

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		ARUNACHAL PRADESH																			
		2015-16																			
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup							
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total			
2011-12	1: Agriculture	1.1: Crop land	76008		304	76311	1959				1		15			16	17	27	146	191	
		1.2: Current Shifting cultivation		14		14															
		1.3: Plantation	417		6826	7244	178	7422			2		0			2	2	2	23	27	
		Farmland (FL) = 1.1+1.2+1.3	76425	14	7130	83568	2137	85705			3		16			18	19	29	169	218	
		1.4: Fallow	2018		126	2144	7428	9572			0		3			3	10	5	32	47	
	Sub Total	78443	14	7255	85712	9565	95277			3		19			21	29	34	201	265		
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						2263							2263	4			0	4	
		2.2: Gullied / Ravinous Land	83		4	86		86		45				1	46				0	0	
		2.3: Rann																			
		2.4: Salt Affected Land	63			63		63				1112		3	1115	0	0		1	1	
		2.5: Sandy Area	9		1	10		10					464	0	465	0			0	1	
		2.6: Scrub Land	498		26	524		524		2		18		10953	10973	13	1		7	21	
		Sub Total	653		31	684		684	2263	47		1130	464	10957	14862	18	1		9	28	
	3: Builtup	3.1: Mining														444			3	447	
		3.2: Rural																2926	1	2926	
		3.3: Urban														0	0	1503	1503		
		Sub Total														444	2926	1506	4876		
	4: Forest	4.1: Deciduous	65		0	65		65									2	0	1	3	
		4.2: Evergreen/Semi evergreen																		0	
		4.3: Forest Plantation	47			47		47												0	
		4.4: Scrub Forest	417		0	417	1	418									1		0	1	
		4.5: Swamp / Mangroves																			
	Sub Total	528		0	529	1	530									3	0	1	4		
	5: Grass / Grazing	5.1: Grass / Grazing																			
	6: Snow and Glacier	6.1: Snow and Glacier																			
	7: Wetlands / Water bodies	7.1: Inland Wetland	1			1	1	2													
		7.2: Coastal Wetland	3		0	3		3											7	7	
7.3: River/Stream/Canals		2		1	2		2											0	0		
7.4: Water bodies		50		1	51	34	85				0	0		0	1	1		1	2		
Sub Total		55		1	57	35	92				0	0		0	1	1		8	9		
Grand Total		79680	14	7288	86981	9602	96583	2263	50		1149	464	10957	14883	495	2962	1725	5182			

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		ANDHRA PRADESH															
		2015-16															
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total				
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total		
2011-12	1: Agriculture	1.1: Crop land									0	0	16	281	297	78774	
		1.2: Current Shifting cultivation				1		1									14
		1.3: Plantation	1					1				0	5	5	10		7462
		Farmland (FL) = 1.1+1.2+1.3	1			1		2			0	0	21	286	308		86250
		1.4: Fallow	0				0	0					2	17	20		9642
		Sub Total	1			1	0	2			0	0	23	303	327		95892
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky															2267
		2.2: Gullied / Ravinous Land				0		0						0	0	0	133
		2.3: Rann															
		2.4: Salt Affected Land												2	2		1182
		2.5: Sandy Area					0	0		4					4		480
		2.6: Scrub Land								1		2	1		5		11522
	Sub Total				0	0	1		5		2	4	11			15585	
	3: Builtup	3.1: Mining															447
		3.2: Rural															2926
		3.3: Urban															1503
		Sub Total															4876
	4: Forest	4.1: Deciduous	24601		25	458		25084					3	0	4		25155
		4.2: Evergreen/Semi evergreen		251				251									251
		4.3: Forest Plantation	0		576	48		624			0				0		671
		4.4: Scrub Forest			14	7686		7699					2	0	2		8120
		4.5: Swamp / Mangroves					364	364			12		0	0	12		376
		Sub Total	24602	251	614	8191	364	34021			12		5	0	17		34573
