountain slopes, alpine meadows, on glacial moraine, among bushes, montane forests; 1900–5600 m.
Polygonaceae						
151.	<i>Persicaria wallichii</i> Greuter and Burdet (Syn. <i>Polygonum polystachyum</i> Wall. ex Meisn.)	Himalayan Knotweed	Shrub	-	Forests, Alpine grassland and meadows	It is a beautiful plant, which is however a persistent weed. Introduced for garden purposes in the West in the 19th century from the Himalayas, it is now established in a few places in the wild - on roadsides, slopes etc.
152.	<i>Polygonum somdevae</i> Aswal and Mehrotra		Shrub	-	Alpine grassland and meadows	
Primulaceae						
153.	<i>Myrsine africana</i> L.	Cape Myrtle, African Boxwood, Thakisa, Oleander, Basuti, Chhota Mehndru	Shrub	-	Bhabhanagar	It is found in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Assam and Meghalaya, at an altitude range of 300-2700 m.
Rhamnaceae						
154.	<i>Sageretia thea</i> var. <i>thea</i> (Syn. <i>S. theezans</i> (L.) Brongn.)	Chinese Sweet-Plum, Chinese bird plum	Shrub	-	Forests	It is found in Kashmir, Himachal Pradesh, Punjab, Uttarakhand, at altitudes up to 2100 m. Flowering: July-September.
Rosaceae						
155.	<i>Cotoneaster acuminatus</i> Lindl.	Nepal Cotoneaster	Shrub	-	Kharogla	Found in the Himalayas, from Kumaun to Bhutan, Tibet, W. China, at altitudes of 2500-3700 m; Flowering: May-June.
156.	<i>Cotoneaster affinis</i> Lindl.		Shrub	-	Pooh	Found on slopes, mixed forests, thickets of river valleys at 1100-3900 m in Bhutan, India, Kashmir, Nepal, Sikkim & China.
157.	<i>Cotoneaster bacillaris</i> Wall. ex Lindl.		Shrub	-	Kharogla	Found in blanks in forests, old grazing camps etc, in the higher hill forests at 1500 - 3000 metres in western Himalayas.

158.	<i>Cotoneaster falconeri</i> Klotz		Shrub	-	Forests, Alpine grassland and meadows	
159.	<i>Cotoneaster gilgitensis</i> Klotz		Shrub	-	Scrublands	
160.	<i>Cotoneaster microphyllus</i> Wall. ex Lindl.	Rockspray Cotoneaster, Chinese Rockspray	Shrub	-	Alpine grassland and meadows	This plant is loved for its showy scarlet berries. Rockspray cotoneaster is found in the Himalayas, from Afghanistan to SW China, at altitudes of 2000-5400. Flowering: May-June.
161.	<i>Cotoneaster obovata</i> Wall. ex Dunn		Shrub	Endemic	Forests	
162.	<i>Cotoneaster rotundifolius</i> Wall. ex Lindl.	Roundleaf Cotoneaster, Rose Box, Quince-leaved Medlar	Shrub	-	Sangla	Found in the Himalayas at altitudes of 1200-4000 m. Flowering: May-June.
163.	<i>Cotoneaster schubertii</i> Klotz	Kashmir Cotoneaster	Shrub	-	Forests	Found in Kashmir and Pakistan. Flowering: April-May.
164.	<i>Prinsepia utilis</i> Royle	Himalayan Cherry Prinsepia, Bhikal, Bekkra, Bhekal	Shrub	-	Forests, Scrublands	Himalayan Cherry Prinsepia is a spiny shrub, growing up to 1-5 m tall. Branches are grayish green, robust, branchlets green to grayish green, angled, brown velvety to hairless.
165.	<i>Rosa brunonii</i> Lindl.	Himalayan Musk Rose	Shrub	-	Forests	It is a stout climber with small curved prickles. Leaves are compound with 5-7 elliptic to oblong-lancelike and finely toothed. Beautiful, fragrant, white flowers consist of 5 petals forming a single cup.
166.	<i>Rosa cymosa</i> Tratt. (Syn. <i>R. indica</i> L.)	Elderflower Rose	Shrub	-	Forests	It is a species of climbing rose native to China, where it grows from the east coast in Fujian to western Sichuan at up to 1300 m, in warm areas in scrub and gorges, and in bamboo plantations.
167.	<i>Rosa macrophylla</i> Lindl.	Himalayan Rose, Big Hip Rose	Shrub	Endemic	Forests, Alpine grassland and	Himalayan rose is one of the most remarkable rose species, and one of the most variable. It

					meadows, Scrublands	grows in the Himalayas, at altitudes ranging from 2400 to 3600 m. Flowering: June-July.
168.	<i>Rosa sericea</i> Lindl.	Silky Rose, Jangali-Gulab, Dhurkunja	Shrub	-	Katgaon	Found in the Himalayas, from Himachal Pradesh to SW China and Burma, at altitudes of 2100-4500 m. Flowering: May-August.
169.	<i>Rosa webbiana</i> Wall. ex Royle	Webb's Rose, Thorny Rose, Jangli Gulab	Shrub	-	Forests, Scrublands	It is a common shrub rose, widely distributed, and growing from 1500 m to all the way to 4000 m. A shrub from 1-2 m high, with straight, slender, yellowish prickles. Flowers born singly, usually pink, with a white centre all entirely white, scented. Native to the western Himalayas from the Pamir in central Asia to Kashmir, Tibet and Afghanistan.
170.	<i>Rubus biflorus</i> Buch.-Ham. ex Sm.	Raspberry, Blackberry	Shrub	-	Katgaon	Found in valleys, river sides, slopes, roadsides, thickets, forests, forest margins at 1500-3500 m in Bhutan, India, China, Myanmar, Nepal & Sikkim.
171.	<i>Rubus ellipticus</i> Sm.	Yellow Himalayan Raspberry, Lalanchu, Hinsal	Shrub	-	Forests	It is a shrub, growing up to 2 m tall. It is clothed with prickles and reddish hairs. The alternate leaves are compound with three round to blunt leaflets 5-10 cm long. It is native to India and south Asia. Flowering: February-April.
172.	<i>Rubus irritans</i> Focke (Syn. <i>R. purpureus</i> Bunge ex Hook. f.)	Wild Red Raspberry	Shrub	-	Forests, Alpine grassland and meadows	Found in slopes, forest margins, thickets at 2000-4500 m in the Himalayan region.
173.	<i>Rubus niveus</i> Thunb. (Syn. <i>R. foliolosus</i> D. Don)	Mysore Raspberry, Ceylon Raspberry, Hill Raspberry, Kala Hinsalu, Khre, Anchu, Badrakhan	Shrub	-	Forests	Found in Afghanistan, Himalayas, Bhutan, South India, Indonesia, Kashmir, Laos, Malaysia, Myanmar, Nepal, Philippines, Sikkim, Sri Lanka, Thailand, Vietnam, at altitudes of 500-2800 m.
174.	<i>Sorbaria tomentosa</i> (Lindl.) Rehder	Kashmir False Spirea,	Shrub	-	Forests	It is commonly found at altitudes of 1800-2900 m. Flowering: June-August.

		Himalayan Sorbaria				
175.	<i>Sorbus lanata</i> (Don) Schauer	Hairy Rowan	Shrub	-	Homte	It is found in the northern hemisphere. It grows in cooler areas. Most of the species is found in Eastern China and the Himalayas.
176.	<i>Spiraea canescens</i> D. Don	Grey Stem Spiraea, Jhar Mairala	Shrub	-	Forests, Scrublands	Found in thickets, thicket margins, valleys, river banks, stream sides, dry places, at altitudes of 1500-3000 m. Flowering: May-June.
	Rubiaceae					
177.	<i>Leptodermis lanceolata</i> Wall.	Lanceleaf Leptodermis	Shrub	-	Ponda	Found in Temperate Himalayas, from Kashmir to Nepal, Bhutan and Assam, at altitudes of 2000-3500 m. Flowering: May-June.
	Rutaceae					
178.	<i>Skimmia anquetilia</i> N.P. Taylor and Airy Shaw	West-Himalayan Skimmia	Shrub	Endemic	Surchoo	Native of the western Himalaya as far east as W. Nepal, extending into eastern Afghanistan; it appears to be common in the undergrowth of coniferous forest, up to 4000 m. Traditionally, the leaf infusion of <i>S. anquetilia</i> is taken for treatment of headache, freshness and general fever. Powder of its bark is used for the healing of burns and wounds. Its leaves are also used for the treatment of headache and smallpox as well as for freshness.
179.	<i>Zanthoxylum armatum</i> DC.	Winged Prickly Ash, Tumbru, Toothache Tree, Tejbal, Tejphal, Timroo, Trimal	Shrub	-	Ponda	It is used in many chronic problems such as rheumatism and skin diseases; chilblains, cramp in the leg, varicose veins and varicose ulcers. It is also used for low blood pressure, fever, and inflammation. Externally it may be used as a stimulation liniment for rheumatism and fibrositis. It has a stimulating effect upon the lymphatic system, circulation and mucous membranes.
	Salicaceae					
180.	<i>Salix denticulata</i> Andersson	Elegant Willow, Dwarf Willow,	Shrub	Endemic	Forests, Alpine grassland and meadows	Found in the Himalayas, from Afghanistan to Nepal and China. Flowering: April-May.

		Bashal, Beuns, Bhashal				
181.	<i>Salix flabellaris</i> Andersson		Shrub	-	Forests, Alpine grassland and meadows	Found at 3600-4000 m in Himalayan region.
	Santalaceae					
182.	<i>Viscum album</i> L.	Common Mistletoe, European mistletoe	Shrub	-	Forests	It is native to Europe and western and southern Asia. It is found in the Himalayas, from Afghanistan to C Nepal, at altitudes of 1000-2700 m. It is common on walnut trees in Kashmir. The dried herb is used consisting of younger branches with leaves, flowers and separated fruits. It has widespread medicinal uses.
	Scrophulariaceae					
183.	<i>Buddleja asiatica</i> Lour.	Dog Tail	Shrub	-	Rarang Panoong	It can grow < 7 m tall in the wild. The leaves are usually < 30 cm long, attached by petioles 15 mm long, to branches round in section. The sweetly scented flowers are usually white, occasionally pale violet.
184.	<i>Buddleja crispa</i> Benth.	Himalayan Butterfly Bush	Shrub	-	Pangi	Found in the Himalayas, from Pakistan to SW China, altitudes of 1200-4000 m. Flowering: April-June.
	Tamaricaceae					
185.	<i>Myricaria germanica</i> (L.) Desv.	Scaly False Tamarisk, German Tamarisk	Shrub	-	Alpine grassland and meadows, Scrublands	Found in the Himalayas, from Afghanistan to C Nepal, C Asia and Europe, at altitudes of 2400-4000 m. It is common and grows in colonies in Lahaul and Ladakh. Flowering: June-July.
	Thymelaeaceae					
186.	<i>Daphne mucronata</i> Royle	Kashmir Daphne	Shrub	-	Forests, Scrublands	Found in the Himalayas, from Pakistan to Himachal Pradesh at altitudes of 1500-2700 m. It is common in Kashmir and Chenab valleys. Flowering: April-May.
187.	<i>Daphne oleoides</i> Schreb.		Shrub	-	Forests	The shrub is evergreen, and grows up to 60 cm tall. Its branches grow upright. Its flowers are white, with a purplish outside and it bears

						orange fruits. It is often found on calcareous rocks and rocky slopes at altitudes of 1700 to 2300 m.
188.	<i>Daphne papyracea</i> Wall. ex W.W. Sm. and Cave	Indian Paper Plant, Satpura, Setburwa, Setburosa, Bhanchoi	Shrub	-	Moorang	It is an evergreen shrub, growing up to 2 m tall. Stem are hairless, but the younger shoots are velvety. In Nepal and Kumaon, paper is made of the inner fibrous bark. Flowering: November-April.
189.	<i>Wikstroemia canescens</i> Wall. ex Meisn.	Himalayan Tie Bush, Himalayan String-Bush, Chamliya, Chambat, Tilak, Padaren, Chambai	Shrub	-	Rarang	Found in the Himalayas, from Afghanistan to Sikkim, and Sri Lanka and China, at altitudes of 1800-3000 m. Flowering: May-September.
Urticaceae						
190.	<i>Debregeasia saeneb</i> (Forssk.) Hepper and J.R.I. Wood	Himalayan Wild Rhea, Puruni, Siaru, Siharu	Shrub	-	Forests	Found in Iran, Afghanistan, Himalayas, from Kashmir to Nepal, at altitudes of 1500-2400 m. Flowering: March-June.
Gymnosperms						
Cupressaceae						
191.	<i>Juniperus communis</i> L.	Common Juniper	Shrub	-	Forests, Alpine grassland and meadows	Common Juniper is found in the Himalayas, from Afghanistan to C. Nepal, at altitudes of 1800-3600 m. Flowering: April-May.
192.	<i>Juniperus indica</i> Bertol.	Black Juniper	Shrub	-	Forests	Native to high altitudes in the Himalaya, occurring from the northern Indus Valley in Kashmir east to western Yunnan in China. It is of interest as the highest altitude woody plant known, reported growing as high as 5200 m in southern Tibet; the lowest limit being 2600 m.
Ephedraceae						
193.	<i>Ephedra gerardiana</i> Wall. ex Stapf	Somlata, Gerard Jointfir, Ain, Khanta, Somlata	Shrub	-	Scrublands	Found on stony slopes, gravel terraces and drier places in the Himalayas, from Afghanistan to Bhutan, at altitudes of 2400-5000 m. Flowering: May-June. It has very likely been used in India since the Vedic period as a soma substitute.

194.	<i>Ephedra intermedia</i> Schrenk and C.A. Mey.		Shrub	-	Scrublands	It is native to Siberia, Central Asia, Iran, Afghanistan, Pakistan, the western Himalayas, Tibet, Mongolia, and China. It is found in deserts, grasslands, floodlands and river valleys, slopes and cliffs, and sandy beaches. It grows at elevations of 100-4,600 metres, in rocky or sandy dry habitats.
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Table 4: CLIMBERS FOUND IN KINNAUR

S.No.	Species	Common Name	Habit	Status	Locality/ habitat	Additional Information
	Araliaceae					
1.	<i>Hedera nepalensis</i> K. Koch	Himalayan Ivy, Bano, Lablab, Mithiari, Kural	Climber	-	Forests	Found in the Himalayas, from Afghanistan to SW China and Burma, at altitudes of 1800-3000 m. Flowering: September-October.
	Convolvulaceae					
2.	<i>Convolvulus arvensis</i> L.	Field Bindweed, Hiranpug, Hiranpadi	Climber	-	Sunnam	It is a climbing or creeping herbaceous perennial plant growing to 0.5-2 m high. Each fruit contains 2 seeds that are eaten by birds and can remain viable in the soil for decades. Field Bindweed is generally considered a weed. Field Bindweed is native to Europe and Asia.
3.	<i>Cuscuta campestris</i> Yunck.	Golden Dodder, Common Dodder, Field Dodder,	Climber	-	Ponda	This plant invades a wide range of habitats, especially river banks, other moist sites and irrigated crop lands. Golden Dodder is native to the American continents, but widely naturalized.
4.	<i>Cuscuta chinensis</i> Lam.	Common Dodder, Amar Bel	Climber	-	Pooh	Found in fields, open mountain slopes, thickets and sandy beaches at elevations up to 3,000 metres
5.	<i>Cuscuta reflexa</i> Roxb.	Giant Dodder, Amar bel, Akashbel	Climber	-	Ponda, Hoyer, Chansu	It is an unusual parasitic vine related to the Morning glory family. It grows in a prolific manner over host plants (or other support) with

						inter-twined stems, giving it a common name of Devils Hair. Its seeds can remain dormant for five years and control of Dodder is an important issue for crops and forests.
6.	<i>Ipomoea nil</i> (L.) Roth	Blue Morning Glory, Japanese Morning Glory, White-Edge Morning Glory Jharmaric, Kaladana, Neelkalmi	Climber	-	Forests, Scrublands	Annual or sometimes short-lived perennial, with twining to decumbent-creeping, slender, somewhat angular stems 2-5 m long. Leaves are broadly ovate or nearly circular, 4-15 x 4.5-14 cm, base heart-shaped, margin entire or 3-lobed. Inflorescences axillary, 1- to few flowered. Petals pale to bright blue with whitish tube, fading to pinkish in age, funnellform, 5-6 cm.
7.	<i>Ipomoea purpurea</i> (L.) Roth	Common Morning Glory, Tall Morning Glory, Purple Morning Glory, Garden morning glory	Climber	-	Surchoo	It is a morning glory vine native to Mexico and Central America, but widely naturalized in India. Like all morning glories the plant entwines itself around structures with its viny stems, growing to a height of 2-3 m tall.
	Cucurbitaceae					
8.	<i>Herpetospermum pedunculatum</i> (Ser.) C.B. Clarke	Himalayan Bitter Gourd, Ban Karelaa, Beej Karela	Climber	-	Nichar	Found in the Himalayas from Uttarakhand to Bhutan, S. Tibet, Assam, SW China, at altitudes of 1500-3600 m. The seeds are used in Tibetan medicine, where they are considered to have a bitter taste and a cooling potency. Anti-inflammatory, cholagogue, choleric and febrifuge, they are used in the treatment of piles, inflammation of the stomach and the intestines. The pounded root is used to treat problems of the bile ducts.
9.	<i>Solena amplexicaulis</i> (Lam.) Gandhi (Syn. <i>Melothria heterophylla</i> (Lour.) Cogn.)	Creeping Cucumber, Diversely-leaved melothria, Amantamul, Tarali	Climber	-	Surchoo	It is a climbing perennial herb with several tuberous roots spindle-shaped, 1.5-2 cm in diameter. Stem and branches hairless. It has traditionally been used in the management of diseases pertaining to gastrointestinal, respiratory and vascular system.

	Dioscoreaceae					
10.	<i>Dioscorea deltoidea</i> Wall. ex Griseb.	Nepal Yam, Shingli-Mingli, Baniatakari, Harvish, Janj, Jung	Climber	Vulnerable	Forests, Scrublands	Found in the Himalayas, from Kashmir to Assam, Indo-China and W. China, at altitudes of 450-3100 m. Flowering: May-July. The juice of the root tuber is taken in the evening in the treatment of roundworm. It is also used to alleviate constipation. The roots of most, if not all, members of this genus, contains diosgenin. This is widely used in modern medicine in order to manufacture progesterone and other steroid drugs. These are used as contraceptives and in the treatment of various disorders of the genitry organs as well as in a host of other diseases such as asthma and arthritis. The roots of this species contain an average of 4.8% diosgenin.
	Menispermaceae					
11.	<i>Cissampelos pariera</i> L.	Velvet Leaf, False Pareira Brava, Abuta, Pereira Root, Barbasco, Akanadi, Batindu	Climber	-	Chaura	It is native to India, Africa and S. Asia. It is also found in the Himalayas, up to altitudes of 2300 m. Flowering: August-October. It is known as Midwife's herb as mainly used in women ailments. It is used for menstrual problems, hormonal imbalance, ease childbirth, postpartum pain, prevent threatened miscarriage, and control uterine hemorrhages, hormonal acne and premenstrual syndrome. It is used for heart problems, kidney stones, kidney infections and pains, asthma, arthritis, muscle cramps and stomach pains.
	Polygonaceae					
12.	<i>Fallopia convolvulus</i> (L.) Á Löve (Syn. <i>Polygonum convolvulus</i> L.)	Black- Bindweed, Wild Buckwheat	Climber	-	Forests	The seeds are edible, and were used in the past as a food crop, with remains found in Bronze Age middens. The seeds are too small and low-yielding to make a commercial crop, and it is now more widely considered a weed, occurring in crops, waste areas and roadsides. It ranges

						from sea level in the north of its range, up to 3600 m altitude in the south in the Himalaya.
	Ranunculaceae					
13.	<i>Clematis buchananiana</i> DC.	Lemon Clematis, Fragrant Chinese Clematis	Climber	-	Ponda	Found in the Himalayas, from Kashmir to NE, Assam, N. Burma, Indo-China, W. China, at altitudes of 1800-3300 m. A paste of the roots is used as a poultice to treat swellings caused by inflammation. The juice of the root is used in the treatment of peptic ulcers. The juice is also inhaled to get rid of coughs and colds. A paste of the stem or root bark is kept pressed against the teeth for about 15 minutes to relieve toothache. The juice of the plant is applied externally to cuts and wounds. It is also taken internally in the treatment of indigestion.
14.	<i>Clematis connata</i> DC.	Himalayan Clematis	Climber	-	Hoye	Found in the Himalayas, from Pakistan to SW China, at altitudes of 1800-3300 m. Flowering: August-September.
15.	<i>Clematis grata</i> Wall.	Charming Clematis, Dhanwali, Santai, Charki, Garol	Climber	-	Forests, Scrublands	Found in the Himalayas, from Afghanistan to C. Nepal and China, at altitudes of 600-2400 m. Flowering: July-September.
16.	<i>Clematis montana</i> Buch.-Ham. ex DC.	Anemone Clematis, Indian Virgin's Bower, Garol, Geor bel, Kanguli	Climber	-	Forests	Found in the Himalayas, from Kashmir to Assam, W. & C. China and Taiwan, at altitudes of 1600-4000 m. Flowering: April-May.
17.	<i>Clematis orientalis</i> L.		Climber	Endemic	Scrublands	Found on slopes and along streams in the Himalayan region at 400-3800 m.
	Rosaceae					
18.	<i>Rubus paniculatus</i> Sm.	Heart-Leaf Raspberry	Climber	-	Sangla	Found in the Himalayas, from Pakistan to Bhutan, at altitudes of 1500-2900 m. Flowering: June-August.
	Rubiaceae					