	5: Grass / Grazing	5.1: Grass / Grazing							98								98
	6: Snow and Glacier	6.1: Snow and Glacier															
	7: Wetlands / Water bodies	7.1: Inland Wetland									367			69	436		438
7.2: Coastal Wetland						18	18				858	0	2	860		888	
7.3: River/Stream/Canals										0	0	3868	8	3877		3879	
7.4: Water bodies						1	1			2		1	6669	6672		6760	
Sub Total						19	19			369	858	3869	6748	11844		11965	
Grand Total		24603	251	614	8192	384	34043	98		387	858	3900	7055	12200		162989	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		ARUNACHAL PRADESH																	
		2015-16																	
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup					
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	2622		0	2623						1	11	12		0	0	0	
		1.2: Current Shifting cultivation	0	422		422	0	422	0					9	10		0	0	
		1.3: Plantation			56	56		7422						2	2				
		Farmland(FL) = 1.1+1.2+1.3	2623	422	56	3101	0	10466	0				1	22	24		1	0	1
		1.4: Fallow	0			0	72	72						0	0				
	Sub Total	2623	422	56	3101	72	10538	0				1	22	24		1	0	1	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						237					5	242					
		2.2: Gullied / Ravinous Land																	
		2.3: Rann																	
		2.4: Salt Affected Land																	
		2.5: Sandy Area									22		22						
		2.6: Scrub Land	1	3		3		3	5				0	2492	2498		0		0
	Sub Total	1			1		1									0		0	
	3: Builtup	3.1: Mining														1			1
		3.2: Rural						0					13	13		354	12	366	
		3.3: Urban											12	12			125	125	
		Sub Total						0					25	25	1	354	137	492	
	4: Forest	4.1: Deciduous											27	27					
		4.2: Evergreen/Semi evergreen	31	248		279		279	15			2	95	111	0	7	0	7	
		4.3: Forest Plantation											5	5					
		4.4: Scrub Forest	3	16		18		18	0			0	41	41		0		0	
		4.5: Swamp / Mangroves																	
	Sub Total	34	264		298		298	15			2	168	185	0	7	0	8		
	5: Grass / Grazing	5.1: Grass / Grazing	0	0		1		1	2			9	111	122					
	6: Snow and Glacier	6.1: Snow and Glacier							0				36	36					
	7: Wetlands / Water bodies	7.1: Inland Wetland																	
		7.2: Coastal Wetland																	
7.3: River/Stream/Canals							0				27	25	52			0	0		
7.4: Water bodies							0					0	0						
Sub Total							0				27	25	52			0	0		
Grand Total		2658	689	56	3402	72	3474	259				61	2886	3206	1	362	137	501	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		ARUNACHAL PRADESH													
		2015-16													
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total		
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4	Sub Total	
2011-12	1: Agriculture	1.1: Crop land			0		0	0			0	0	0	2635	
		1.2: Current Shifting cultivation		0		342	342	1				0	0	775	
		1.3: Plantation												7424	
		Farmland (FL) = 1.1+1.2+1.3		0	0	342	342	1				0	0	10834	
		1.4: Fallow												72	
		Sub Total		0	0	342	342	1				0	0	10905	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky								0			0	242	
		2.2: Gullied / Ravinous Land													
		2.3: Rann													
		2.4: Salt Affected Land													
		2.5: Sandy Area										2		24	
		2.6: Scrub Land			5		3	7	0	102			0	0	2611
	Sub Total			5		3	7	0	102			2	0	2877	
	3: Builtup	3.1: Mining												1	
		3.2: Rural												379	
		3.3: Urban												137	
		Sub Total												517	
	4: Forest	4.1: Deciduous	116					116						143	
		4.2: Evergreen/Semi evergreen	0	57774	2	407	58183	128	146			2	0	2	58857
		4.3: Forest Plantation				24	24							30	
		4.4: Scrub Forest		10	2	1337	1350				0	0		0	1410
		4.5: Swamp / Mangroves													