19.	<i>Galium aparine</i> L.	Goose Grass, Cleavers, Common Bedstraw, Coachweed, Catchweed Kuri	Climber	-	Forests, Temperate Grasslands, Alpine grassland and meadows, Scrublands	Found in Europe, North Africa, Asia minor, Siberia, Iran, Afghanistan, Pakistan and the Himalayas region, from plains to 3500 m. Flowering: March-July. A popular "Spring-cleansing" tonic, it has been used for centuries to purify the blood and treat skin disease. The whole herb is now given by herbalists for eczematous rashes, swollen lymph glands, and urinary tract problems.
20.	<i>Galium asperifolium</i> Wall.	Rough-Leaved Clivers, Leswakuri	Climber	-	Scrublands	Found in Afghanistan, Himalayas (Kashmir to Sikkim), at altitudes of 1500-3000 m. Flowering: June-September.
21.	<i>Galium asperuloides</i> Edgew.	Rough Goose Grass	Climber	-	Forests	Found in forests on mountain slopes, thickets, ditch sides, along rivers, meadows, in the Himalayas, in Afghanistan, Kashmir, Pakistan and parts of China, at altitudes of 1500-2800 m. Flowering: April-August.
22.	<i>Galium elegans</i> Wall. ex Roxb. (Syn. <i>Galium vestitum</i> D. Don)	Elegant Goose Grass	Climber	-	Forests	Found in the Himalayas, at altitudes of 200-3500 m. Flowering: July-October.
23.	<i>Galium serpylloides</i> Royle ex Hook. f.		Climber	-	Alpine grassland and meadows, Scrublands	Found on mountain slopes at 3600-3800 m in Himalayan region of India, Nepal & China.
24.	<i>Rubia cordifolia</i> L.	Indian Madder, Common Madder, Manjistha Majith, Lachkura	Climber	-	Forests, Scrublands	Found throughout the Himalayas, at altitudes of 300-2800 m. It is also found in the Western Ghats, Sri Lanka, Korea, Mongolia, Russia (Far East) and SE Asia. Flowering: June-August. The plant is used both, internally as well as externally. The roots of Manjistha are used for medicinal purpose. Externally, Manjistha is highly recommended in skin diseases associated with edema and oozing. The wound and ulcers dressed with Manjistha ghrita heal promptly and get dried up and well cleansed.

	Smilacaceae					
25.	<i>Smilax menispermoides</i> A. DC.	Prickly-Ivy, Smilax	Climber	-	Ponda	Found in forests, thickets, shaded places on slopes at 2600-3700 m in Himalayas.
26.	<i>Smilax vaginata</i> Decne.	Prickly-Ivy, Smilax	Climber	-	Forests	Commonly growing in patches, in shrubby forest undergrowth, found in W Himalayas from 1500-3000 m.
	Vitaceae					
27.	<i>Ampelocissus divaricata</i> (Wall. ex M.A. Lawson) Planch.		Climber	-	Surchoo, Shelti	
28.	<i>Parthenocissus semicordata</i> (Wall.) Planch.	Himalayan Woodbine, Virginia Creeper	Climber	Endemic	Forests	Found in the Himalayas, from Pakistan to Sikkim, SW China and Burma, at altitudes of 1800-3300 m. Flowering: April-May.

Table 5: TREES FOUND IN KINNAUR

S.No.	Species	Common Name	Habit	Status	Locality/ Habitat	Additional Information
	Anacardiaceae					
1.	<i>Toxicodendron wallichii</i> var. <i>wallichii</i> (Syn. <i>Rhus wallichii</i> Hook. f.)		Tree	-	Bari	Found in shady and open places in forests and shrubberies; at elevations from 300 - 2,500 metres in E. Asia - southern China (Guangxi, Xizang, Yunnan), northern India, Nepal.
	Aquifoliaceae					
2.	<i>Ilex dipyrena</i> Wall.	Himalayan Holly	Tree	Endemic	Bhabhanagar, Nichar	It is a moderate-sized evergreen tree with light gray smooth bark, and with dark glossy green, very leathery, elliptic leaves with strong thorny teeth on the margins. It is found in the Himalayas, from Pakistan to SW China, at altitudes of 1500-3000 m. Flowering: April-July.
	Betulaceae					
3.	<i>Alnus nitida</i> (Spach) Endl.	West Himalayan Alder, Koi, Kosh, Kunis, Piak	Tree	Endemic	Forests	It is a deciduous tree 20 m or more tall. Found in the Himalayas, from Kashmir to W. Nepal, at altitudes of 1000-2700 m. Flowering: September-October.
4.	<i>Betula alnoides</i> Buch.-Ham. ex D. Don	Himalayan Birch, Bhojpatra	Tree	-	Forests	It is a tree 30 m tall with white-hairy branches. Found in the Himalayas, from Kumaun to Bhutan, Assam, S. Tibet, W. & C. China, at altitudes of 1200-2600 m. Flowering: October-January.

5.	<i>Betula utilis</i> D. Don	Bhoj Patra Tree, Himalayan Birch, Bhoj patra	Tree	Endangered	Forests	It is a tree widely found in the Himalayas, well-known for the use of its bark for writing in ancient India. The tree is distinguished by its white to brownish bark. It is a middle sized tree, with very distinctive bark which peels off in very thin, almost transparent strips. Flowering: April-May.
6.	<i>Corylus jacquemontii</i> Decne.	Jacquemont's Hazel, Bhotiya badam, Kabasi, Thangi	Tree	Endemic	Forests	It is a medium sized deciduous tree, with thin dark grey bark. Trees are cultivated for the nuts, which are an important food. Jacquemont's Hazel is found in the Himalayas, from Afghanistan to W. Nepal, at altitudes of 1800-3000 m. Flowering: March-April.
Boraginaceae						
7.	<i>Ehretia acuminata</i> R. Br. (Syn. <i>E. acuminata</i> var. <i>serrata</i> (Roxb.) I.M. Jhonst.)	Koda Tree, Brown-Cedar, Kodowood, Silky-ash, Bakli, Pania	Tree	-	Scrublands	Found in Bhutan, India, Indonesia, Japan, Vietnam; Australia, and in the Himalayas at altitudes of 100-1700 m.
Buxaceae						
8.	<i>Buxus wallichiana</i> Baill.	Himalayan Boxwood, Himalayan Box Tree, Papri	Tree	Endemic	Forests	Found in moist hills in the Himalayas, from Afghanistan, Pakistan to Kashmir, Uttarakhand, Himachal, Nepal and Bhutan, at altitudes up to 3000 m. Flowering: March-May.
Cannabaceae						
9.	<i>Celtis australis</i> L.	Mediterranean Hackberry, European Nettle Tree, Honeyberry	Tree	-	Ribba	It is a deciduous tree that can grow up to 25 m tall. The bark is smooth and grey, almost elephantine. It is native to southern Europe, North Africa, and Asia Minor.
10.	<i>Celtis tetrandra</i> Roxb.	Eastern Nettle Tree, Khirk	Tree	-	Bhabhanagar, Sholtu	It is a large tree with smooth grey bark. Alternately arranged leaves are elliptic, slightly ovate or ovate-oblong. Leaf margins are nearly entire or lightly toothed from above the middle. Flowers are tiny, insignificant, pale green

	Celastraceae					
11.	<i>Euonymus fimbriatus</i> Wall.	Fringed Spindle Tree	Tree	-	Alpine grassland and meadows	Found in open ground, woodlands at 2100-3300 m in Himalayan region.
	Cornaceae					
12.	<i>Cornus capitata</i> Wall.	Himalayan Strawberry Tree, Evergreen Dogwood	Tree	-	Forests	Found in the Himalayas, from Himachal Pradesh to SW China, at altitudes of 1200-3400 m.
13.	<i>Cornus macrophylla</i> Wall. (Syn. <i>Swida macrophylla</i> (Wall.) Soják)	Large Leaf Dogwood	Tree	-	Forests	It is a small, often low-branched or multistemmed tree, usually no more than 8 -10 m tall. In the wild it can grow up to 20 m.
	Elaeagnaceae					
14.	<i>Elaeagnus rhamnoides</i> (L.) A. Nelson (Syn. <i>Hippophae rhamnoides</i> L.)	Sea-buckthorn	Tree	-	Forests, Scrublands	Found in Afghanistan; Armenia; Austria; Azerbaijan; Belgium; Bulgaria; China; Czechia; Denmark; Estonia; Finland; France (France (mainland)); Georgia; Germany; Hungary; India; Iran, Islamic Republic of; Ireland; Italy (Italy (mainland)); Luxembourg; Mongolia; Netherlands; Norway; Pakistan; Poland; Romania; Russian Federation (European Russia); Slovakia; Spain (Spain (mainland)); Sweden; Switzerland; Turkey (Turkey-in-Asia); Ukraine; United Kingdom (Great Britain) up to 2000 m altitude.
15.	<i>Hippophae salicifolia</i> D. Don	Willow-Leaved Sea Buckthorn, Chuk, Tarwa	Tree	Endemic	Scrublands	This sea buckthorn can be found in the Himalayas at elevations of 2000-3700 m. Flowering: June
	Ericaceae					
16.	<i>Lyonia ovalifolia</i> (Wall.) Drude	Oval-Leaf Lyonia, Oval-Leaf Staggerbush	Tree	-	Forests	Found in the Himalayas at altitudes of 1500-3000 m. Flowering: April-June. The young leaves and buds are toxic, but they are used externally as an infusion to treat skin diseases and external parasites.

17.	<i>Rhododendron arboreum</i> Sm.	Tree Rhododendron, Burans,Lal buransh	Tree	-	Forests	This plant holds the Guinness Record for World's Largest Rhododendron. In fact, a scarlet <i>Rhododendron arboreum</i> on Mt. Japfu, Nagaland reached a height of 20 m. Scarlet rhododendron is native to Himalayas, from Kashmir eastwards to Nagaland.
Fagaceae						
18.	<i>Quercus baloot</i> Grift.	Holm Oak, Holly Oak	Tree	Endemic	Forests	It is native to the Himalayas from 1,000–3,000 metres. Found in Afghanistan, Pakistan and India (Jammu and Kashmir, Himachal Pradesh)
19.	<i>Quercus floribunda</i> Lindl. f ex A. Camus (Syn. <i>Quercus dilatata</i> Lindl. ex A. DC.)	Mohru Oak, Green Oak, Holly Oak, Moru	Tree	Endemic	Forests	Found in Afghanistan, Pakistan, temperate Himalayas, from Kashmir to Nepal, at altitudes of 1600-2900 m. Flowering: April-May.
20.	<i>Quercus ilex</i> L.	Evergreen Oak, Holly Oak, Holm Oak	Tree	-	Forests	It is a large evergreen oak native to the Mediterranean region.
21.	<i>Quercus leucotrichophora</i> A. Camus	Ban Oak, Woolly Oak, Banjh	Tree	Endemic	Forests	Ban Oak is an evergreen tree to 25m, found in the Himalayas. It is a large or medium sized tree, with leathery dull green leaves.
22.	<i>Quercus semecarpifolia</i> Sm.	Brown Oak, Kharshu Oak	Tree	-	Forests	It is native to the Himalayas and nearby mountains in Tibet, Afghanistan, India, Nepal, and Pakistan at 2500-4000 m.
Juglandaceae						
23.	<i>Juglans regia</i> L.	Walnut, Common Walnut, Akhrot	Tree	Endemic	Forests	Walnut is found in West Asia, W. China and the Himalayas, at altitudes of 1000-3300 m.
Leguminosae						
24.	<i>Robinia pseudo-acacia</i> L.	White Locust Tree, False Acacia, Black Laurel	Tree	-	Forests	It is a deciduous tree that grows to 14–25 m tall, with a trunk up to 0.8 m diameter, with thick, deeply furrowed blackish bark. The tree is native to North America, introduced and widely cultivated in Europe. It was probably introduced in India by the British while

						developing the hill stations, where it is now seen.
	Malvaceae					
25.	<i>Grewia optiva</i> J.R. Drumm. ex Burret	Bihul, Beul, Bhimal, Dhaman	Tree	-	Sangla	Found in the Himalayan regions in Pakistan, Nepal, India, usually between 500 and 2500 m. Flowering: April-September.
	Meliaceae					
26.	<i>Toona sinensis</i> (Juss.) M. Roem. (Syn. <i>T. serrata</i> (Royle) M. Roem.)	Chinese Toon, Chinese Mahogany	Tree	-	Sholtu	It is native to eastern and southeastern Asia, from North Korea south through most of eastern, central and southwestern China to Nepal, northeastern India, Myanmar, Thailand, Malaysia, and western Indonesia. The fruit, bark, and roots are used in traditional Chinese medicine.
	Moraceae					
27.	<i>Ficus palmata</i> Forssk.	Punjab Fig, Anjiri,	Tree	-	Forests, Scrublands	Punjab Fig is one of the tastiest fruits found growing wild in the mid-Himalayan region. It is at par with the cultivated figs in taste and flavour, however, size is rather small in this case. In the hills of India, this fig is eaten largely and is succulent, sweet and pleasant.
28.	<i>Morus serrata</i> Roxb.	Himalayan Mulberry, Kimmu, Chimmu	Tree	Endemic	Tapri	Found in the Himalayas, from Kashmir to Himachal Pradesh to Nepal, at altitudes of 1200-2700 m. Flowering: March-May.
	Oleaceae					
29.	<i>Fraxinus xanthoxyloides</i> (G. Don) Wall. ex A. DC.	Afghan Ash	Tree	Endemic	Forests, Scrublands	Found in Himalayan region upto 2,800 m.
30.	<i>Olea cuspidata</i> Wall. ex G. Don	Brown Olive, Wild Olive, Indian Olive, Kahu, Bairbanj	Tree	-	Sholtu	Found in Western Himalaya, at altitudes of 600-2800 m, and in Africa and West Asia.

31.	<i>Olea europaea</i> subsp. <i>cuspidata</i> (Wall. and G. Don) Cif. (Syn. <i>O. ferruginea</i> Royle)	Wild Olive, Brown Olive, Indian Olive	Tree	-	Forests	Type specimen described from banks of Jumna and Sutlej, near Turanda (Tranda). Found in Afghanistan, Pakistan & India at 500-2000 m.
Rhamnaceae						
32.	<i>Rhamnus triquetra</i> (Wall.) Brandis	Three-Lobed Buckthorn, Galodan, Gaunt, Gulodan	Tree	-	Forests	Found in Pakistan, Western Himalayas from Jhelum to Kumaon, Kashmir. Flowering: July-August.
33.	<i>Rhamnus virgata</i> Roxb.	Cane Buckthorn, Chadua, Chato	Tree	-	Forests	Found in the Himalayas, from Afghanistan, NW Pakistan, Kashmir to Bhutan, Burma, at altitudes of 1200-3800 m. Flowering: April-June.
Rosaceae						
34.	<i>Cerasus cerasoides</i> (Buch.-Ham. ex D. Don) S.Y. Sokolov (Syn. <i>Prunus cerasoides</i> Buch.-Ham. ex D. Don)	Wild Himalayan Cherry, Padam, Padmakashtha	Tree	-	Kalpa	It is a deciduous tree found in the forests of the Himalayas, from Himachal Pradesh in India to SW China and Burma. It grows at altitudes of 1200-2400 m above sea level.
35.	<i>Crataegus curvisepala</i> Lindm. (Syn. <i>C. oxyacantha</i> L.)	Hawthorn, Bansangli	Tree	-	Kalpa	It is a temperate shrub or a small tree of forests, scrubs, foothills, wastelands etc. of north-west Himalaya from Indus to Ravi, at an altitude of 2000-3000 m.
36.	<i>Malus pumila</i> Mill. (Syn. <i>Pyrus malus</i> L.)	Apple, Seb	Tree	-	Forests	It is a small to medium sized tree with spreading canopy, to 30 ft in wild, generally 6-15 ft in cultivation. Dark green leaves are elliptical with serrate margins, and velvety hairs on the underside. A special fruit type is given to apple and related fruits - the pome. The bulk of the fleshy edible portion derives from the flower cup, and not the ovary. Seeds are relatively small and black, and mildly poisonous.

37.	<i>Padus cornuta</i> (Wall. ex Royle) Carrière (Syn. <i>Prunus cornuta</i> (Wall. ex Royle) Steud.)	Himalayan Bird Cherry	Tree	-	Forests	Found in the Himalayas, from Afghanistan to SW China and Burma, at altitudes of 2100-3500. Flowering: April-June.
38.	<i>Photinia nussia</i> (Buch.-Ham ex D. Don) Kalkman		Tree	-	Hoye	It is native to the Himalaya and Northeast India.
39.	<i>Prunus amygdalus</i> Batsch (Syn. <i>P. communis</i> (L.) Arcang)	Almond, Sweet Almond, Badam	Tree	-	Forests	It is native to Afghanistan, Iran, Iraq, Kazakhstan, Pakistani Kashmir, Uzbekistan. It is widely cultivated in Kashmir.
40.	<i>Prunus armeniaca</i> L.	Apricot, Khubani	Tree	-	Sangla, Nigani	The apricot was known in Armenia during ancient times, and has been cultivated there for so long it is often thought to be native there. Its scientific name <i>Prunus armeniaca</i> (Armenian plum) derives from that assumption. Some believe that it was cultivated in India in 3000 BC.
41.	<i>Prunus domestica</i> L.	Plum, Alu bukhara	Tree	-	Sangla	It is a deciduous Tree growing to 12m by 10m at a medium rate. It is in flower in April, and the seeds ripen from July to November.
42.	<i>Prunus persica</i> (L.) Stokes	Peach, Adoo	Tree	-	Scrublands	Widely popular for their sweet, juicy fruits and beautiful blossoms, Peach trees are actually plagued by so many different pests and diseases that they should probably only be planted by the horticulturally dedicated homeowner.
43.	<i>Pyrus pashia</i> Buch.-Ham ex D. Don	Himalayan Pear, Indian Wild pear, Kainath, Kainth	Tree	-	Forests	Himalayan Pear is found in the Himalayas, from Afghanistan to SW China and Burma, at altitudes of 750-2700 m. Flowering: March-April.
	Salicaceae					
44.	<i>Populus ciliata</i> Wall. ex Royle	Himalayan Poplar, Bangikat	Tree	-	Forests	It is a large deciduous tree with tall clean straight bole and broad rounded crown. The bark of young trees is smooth greenish-grey

		Chalun, Biaon, Syan				and that of the old trees dark brown with deep vertical fissures.
45.	<i>Populus nigra</i> L.	Black Poplar, Lombardy Poplar	Tree	-	Forests	It is a medium-sized to large deciduous tree, reaching 20-30 m, rarely 40 m tall, with a trunk up to 1.5 m diameter. It is a native of W & C Asia and Europe. It is widely cultivated in Ladakh.
46.	<i>Salix alba</i> L.	White Willow	Tree	-	Forests	It native to Europe and western and central Asia. White willows are fast-growing, but relatively short-lived, being susceptible to several diseases, including watermark disease caused by the bacterium <i>Brenneria salicis</i> .
47.	<i>Salix pycnostachya</i> var. <i>oxycarpa</i> (Andersson) Y.L. Chou and C.F. Fang (Syn. <i>S. oxycarpa</i> Andersson)	Willow	Tree	-	Forests, Alpine grassland and meadows, Scrublands	Found on mountain slopes in Himalayan region at around 4400 m.
48.	<i>Salix pycnostachya</i> Andersson	Willow	Tree	-	Forests	Found in river valleys and mountain slopes in the Himalayan region at around 4400 m.
49.	<i>Salix tetrasperma</i> Roxb.	Indian Willow, Bod, Bains	Tree	-	Forests	It is a medium sized tree of wet and swampy places, shedding the leaves at the end of monsoon.
Sapindaceae						
50.	<i>Acer caesium</i> Wall. ex Brandis	Bluish Grey Maple	Tree	Endemic and Vulnerable	Forests	It is a deciduous tree, growing up to 25 m tall. Bark is is rather grey. Twigs are red-brown, hairless, peppered with dots. Flower buds are large, prominent in dormant season.
51.	<i>Acer lobelia</i> subsp. <i>pictum</i> (Thunb.) Wesm. (Syn. <i>Acer pictum</i> Thunb.)	Yellow-paint Maple	Tree	-	Forests	It is Asian species of maple. Its natural habitat is in temperate forests.
52.	<i>Aesculus indica</i> (Wall. ex Camb.) Hook.	Indian Horse Chestnut, Kanor, Bankhor	Tree	-	Forests	Native to the Himalayas, Indian Horse Chestnut is a tall, deciduous, spreading, shady tree, with a straight trunk, and branches in