	Sub Total	116	57784	28	1745	59673	128	146		0	2	0	2	60439	
	5: Grass / Grazing	5.1: Grass / Grazing		3		5	7	4750	632	0		2		2	5514
	6: Snow and Glacier	6.1: Snow and Glacier		1		1	3	6	9250				0	0	9295
	7: Wetlands / Water bodies	7.1: Inland Wetland									0			0	0
		7.2: Coastal Wetland													
7.3: River/Stream/Canals			1		1	1	22	4			1448		1448	1527	
7.4: Water bodies								3				31	31	34	
Sub Total			1		1	1	22	7	0		1448	31	1479	1561	
Grand Total		116	57793	28	2096	60033	4907	10137	0	0	1453	31	1485	83743	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		ASSAM																		
		2015-16																		
		1: Agriculture					2: Barren/Unculturable/ Wastelands							3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	24118	2	5	24125	43	24168					10	39	49	34	3	2	39	
		1.2: Current Shifting cultivation		25		25		25						39	39					
		1.3: Plantation	2		3798	3800		7422					0	13	14	1			0	2
		Farmland (FL) = 1.1+1.2+1.3	24120	28	3803	27951	43	31615					10	91	101	35	3	2	40	
		1.4: Fallow	47			47	437	484					1	3	3	2	0	2	4	
	Sub Total	24167	28	3803	27998	480	32099					11	94	104	38	3	5	45		
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky												0	0					
		2.2: Gullied / Ravinous Land																		
		2.3: Rann																		
		2.4: Salt Affected Land																		
		2.5: Sandy Area	16		0	16		16					9	1	10	1	0	0	1	
		2.6: Scrub Land	9	14	8	31	3	35					1	3238	3239	1		0	1	
	Sub Total	25	14	8	47	3	51					9	3240	3249	2	0	0	3		
	3: Builtup	3.1: Mining												1	1	82		2	83	
		3.2: Rural												11	11	1	635	0	636	
		3.3: Urban											0	4	4	0		718	718	
		Sub Total											0	17	17	82	635	720	1437	
	4: Forest	4.1: Deciduous	19	4	2	25	1	25					2	609	611	6	0	16	23	
		4.2: Evergreen/Semi evergreen	4	8	7	19	1	20					0	17	17	1	0	0	1	
		4.3: Forest Plantation		0		0		0						1	1			0	0	
		4.4: Scrub Forest	11	5	1	16		16						57	57	1		0	1	
		4.5: Swamp / Mangroves																		
	Sub Total	33	17	9	60	2	61					2	684	686	8	1	16	25		
	5: Grass / Grazing	5.1: Grass / Grazing	73		0	73	8	81					4	23	27	0	0	0	1	
	6: Snow and Glacier	6.1: Snow and Glacier																		
	7: Wetlands / Water bodies	7.1: Inland Wetland	36			36	4	40					1	15	16	5	1	2	8	
		7.2: Coastal Wetland																		
		7.3: River/Stream/Canals	82	0	1	83	3	86					15	17	32	1	1	0	2	
7.4: Water bodies		1			1		1						2	2	0			0		
Sub Total	119	0	1	120	7	127					16	34	50	6	2	2	10			
Grand Total		24417	58	3822	28297	501	28798					42	4091	4133	136	640	744	1520		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			ASSAM														
			2015-16														
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies					Grand Total		
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4		Sub Total	
2011-12	1: Agriculture	1.1: Crop land	62					62	35		23		213	7	243	24596	
		1.2: Current Shifting cultivation	3	0		21		24								88	
		1.3: Plantation	7			0		7			0		3	0	3	7447	
		Farmland (FL) = 1.1+1.2+1.3	72	0		21		93	35		23		216	7	246	32131	
		1.4: Fallow	1					1	1		1		8	0	10	504	
		Sub Total	73	0		21		94	36		24		224	8	256	32635	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky				0		0								0	
		2.2: Gullied / Ravinous Land															
		2.3: Rann															
		2.4: Salt Affected Land															
		2.5: Sandy Area	1			1		2	30		0		19		19	78	
		2.6: Scrub Land	16			18		34	1		0		6		6	3316	
	Sub Total	17			19		36	31		0		25		25	3395		
	3: Builtup	3.1: Mining				0		0								85	
		3.2: Rural											5		5	652	