						whorls. Its average height is 22 m; the girth of its trunk is about 1 m.
	Simaroubaceae					
53.	<i>Ailanthus altissima</i> (Mill.) Swingle	Tree of Heaven, Ailanthus, Varnish Tree	Tree	-	Forests, Scrublands	It is found in temperate climates rather than the tropics. The tree grows rapidly and is capable of reaching heights of 15 metres (49 ft) in 25 years. While the species rarely live more than 50 years, some specimens exceed 100 years old
	Ulmaceae					
54.	<i>Ulmus villosa</i> Brandis.	Cherry-bark Elm, Marn Elm	Tree	-	Forests	It is endemic to the valleys of the Kashmir at elevations of 1200-2500 m but has become increasingly rare owing to its popularity as cattle fodder, and mature trees are now largely restricted to temples and shrines where they are treated as sacred. Some of these trees are believed to be aged over 800 years. Found in the N.W. & W. Himalaya from 1200-2700 m.
55.	<i>Ulmus wallichiana</i> Planch.	Himalayan Elm	Tree	Endemic and Endangered	Forests	Found in Afghanistan, India, Nepal & Pakistan at elevations of 800–3000 m.
	Gymnosperms					
	Pinaceae					
56.	<i>Abies pindrow</i> (Royle ex D. Don) Royle	West- Himalayan Silver Fir, Dodimma, Jhilla, Tosh	Tree	-	Forests	Found in the Himalayas, from Afghanistan to W. Nepal, at altitudes of 2100-3600 m. Flowering: April-May.
57.	<i>Cedrus deodara</i> (Roxb. ex Lamb.) G. Don	Devdar, Himalayan Cedar, Deodar Cedar, Devdar	Tree	-	Forests	It is a very elegant ornamental tree, commonly found on the slopes of Western Himalayas. It is a large evergreen coniferous tree reaching 40-50 m tall, exceptionally 60 m, with a trunk up to 3 m diameter.
58.	<i>Picea smithiana</i> (Wall.) Boiss.	Himalayan Spruce, Morinda Spruce, Indian Spruce, Rai	Tree	-	Forests	It is a large evergreen tree growing to 40-55 m tall (exceptionally to 60 m), and with a trunk diameter of up to 1-2 m. It has a conical crown with level branches and usually pendulous branchlets.

59.	<i>Pinus gerardiana</i> Wall. ex D. Don	Chilghoza Pine, Noosa, Neoza, Chilghoza	Tree	Rare	Forests	It is a pine native to the northwestern Himalaya in eastern Afghanistan, Pakistan, and northwest India, growing at elevations between 1800-3350 m. It often occurs in association with Blue Pine (<i>Pinus wallichiana</i>) and Deodar. The trees are 10-20(-25) m tall with usually deep, wide and open crowns with long, erect branches.
60.	<i>Pinus roxburghii</i> Sarg.	Chir Pine, Himalayan Longleaf Pine, Chir	Tree	-	Forests	Native to the Himalayas, it is good as a street tree too. This is one of the least exacting of the Himalayan trees growing sometimes on bare rocks where only a few species are capable of existing. It is a resinous tree capable of yielding resin continuously provided rill method of tapping is adopted. The turpentine obtained from the resin of all pine trees is antiseptic, diuretic, rubefacient and vermifuge. It is a valuable remedy used internally in the treatment of kidney and bladder complaints and is used both internally and as a rub and steam bath in the treatment of rheumatic affections.
61.	<i>Pinus wallichiana</i> A.B. Jacks.	Himalayan Blue Pine, Himalayan White Pine, Kail	Tree	-	Forests	It is a dense evergreen tree, found in the Himalayas, from Afghanistan to Tibet, and forms forests at altitudes of 1800-4300 m. The tree is distinguished by its clusters of long cylindrical hanging cones, and its needle-like blue-green leaves. The tree grows up to 50 m tall, symmetric and pyramidal in shape.
Cupressaceae						
62.	<i>Juniperus polycarpus</i> K. Koch	Pencil Cedar	Tree	-	Scrublands	Found in the Himalayas, from Pakistan to Uttarakhand, at altitudes of 2400-4300 m. It is mostly found in dry river valleys, gregarious; forming open forests in Lahaul.
63.	<i>Juniperus recurva</i> Buch.-Ham. ex D. Don	Drooping Juniper	Tree	-	Forests, Scrublands	It is a juniper native to the Himalayas, from northern Pakistan east to western Yunnan in

						southwestern China. It grows at 3,000-4,000 m altitude.
	Taxaceae					
64.	<i>Taxus wallichiana</i> Zucc. (Syn. <i>Taxus baccata</i> L. ssp. <i>wallichiana</i> L.)	Himalayan Yew, Gallu, Thuno	Tree	-	Forests	Found in the Himalayas, from Afghanistan to SW China and Myanmar, at altitudes of 2100-3400 m. Flowering: March-May.

Table 6: BUTTERFLIES FOUND IN KINNAUR

S.No.	Taxon
Family: Papilionidae	
1.	<i>Papilio machaon punjabensis</i> Eimer
2.	<i>Parnassius simo simoides</i> O. Bang-Haas
3.	<i>P. charltonius</i> Gray
Family: Pieridae	
4.	<i>Baltia butleri butleri</i> (Moore)
5.	<i>Aporia nabellica</i> (Boisduval)
6.	<i>Synchlœ callidice kalora</i> (Moore)
7.	<i>Pieris napi ajaka</i> Moore
8.	<i>P. brassicae nepalensis</i> Doubleday
9.	<i>Ixias pyrene kausala</i> Moore
10.	<i>Colias erate erate</i> (Esper)
11.	<i>C. ladakensis</i> C & R Felder
Family: Satyridae	
12.	<i>Lethe pulaha pondiya</i> Talbot
13.	<i>Lasiommata moerula moerula</i> (C & R Felder)
14.	<i>Maniola pulchra pulchra</i> (C & R Felder)
15.	<i>M. davendra davendra</i> (Moore)
16.	<i>Aulocera brahminus brahminus</i> (Blanchard)
17.	<i>A. swaha swaha</i> (Kollar)
18.	<i>Callerebia kalinda kalinda</i> Moore
19.	<i>C. scanda scanda</i> (Kollar)
Family: Nymphalidae	
20.	<i>Athyma opalina</i> (Kollar)
21.	<i>Neptis hylas astola</i> Moore
22.	<i>Junonia orithya</i> (Linn.)

23.	<i>Cynthia cardui</i> (Linn.)
24.	<i>Vanessa egeacognate</i>
25.	<i>Aglaia urticae</i> (Linn.)
26.	<i>A. ladakensis</i> Moore
Family: Lycaenidae	
27.	<i>Acytolepis puspa gzsca</i> Fruhstorfer
28.	<i>Philotes vicrama</i> Moore
29.	<i>Polyommatus eros</i> Schmett
30.	<i>Lycaena kasyapa</i> (Moore)
Family: Hesperidae	
31.	<i>Hesperia alpina</i>

Table 7: EARTHWORMS FOUND IN KINNAUR

S.No.	Taxon
Phylum: Naididae	
Class: Oligochaeta	
Family: Lumbricidae	
1.	<i>Allolobophora parva</i> Eisen.
2.	<i>Aporrectodea c. caliginosa</i> (Savigny)
3.	<i>Aporrectodea c. trapezoides</i> (Duges)
4.	<i>Aporrectodea rosea rosea</i> (Savigny)
5.	<i>Dendrodrilus rubidus</i> (Savigny)
6.	<i>Eisenia fetida</i> (Savigny)
7.	<i>Eiseniella t. tetraedra</i> (Savigny)
8.	<i>Octolasion tyrtaeum</i> (Savigny)
Family: Megascolecidae	
9.	<i>Amyntas corticis</i> (Kinberg)
10.	<i>Perionyx bainii</i> Stephenson

Table 8: INSECTA (COLEOPTERA) FOUND IN KINNAUR

S.No.	Taxon
Family: Scarabaeidae	
Subfamily: Aphodiinae	
1	<i>Aphodius jinctarius</i> Olivo
Subfamily: Scarabaeinae	
2	<i>Gymnopleurus opacus</i> Redtenbacher
3	<i>Caccobius himalayanus</i> (Jek.)
4	<i>Caccobius denticollis</i> Harold
5	<i>Onthophagus expansicornis</i> Bates
6	<i>Onthophagus jasciatus</i> (Boue.)
7	<i>Liatongus phanaeoides</i> (Westw.)
Subfamily: Melolonthinae	
8	<i>Holotrichia longipennis</i> Blanch.
9	<i>Brahmina crinicollis</i> Bunn.
10	<i>Melolontha cuprescens</i> Blanch.
11	<i>Melolontha forcicauda</i> Ancey
Subfamily: Dynastinae	
12	<i>Oryctes nasicornis</i> (L.)

Table 9: FISH FOUND IN KINNAUR

S. No	Taxon	Common Name	Status	Habitat/Distribution/Altitudinal zone
Class: Actinopterygii, Order: Salmoniformes, Family: Salmonidae				
1	<i>Oncorhynchus mykiss</i> Walbaum, 1792	Rainbow Trout	IUCN least concern	Native to cold-water tributaries of the Pacific Ocean in Asia and North America. Locally also called 'Rainbow trout' and introduced during 1919 by procuring "eyed ova" from a Kashmir farm, this exotic species is now well established in all the major/streams of high altitude districts of the state. Besides open waters, intensive & extensive breeding and farming of this species is being done in govt and private farms of the state.

2	<i>Salmo trutta fario</i> Linnaeus 1758	Brown Trout	IUCN Least Concern; However the stream's stock under stress mainly through introgression, habitat degradation and over fishing	Introduced during 1909 from Kashmir & locally called by the same name Brown trout, the species is thriving well in abbot 200 km of riverine stretches of Shimla, Kinnaur, Kullu, Mandi, Chamba and even Lahul Spiti districts. Pabber, Beas, Tirthan, Sainj, Parbati, Uhl, Holi, Ravi, Rukti are some of the streams which host good stock of brown trout
Class: Actinopterygii, Order: Cypriniformes, Family: Cobitidae				
3.	<i>Botia geto</i> (Hamilton-Buchanan)	Bengal Loach, Green Loach	IUCN Least Concern	Found in Bangladesh and India
4.	<i>Triplophysa stoliczkae</i> (Steindachner)	Tibetan Stone Loach	IUCN Least Concern	Found in India and China. Reported from Afghanistan, Iran, Pakistan and Uzbekistan.
Order: Synbranchiformes, Family: Mastacembelidae				
5.	<i>Mastacembelus armatus</i> (Laceped)	Tire Track Eel, Spiny Eel	IUCN Least Concern	Native to the riverine fauna of India, Pakistan, Sri Lanka, Thailand, Viet Nam, Indonesia and other parts of South East Asia.

Table 10: AMPHIBIANS FOUND IN KINNAUR

S.No.	Taxon	Common Name	Status	Habitat/Distribution/Altitudinal zone
Order: Anura, Family: Bufonidae				
1.	<i>Duttaphrynus himalayanus</i> (Gunther, 1864)	Himalayan Toad	IUCN least concern	This species is widely distributed throughout the Himalayan mountains. It is found from the Hazara Division of Azad Kashmir, Pakistan, through northern India and Nepal, and is presumed to be present in Bhutan although this is not yet confirmed. It is also known from the southern slopes of the Himalayas in Xizang (<i>himalayanus</i>) and northwestern Yunnan (<i>cyphosus</i>), China. It has an altitudinal range of 1,000-3,500m asl.
2.	<i>Bufo viridis</i> Laurenti	Green Toad	IUCN least concern	It lives in many habitats, including steppes, mountainous areas, semi-deserts, and urban areas.

Table 11: REPTILES FOUND IN KINNAUR

S. No	Taxon	Common Name	Status	Habitat/Distribution/Altitudinal zone
Order: Squamata Family: Agamidae				
1	<i>Laudakia dayana</i> (Stoliczka, 1871)	Kashmir/Hurdwar Lizard	IUCN least concern	Found in NW India upto around 3000 m.
Family: Scincidae				
2	<i>Asymblepharus himalayanus</i> (<i>Gunther, 1864</i>)	Himalayan Ground Skink	IUCN least concern	Found in N.Pakistan (Chitral, Hazara), India (W Himalaya: Kashmir, Punjab, Himachal Pradesh, Uttar Pradesh), W Nepal, Pakistan & Turkmenistan.
Family: Colubridae				
3	<i>Ptyas mucosus</i> (Linnaeus, 1758)	Indian Rat Snake	IUCN least concern	Found in Afghanistan, Bangladesh, Burma, Cambodia, China, India, Sri Lanka, Indonesia, Iran, Laos, West Malaysia, Nepal, Myanmar, Pakistan, Thailand, Turkmenistan, Vietnam & Nepal
Family: Viperidae				

4	<i>Gloydius himalayanus</i> (Gunther,1864)	Himalayan Viper	Pit	IUCN least concern	Found in Pakistan, India (Kashmir, Haryana, Himachal Pradesh, Uttar Pradesh, West Bengal), & W/C Nepal at up to 4880 m
5	<i>Trimeresurus albolabris</i> Gray, 1842	White-lipped Viper	Pit	IUCN least concern	Found in India (Himachal Pradesh, Arunachal Pradesh, Nepal, Burma, Thailand, Cambodia, Laos, Vietnam, S China & Indonesia

Table 12: BIRDS FOUND IN KINNAUR

S.No.	Taxon	Common Name	Status	Habitat/Distribution/Altitudinal zone
Order: Falconiformes				
Family: Accipitridae				
1.	<i>Milvus migrans</i> (Boddaert, 1783)	Black Kite	IUCN least concern	Found throughout India, resident in Himachal Pradesh showing some seasonal local movements; found up to 4500 m altitude (occasionally reaching 5300 m).
2.	<i>Gypaetus barbatus</i> (Linnaeus, 1758)	Bearded Vulture	Near Threatend	Resident in Himalayas between 1200 to 4000 m, also observed by the Everest expeditions at 7500m.
3.	<i>Gyps himalayensis</i> Hume, 1869	Himalayan Griffon	Near Threatend	Resident in Himalayas from western Pakistan to eastern Assam between 600 to 4000 m altitude.
4.	<i>Buteo rufinus</i> (Cretzschmar, 1827)	Long-legged Buzzard	IUCN least concern	Breeds in Himalayas between 1500m to 3700m and winters mainly in Northern India, Assam. Breeds in forested hills and winters in open-country habitats.
5.	<i>Aquila chrysaetos</i> (Linnaeus, 1758)	Golden Eagle	IUCN least concern	Resident, in Himalayas, found from 1800m to 5500m. altitude.
Family: Falconidae				
6.	<i>Falco tinnunculus</i> Linnaeus, 1758	Common Kestrel	IUCN least concern	Breeds in Himalayas (between 700 to 3300m, occasionally up to 5500 m) and Western Ghats, winters throughout India. An altitudinal migrant species found throughout Himachal Pradesh.
Order: Galliformes				
Family: Phasianidae				

7.	<i>Tetraogallus himalayensis</i> G.R. Gray, 1843	Himalayan Snowcock	IUCN least concern	Found in Afghanistan, China, India, Kazakhstan, Kyrgyzstan, Nepal, Pakistan, Tajikistan, Turkmenistan & Uzbekistan between 3600 to 4570 m.
8.	<i>Alectoris chukar</i> (J.E. Gray, 1830)	Chukor	IUCN least concern	Resident, Himalayas between 2000 to 4000 m (occasionally from 1200 m to 5000 m)
9.	<i>Tragopan melanocephalus</i> (J.E. Gray)	Western Tragopan	Vulnerable	<i>It</i> has a disjunct distribution in the western Himalayas, occurring from Indus-Kohistan district, north Pakistan , east through Kashmir and Himachal Pradesh to Uttarakhand in north-west India , between 1740 to 3600 m.
10.	<i>Lophophorus impejanus</i> (Latham, 1790)	Impeyan Monal	IUCN least concern	Resident, Himalaya between 2500 m to 5000 m altitude.
11.	<i>Pucrasia macrolopha</i> (Lesson)	Koklass Pheasant	IUCN least concern	Found in China, India, Nepal & Pakistan between 2000 to 4000 m.
Order: Gruiformes Family: Rallidae				
12.	<i>Gallinula chloropus</i> (Linnaeus, 1758)	Common Moorhen	IUCN least concern	Resident and partly winter visitor, found throughout India, up to 2400 m in Kashmir.
Order: Charadriiformes Family: Scolopacidae				
13.	<i>Actitis hypoleucos</i> Linnaeus, 1758	Common Sandpiper	IUCN least concern	In our territory, breeds in Kashmir, Ladakh and Garhwal between 1800 and 3200m. Winter visitor to rest of India.
Order: Columbiformes Family: Columbidae				
14.	<i>Columba livia</i> Gmelin, 1789	Blue Rock Pigeon	IUCN least concern	Resident throughout India, except parts of Northwest and Northeast. It reaches 3300 m altitude in Himalayas. A resident altitudinal migrant species in Himachal Pradesh.
15.	<i>Columba rupestris</i> Pallas, 1811	Hill Pigeon	IUCN least concern	Resident, found in Himalayas between 3000 to 5500m, and descends down to 1500 m around suitable habitat types in winters.
16.	<i>Columba leuconota</i> Vigors, 1831	Snow Pigeon	IUCN least concern	Resident, found in Himalayas between 3000 to 5000m, descends down to 1500m around suitable habitat in winters

17.	<i>Streptopelia orientalis</i> (Latham, 1790)	Oriental Turtle-Dove	IUCN least concern	Resident and migrant (depending upon races), found in Himalayas, Northeast India, south to central peninsular India. Two of the races i.e. <i>S. o. meena</i> and <i>S. o. agricola</i> breeds during summer in Himalayas (up to 4000 m altitude) and migrate southwards in winter.
Order: Psittaciformes Family: Psittacidae				
18.	<i>Psittacula himalayana</i> (Lesson)	Himalayan Slaty-headed Parakeet	IUCN least concern	Found between 600 to 2500 m.
Order: Cuculiformes Family : Cuculidae				
19.	<i>Cuculus canorus</i> Linnaeus, 1758	Common Cuckoo	IUCN least concern	Breeds in Himalayas, Northern, Northeastern and Central India; scattered winter records from different places in India. Optimum zone for breeding 600 to 4100 m altitude, highest 5250 m in Kashmir.
Order: Strigiformes Family: Strigidae				
20.	<i>Bubo bubo</i> (Linnaeus)	Himalayan or Eurasian Eagle-Owl	IUCN least concern	Found between 2000 to 4200 m.
Order: Apodiformes Family: Apodidae				
21.	<i>Collocalia brevirostris</i> (Horsfield, 1840)	Himalayan Swiftlet	IUCN least concern	Resident in Himalayas and Northeast India from Chamba eastwards, between foothills to 4580m altitude.
22.	<i>Apus apus</i> (Linnaeus, 1758)	Common Swift	IUCN least concern	Asummer visitor, found in Western Himalayas between 1500 to 3300 m.
Order: Coraciiformes Family: Upupidae				
23.	<i>Upupa epops</i> Linnaeus, 1758	Common Hoopoe	IUCN least concern	Summer visitor to far north up to 4600 m altitude; resident and winter visitor to almost rest of India.
Order: Passeriformes				

Family: Alaudidae				
24.	<i>Alauda gulgula</i> Franklin, 1831	Eastern Skylark	IUCN least concern	Resident, breeding visitor and winter visitor to different areas throughout India, upto 4300m in Himalayas.
25.	<i>Eremophila alpestris</i> (Linnaeus, 1758)	Horned Lark	IUCN least concern	Resident and altitudinal migrant in high Himalayas, found between 3500m to snowline in summer and descends down to 1500 m at suitable habitat types in winter.
Family: Hirundinidae				
26.	<i>Riparia paludicola</i> (Vieillot, 1817)	Plain Martin	IUCN least concern	Resident, showing local movements, found in Northern, Central and Northeastern India, upto 4500 m in Himalayas. Found to be an altitudinal migrant in Himachal Pradesh.
27.	<i>Hirundo rupestris</i> Scopoli, 1769	Eurasian Crag-Martin	IUCN least concern	Breeds in Himalayas between 1600 to 5000m, winters in Western Ghats and other peninsular hills below 2150m.
28.	<i>Hirundo daurica</i> Linnaeus, 1771	Red-rumped Swallow	IUCN least concern	Summer visitor to Northwest India, reaching up to 3300m in Himalayas; resident and winter migrant to rest of India. Found as an altitudinal migrant in Himachal Pradesh.
Family: Motacillidae				
29.	<i>Motacilla alba</i> Linnaeus, 1758	White Wagtail	IUCN least concern	Breeds in Himalayas between 800 to 4500m and winters below 1800m, practically throughout India.
30.	<i>Motacilla citreola</i> Pallas, 1776	Citrine Wagtail	IUCN least concern	Summers in Himalayas between 3000 to 4600 m, and winter migrant to plains; found throughout India. Observed as an altitudinal migrant in Himachal Pradesh, descending down to lower areas during winter and found in summers in the higher areas.
31.	<i>Motacilla cinerea</i> Tunstall, 1771	Grey Wagtail	IUCN least concern	Summers in Himalayas between 1800 to 3900 m and winters throughout India below 2000 m altitude.
32.	<i>Anthus trivialis</i> (Linnaeus, 1758)	Eurasian Tree Pipit	IUCN least concern	Resident and winter visitor. Breeds in Northwest Himalaya between 2700 to 3700m; winters practically in the entire Indian peninsula, below 1400m in Himalayas.