		3.3: Urban														722	
		Sub Total				0		0					5		5	1459	
	4: Forest	4.1: Deciduous	27012		2	132		27146	3		1		44	0	45	27853	
		4.2: Evergreen/Semi evergreen	103	4364	5	282		4753	2		0		13		14	4806	
		4.3: Forest Plantation	0		77	9		85					0		0	86	
		4.4: Scrub Forest	24	2	0	736		762	1		0		7		7	844	
		4.5: Swamp / Mangroves															
	Sub Total	27140	4365	84	1158		32747	6		1		65	0	66	33590		
	5: Grass / Grazing	5.1: Grass / Grazing	5	1		57		64	2316		4		459	0	463	2953	
	6: Snow and Glacier	6.1: Snow and Glacier															
	7: Wetlands / Water bodies	7.1: Inland Wetland	2	0		5		7	17			1123		5	1	1129	1217
		7.2: Coastal Wetland															
7.3: River/Stream/Canals		0			19		20	626		1		5962	0	5963	6729		
7.4: Water bodies					0		0					0	78	78	82		
Sub Total		2	0		25		27	643		1124		5968	79	7170	8028		
Grand Total			27237	4367	84	1281		32968	3033		1153		6746	87	7986	78438	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		BIHAR																	
		2015-16																	
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup					
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	63520		230	63750	695	64445		1			5	351	357	21	4	21	46
		1.2: Current Shifting cultivation								0				1	1	0	2	1	2
		1.3: Plantation	22		2688	2710	2	7422						1	1	0	2	1	2
		Farmland (FL) = 1.1+1.2+1.3	63542		2917	66460	697	71866		1			5	353	359	21	5	21	48
		1.4: Fallow	2275		30	2304	1944	4248					2	44	46	7		14	21
		Sub Total	65817		2947	68764	2640	76114		1			8	396	405	29	5	35	69
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky	3		0	3	2	5	92	0					92	0			0
		2.2: Gullied / Ravinous Land	11			11	0	11		59				2	62				
		2.3: Rann																	
		2.4: Salt Affected Land										3			3				
		2.5: Sandy Area	2			2	0	2					18	1	19				
		2.6: Scrub Land	697		2	699	161	860	1	6			11	1812	1831	3	1	2	6
		Sub Total	713		2	715	164	879	93	66		3	29	1815	2006	3	1	2	6
	3: Builtup	3.1: Mining	0			0		0						0	0	203			203
		3.2: Rural													0	5430	18	5448	
		3.3: Urban	0			0		0						1	1	0	843	843	
		Sub Total	0			0		0						1	1	203	5430	860	6494
	4: Forest	4.1: Deciduous	0			0		0	0	4				16	21	0			0
		4.2: Evergreen/Semi evergreen																	
		4.3: Forest Plantation																	
		4.4: Scrub Forest							0	1				1	2				
		4.5: Swamp / Mangroves																	
	Sub Total	0			0		0	1	5				17	22	0			0	
	5: Grass / Grazing	5.1: Grass / Grazing	0			0		0						1	1				
	6: Snow and Glacier	6.1: Snow and Glacier																	
	7: Wetlands / Water bodies	7.1: Inland Wetland	162		0	163	13	176		0			0	11	11	1		1	3
		7.2: Coastal Wetland																	
		7.3: River/Stream/Canals	288		0	289	35	324					12	242	254	2		0	2
7.4: Water bodies		0		0	1	0	1						1	1	0	0	0	0	
Sub Total		451		1	452	48	500		0			13	254	267	3	0	2	5	
Grand Total		66981		2950	69931	2852	72783	93	71		3	49	2485	2702	238	5437	899	6574	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			BIHAR												
			2015-16												
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies					Grand Total
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4	Sub Total
2011-12	1: Agriculture	1.1: Crop land	0		1		1			116		172	6	294	65143
		1.2: Current Shifting cultivation													
		1.3: Plantation								1		0	0	1	7427
		Farmland (FL) = 1.1+1.2+1.3	0		1		1			117		172	6	295	72570
		1.4: Fallow			0	0	0			116		28	1	145	4460
	Sub Total	0		1	0	1			233		200	7	440	77029	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky	5				5								102