33.	<i>Anthus hodgsoni</i> Richmond, 1907	Oriental Tree Pipit	IUCN least concern	Summer visitor to the Himalayas and winter visitor to the foothills and entire peninsula.
Family: Campephagidae				
34.	<i>Pericrocotus flammeus</i> (Forster, 1781)	Scarlet Minivet	IUCN least concern	Resident in Himalayas and hills of India, reaching up to 2700m altitude, moving to lower altitude and extending into the plains in winter.
Family: Laniidae				
35.	<i>Lanius schach</i> Linnaeus, 1758	Rufous-backed Shrike	IUCN least concern	Resident, winter visitor and breeding visitor to different areas throughout India, up to 3000 m altitude.
36.	<i>Lanius tephronotus</i> (Vigors, 1831)	Grey-backed Shrike	IUCN least concern	Breeds in Himalaya at suitable habitat types, between 2700 to 4500m, winters down to foothills and plains of North and Northeastern India.
Family: Cinclidae				
37.	<i>Cinclus pallasii</i> Temminck, 1820	Brown Dipper	IUCN least concern	Resident in Himalayas and Northeast India. Summers from 450 to 4000m and upper limit lowers down to 2700 m during winter.
Family: Troglodytidae				
38.	<i>Troglodytes troglodytes</i> (Linnaeus, 1758)	Winter Wren	IUCN least concern	Resident, shows altitudinal movements. Found in Himalayas from 2400 to 5000m during summers and 1200 to 3600 m during winters.
Family: Prunellidae				
39.	<i>Prunella strophiatea</i> (Blyth, 1843)	Rufous-breasted Accentor	IUCN least concern	Endemic to the Himalayas, descending in the winter to lower-to-middle altitudes. It is found in Afghanistan, Bhutan, Tibet, China, India, Myanmar, Nepal, and Pakistan.
Family: Muscicapidae				
Subfamily: Turdinae				
40.	<i>Monticola solitarius</i> Linnaeus, 1758	Blue Rock-Thrush	IUCN least concern	Summer visitor to Himalayas, between 1200 to 4000m and winter visitor throughout India below 1200m
41.	<i>Myiophonus caeruleus</i> (Scopoli, 1786)	Blue Whistling-Thrush	IUCN least concern	Resident and altitudinal migrant, Himalayas and Northeast India. Breeds between 1500 to 2400m (Occasionally 1000m to treeline) and winters from 2400m down to foothills.

42.	<i>Turdus merula</i> (Linnaeus, 1758)	Eurasian Blackbird	IUCN least concern	Breeds in temperate Eurasia, North Africa, the Canary Islands, and South Asia. It has been introduced to Australia and New Zealand. Populations are sedentary in the south and west of the range, although northern birds migrate south as far as northern Africa and tropical Asia in winter.
43.	<i>Turdus albocinctus</i> Royle, 1840	White-collared Blackbird	IUCN least concern	Resident-altitudinal migrant in Himalayas from Chamba eastwards to Northeast India. Breeds between 2100 to 4200m and winters from 3000m down to hill bases (900m).
44.	<i>Luscinia pectoralis</i> (Gould, 1837)	Himalayan Rubythroat	IUCN least concern	Summer visitor to Himalayas, between 2700 to 4500m and winters mainly in foothills and Northeast India.
45.	<i>Luscinia svecica</i> (Linnaeus, 1758)	Bluethroat	IUCN least concern	Summer visitor to Northwest Himalaya, between 2600 to 3600m and winters down to plains throughout most of India.
46.	<i>Tarsiger cyanurus</i> (Pallas, 1773)	Orange-flanked Bush-Robin	IUCN least concern	Resident and altitudinal migrant, Himalayas and Northeast Indian hills. Breeds between 3700 to 4000m, and winters in lower areas between 1200 to 2600 m.
47.	<i>Phoenicurus caeruleocephalus</i> (Vigors, 1831)	Blue-capped Redstart	IUCN least concern	Found in Bhutan, China, India, Nepal, Pakistan, Uzbekistan, Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan between 2400 to 4300 m.
48.	<i>Phoenicurus ochruros</i> (Gmelin, 1774)	Black Redstart	IUCN least concern	Breeds in Himalayas between 2400 to 4000m, winters below foothills throughout India.
49.	<i>Phoenicurus frontalis</i> (Vigors, 1832)	Blue-fronted Redstart	IUCN least concern	Resident, altitudinal migrant in Himalayas. Breeds between 300 to 4500m in sub-alpine shrubberies and winter from 2700m down to 1000m.
50.	<i>Chaimarrornis leucocephalus</i> (Vigors, 1831)	White-capped Redstart	IUCN least concern	Resident and altitudinal migrant, found in Himalayas and Northeast Indian hills. Breeds between 1800 to 5300 m and winters mostly below 1500 m down to the foothills.
51.	<i>Rhyacornis fuliginosus</i> (Vigors, 1831)	Plumbeous Redstart	IUCN least concern	Resident, found in Himalaya and shows altitudinal movements. Breeds between 1200 to 3900m and winters from 2400m down to the foothills.

52.	<i>Hodgsonius phaenicuroides</i> (Gray, 1846)	White-bellied Redstart	IUCN least concern	Found in Himalayas from N Pakistan to Bhutan and N & W Myanmar; non-breeding also at lower elevations in N & NE India, E Myanmar and possibly NW Thailand.
53.	<i>Saxicola torquata</i> (Linnaeus, 1766)	Common Stonechat	IUCN least concern	Winter visitor, resident and altitudinal migrant (depending upon races) in Himalaya and Northeast Indian hills, breeds between 1500 to 3000m. Winters down to the foothills below 2200m south to almost entire India.
54.	<i>Saxicola ferrea</i> Gray, 1846	Grey Bushchat	IUCN least concern	Resident and altitudinal migrant, breeds in Himalayas and northeast Indian hills, between 1500 to 3300m, and winters from around 2100m down to foothills and plains.
55.	<i>Oenanthe deserti</i> (Temminck, 1825)	Desert Wheatear	IUCN least concern	Breeds in Northwest Himalayas, between 3000 to 5100 m and winters mainly in Northwest India.
Subfamily: Timaliinae				
56.	<i>Garrulax lineatus</i> (Vigors, 1831)	Streaked Laughingthrush	IUCN least concern	Resident, Himalayas, shows some seasonal movements. Found in summers between 1800 to 3000m (occasionally 1200 to 3900m) and in winters between 1000 to 1800m (occasionally 600 to 2750m).
57.	<i>Garrulax variegatus</i> (Vigors, 1831)	Variegated Laughingthrush	IUCN least concern	Resident in Western and Central Himalayas, shows some vertical movements. Found in summers between 2400m to treeline (occasionally lower range is 1800m), and winters between 1000m to 2100m (occasionally 2700m).
Subfamily: Sylviinae				
58.	<i>Cettia fortipes</i> (Horsfield, 1845)	Brown-flanked Bush-Warbler	IUCN least concern	Resident, Himalaya and Northeast India, breeds between 1800 and 3200m and winters from 2140m down to the foothills.
Family: Paridae				
59.	<i>Parus rufonuchalis</i> Blyth, 1849	Simla Crested Tit	IUCN least concern	Resident, seasonal altitudinal migrant, from Western Himalayas up to Nepal. Breeds between 2700 to 4000m and descends down to 1500m in winters.
60.	<i>Parus rubidiventris</i> Blyth, 1847	Rufous-bellied Crested Tit	IUCN least concern	Found in Bhutan, China, India, Myanmar & Nepal between 2500 to 4270 m.

61.	<i>Parus major</i> Linnaeus, 1758	Great Tit	IUCN least concern	Resident, shows some seasonal-local movements (especially in Himalayan regions), found almost throughout India, mostly in hilly terrain.
Family: Certhiidae				
62.	<i>Certhia familiaris</i> Linnaeus, 1758	Eurasian Tree-Creeper	IUCN least concern	Resident, found in Himalayas, between 1700m to tree line.
Family: Emberizidae				
Subfamily: Emberizinae				
63.	<i>Emberiza cia</i> Linnaeus, 1766	Rock Bunting	IUCN least concern	Resident and altitudinal migrant, breeds between 2000 to 4600m, in Western Himalayas and winters down to adjacent plains below 2100m.
Family: Fringillidae				
64.	<i>Serinus pusillus</i> (Pallas, 1811)	Fire-fronted Serin	IUCN least concern	Resident and altitudinal migrant; found in Western and Central Himalayas. Breeds between 2400 to 4000m, and winters from 3300m down to 1500m.
65.	<i>Carduelis spinoides</i> Vigors, 1831	Yellow-breasted Greenfinch	IUCN least concern	Resident, altitudinal migrant, Himalayas and Northeast India. Breeds between 1800 to 4000 m and winters down in foothills, below 1500 m.
66.	<i>Carduelis carduelis</i> (Linnaeus, 1758)	Eurasian Goldfinch	IUCN least concern	Resident and altitudinal migrant, augmented by winter visitors. Found in Western and Central Himalayas; breeds between 2400 to 3900m, and winters from 1900 to 2400m.
67.	<i>Carpodacus erythrinus</i> (Pallas, 1770)	Common Rosefinch	IUCN least concern	Summer visitor to the areas of Himalayas between 2000 to 3900 m altitude, and winters almost throughout India up to 2400 m in Himalayas.
68.	<i>Carpodacus rhodochlamys</i> (Brandt, 1843)	Red-mantled Rosefinch	IUCN least concern	Resident, altitudinal migrant; found in Western Himalayas. Breeds between 2700 to 3800m, and winters from 2600m down to foothills.
69.	<i>Carpodacus rubicilla</i> (Guldenstadt, 1775)	Common Great Rosefinch	IUCN least concern	Resident, found in North Himalayas, breeds between 3300 to 4800m and winter between 2600 to 4500m.
70.	<i>Loxia curvirostra</i> Linnaeus, 1758	Red Crossbill	IUCN least concern	Not globally threatened. Common to locally common, erratically or occasionally irruptive and abundant.
Family: Passeridae				
Subfamily: Passerinae				

71.	<i>Passer domesticus</i> (Linnaeus, 1758)	House Sparrow	IUCN least concern	Resident, found throughout India.
72.	<i>Passer rutilans</i> Temminck, 1835	Cinnamon Tree Sparrow	IUCN least concern	Breeds between 1200 m to 2700 m and winters between 500 m to 1500 m.
73.	<i>Montifringilla adamsi</i> Adams, 1858	Tibetan Snowfinch	IUCN least concern	Resident, found in North Himalayas between 3600 to 5200 m.
Family: Corvidae				
74.	<i>Pyrrhocorax pyrrhocorax</i> (Linnaeus, 1758)	Red-billed Chough	IUCN least concern	Resident, high altitude mountains of Himalayas. Found between 2400 to 4800 m in summer and descends to 1600 m in winter.
75.	<i>Pyrrhocorax graculus</i> (Linnaeus, 1766)	Yellow-billed Chough	IUCN least concern	Found between 2700 to 5000 m, descends down to 2400 m during winter at suitable habitat types.
76.	<i>Corvus macrorhynchos</i> Wagler, 1827	Jungle Crow	IUCN least concern	Resident, found almost throughout India, upto 4500m in Himalayas, and also recorded up to 6400 m (Everest).
77.	<i>Corvus corax</i> Linnaeus, 1758	Common Raven	IUCN least concern	Resident, Northwest India. Race <i>subscorax</i> found in lowland desert and semi desert; <i>tibetanus</i> in dry rocky areas above treeline.

Table 13: MAMMALS FOUND IN KINNAUR

S.No	Taxon	Common Name	Status	Habitat/Distribution/Altitudinal zone
Order: Primates				
Family: Cercopithecidae				
1.	<i>Macaca mulatta</i> Zimmermann, 1780	Rhesus Macaque	IUCN least concern	Found in Afghanistan, Bangladesh, Bhutan, China, India, Lao People's Democratic Republic, Myanmar, Nepal, Pakistan, Thailand and Viet Nam, up to 4000 m.
2.	<i>Semnopithecus schistaceus</i> Hodgson, 1840	Nepal Gray Langur	Endangered	This species occurs in the monsoon forests of North Western Frontier province of Pakistan through the high Himalayan elevations (1,500-4,000 m) of India, Nepal and up to the Sankosh river in Bhutan. In China it is found in the Tibetan regions in Bo Qu, Ji Long Zang Bu and the Chumbi valleys.
Order: Carnivora				
Family: Canidae				
3.	<i>Canis lupus chanco</i> Gray, 1863	Tibetan Wolf	IUCN least concern	It is native to China in the regions of Gansu, Qinghai, and the Tibetan Autonomous Region. It generally occupies territories up to 3,000 above sea level, have evolved hearts that withstand the low oxygen levels. Specifically, these wolves have a strong selection for RYR2, a gene that initiates cardiac excitation.
4.	<i>Vulpes vulpes</i> Linnaeus, 1758	Red Fox	IUCN least concern	The Red Fox has the widest geographical range of any member of the order Carnivora (covering nearly 70 million km ²) being distributed across the entire northern hemisphere from the Arctic Circle to southern North America, Europe, North Africa, the Asiatic steppes, India, and Japan. Found up to 4500 m.
Family: Felidae				
5.	<i>Panthera pardus</i> Linnaeus, 1758	Leopard	Vulnerable	Leopards are widespread across India and Sri Lanka, up to 5200 m.
6.	<i>Uncia uncia</i> Schreber, 1775	Snow Leopard	Vulnerable	The range of the Snow Leopard extends from the Himalaya in the south, across the Qinghai-Tibet Plateau and the mountains of Central Asia to the mountains of southern Siberia in the north. It occurs in the Altai, Sayan, Tien Shan, Kunlun, Pamir, Hindu Kush, Karakoram, and outer Himalayan ranges and in smaller

				isolated mountains in the Gobi region. It occurs in 12 countries: Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyzstan, Mongolia, Nepal, Pakistan, Russia, Tajikistan and Uzbekistan. Found up to 5800 m.
7.	<i>Felis libycaornata</i> Forster	Asiatic Wild Cat, Indian Desert Cat	IUCN least concern	This subspecies occurs from the eastern Caspian Sea north to Kazakhstan, into western India, western China and southern Mongolia. It ranges up to 2,000 to 3,000 m (6,600 to 9,800 ft) in mountain areas.
8.	<i>Prionailurus bengalensis</i> Kerr, 1792	Leopard Cat	IUCN least concern	The Leopard Cat is a widespread species. It is found through parts of India, west into Pakistan and Afghanistan (Habibi 2003), through the Himalayan foothills, throughout most of China, and north to the Korean peninsula and into the Russian Far East (Nowell and Jackson 1996). Its range extends south throughout Southeast Asia, and includes the islands of Sumatra, Java, Borneo and Taiwan, upto 3240 m.
Family: Mustelidae				
9.	<i>Martes foina</i> Erxleben, 1777	Stone Marten	IUCN least concern	In India, it has been found above 1,300 m up to 3,950 m.
10.	<i>Martes flavigula</i> Boddaert, 1785	Himalayan Yellow-throated Marten	IUCN least concern	Occurs in South, South-east and East Asia, from Afghanistan and Pakistan in the west, along the Himalaya and foothills east to southern China, throughout mainland South-east Asia, and the islands of Sumatra, Java and Borneo. It also extends north through eastern China (including Taiwan) and Korea to the Russian Far East. The species's known elevational range extends from sea-level to 4,510 m.
11.	<i>Mustela sibirica</i> Pallas, 1773	Himalayan Weasel	IUCN least concern	In Himalayas, it seems to be strictly montane. Found in India and neighbouring areas between 1,500-4,875 m.
12.	<i>Mustela erminea</i> Linnaeus, 1758	Ermine	IUCN least concern	It has a restricted distribution in the Himalaya, where it is confined to the west, in Ladakh and parts of Himachal Pradesh (India), Pakistan and Afghanistan up to 4050 m.
Family: Ursidae				
13.	<i>Ursus arctos</i> Linnaeus, 1758	Brown Bear	IUCN least concern	Found in Afghanistan, Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Canada, China, Croatia, Estonia, Finland, France, Georgia, India, Iran, Iraq, Italy, Japan, Kazakhstan, Korea, Latvia,

				Mongolia, Montenegro, Nepal, North Macedonia, Norway, Pakistan, Poland, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Tajikistan, Ukraine, United States and Uzbekistan up to 5000 m.
14.	<i>Ursus thibetanus</i> G.Cuvier, 1823	Asiatic Black Bear	Vulnerable	In Afghanistan, Pakistan, and India, the Asiatic Black Bear range overlaps the Brown Bear (at elevations >3,000 m) in the Himalayas. In India, Asiatic Black Bear range overlaps the Sloth Bear at low elevations (<1,000 m). Found up to 4300 m.
Order: Artiodactyla Family: Moschidae				
15.	<i>Moschus leucogaster</i> Hodgson, 1839 This taxon is sometimes treated as a Himalayan subspecies of Alpine Musk Deer <i>M. chrysogaster</i>	Musk Deer	Endangered	Himalayan musk deer occurs in parts of northern Afghanistan, Pakistan, Tibet, Nepal, Bhutan, and in northern India such as in Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh. It inhabits high alpine environments above altitudes of 2,500 m.
Family: Bovidae				
16.	<i>Naemorhedus goral</i> Hardwicke, 1825	Himalayan Goral	Near Threatened	In India, the Himalayan goral is apparently patchily distributed along the Himalayan mountain ranges in Jammu and Kashmir. It is still widely distributed and locally common in the Sutlej and Beas River catchments of Himachal Pradesh. Reports also confirm its continued presence between 1,600 and 2,100 m in the Simla Water Catchment Reserve and the Chail and Majathal Harsang Wildlife Sanctuaries in Himachal Pradesh. Found between 900 to 4000 m.
17.	<i>Pseudois nayaur</i> Hodgson, 1833	Bharal	IUCN least concern	Found in Bhutan, China, India, Myanmar, Nepal & Pakistan at 2500 to 5500 m.
18.	<i>Bos grunniens</i> Linnaeus, 1766	Yak	Not assessed	Found throughout the Himalayan region of the Indian subcontinent, the Tibetan Plateau and as far north as Mongolia and Siberia. It is descended from the wild yak (<i>Bos mutus</i>).
Order: Rodentia Family: Cricetidae				

19.	<i>Alticola roylei</i> Gray, 1842	Royle High Mountain Vole	Near Threatened	This species is endemic to northern India, where it is distributed in the western Himalayas from Kulu Valley in Himachal Pradesh to Kumaon in Uttarakhand. It has been recorded from 2,500 to 4,300 m.
Family: Muridae				
20.	<i>Rattus rattus</i> (Linnaeus, 1758)	House Rat	Near Threatened	Originally an Indomalayan species, <i>Rattus rattus</i> was widely introduced across the globe as a result of human activities. In Europe, it has been present since ancient times, and is found in most countries. The species is widespread and common throughout the Mediterranean region. The list of countries of occurrence where the species is introduced is incomplete.
21.	<i>Mus musculus</i> (Linnaeus, 1758)	House Mouse	IUCN least concern	<i>It</i> was originally a Palearctic species, but through its close association with humans it has been widely introduced across the globe. The species is widespread over all continents, except Antarctica, and has become established in North and South America, sub-Saharan Africa, Australia, and many oceanic islands. The list of countries of occurrence is incomplete.
Family: Sciuridae				
22.	<i>Marmota himalayana</i> Hodgson, 1841	Himalayan Marmot	IUCN least concern	This species is present in northwestern South Asia, and western, central and southern China. In South Asia, this species has been recorded widely distributed in the Himalaya of India, Nepal and Pakistan at elevations of 3,500 to 5,200 m. In Nepal found in Mustang district.
Order: Logomorpha				
Family: Ochotonidae				
23.	<i>Ochotona roylei</i> (Ogilby, 1839)	Pika		<i>It</i> occurs in the Himalayan massif through Pakistan, northwestern India, Nepal and Tibet, from 2,400-5,200 m.

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