		2.2: Gullied / Ravinous Land	0			0	0					0	2	2	75
		2.3: Rann													
		2.4: Salt Affected Land										1			3
		2.5: Sandy Area													21
		2.6: Scrub Land	21				21			13		108	5	126	2843
		Sub Total	26			0	26			13		108	6	127	3045
	3: Builtup	3.1: Mining								0				0	204
		3.2: Rural													5448
		3.3: Urban								0				0	844
		Sub Total								0				0	6496
	4: Forest	4.1: Deciduous	4536		0	60	4596					1	9	10	4627
		4.2: Evergreen/Semi evergreen													5
		4.3: Forest Plantation			5		5								
		4.4: Scrub Forest	1			1241	1242					1	2	3	1246
		4.5: Swamp / Mangroves													
	Sub Total	4537		5	1301	5843					2	10	12	5878	
	5: Grass / Grazing	5.1: Grass / Grazing							17				0	0	18
	6: Snow and Glacier	6.1: Snow and Glacier													
	7: Wetlands / Water bodies	7.1: Inland Wetland								1733		21	1	1755	1944
		7.2: Coastal Wetland													
7.3: River/Stream/Canals		1			1	2			4		3703	0	3707	4289	
7.4: Water bodies					0	0			2		0	178	180	182	
Sub Total		1			1	2			1738		3725	179	5642	6415	
Grand Total			4565		5	1302		5873	17		1984	4034	203	6222	94171

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		CHHATTISGARH																			
		2015-16																			
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup							
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total			
2011-12	1: Agriculture	1.1: Crop land	58962		12	58974	182	59156									6	0	15	21	
		1.2: Current Shifting cultivation																			
		1.3: Plantation	2		206	208	2	7422									0		0	0	
		Farmland (FL) = 1.1+1.2+1.3	58964		218	59182	184	66577									6	0	15	21	
		1.4: Fallow	368		1	369	1958	2327						31	31	2	0	10	11		
	Sub Total	59331		219	59551	2142	68904						31	31	7	0	25	33			
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						691						691							
		2.2: Gullied / Ravinous Land							82					82							
		2.3: Rann																			
		2.4: Salt Affected Land																			
		2.5: Sandy Area	0			0		0					23	23	0				0		
		2.6: Scrub Land	100		3	103	2	104						2833	2833	4	0	18	22		
	Sub Total	100		3	103	2	104	691	82			23	2833	3628	4	0	18	22			
	3: Builtup	3.1: Mining															229			229	
		3.2: Rural																3253		3253	
		3.3: Urban																	941	941	
		Sub Total															229	3253	941	4423	
	4: Forest	4.1: Deciduous	15		0	15		15								1	0	2	3		
		4.2: Evergreen/Semi evergreen																	0	0	
		4.3: Forest Plantation																	0	0	
		4.4: Scrub Forest	0			0	0	1									0		0	0	
		4.5: Swamp / Mangroves																			
	Sub Total	15		0	15	0	16									2	0	2	4		
	5: Grass / Grazing	5.1: Grass / Grazing																			
	6: Snow and Glacier	6.1: Snow and Glacier																			
	7: Wetlands / Water bodies	7.1: Inland Wetland																			
		7.2: Coastal Wetland																			
		7.3: River/Stream/Canals	1			1		1					2	2							
7.4: Water bodies		20		0	20		20						0	0							
Sub Total		21		0	21		21					2	0	3							
Grand Total		59467		222	59690	2144	61833	691	82			25	2863	3661	242	3254	986	4482			

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			CHHATTISGARH													
			2015-16													
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total		
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4	Sub Total	
2011-12	1: Agriculture	1.1: Crop land				2	2						9	9	59188	
		1.2: Current Shifting cultivation	0				0							0	0	7422
		1.3: Plantation												0	0	66610
		Farmland (FL) = 1.1+1.2+1.3	0			2	2							9	9	2370
		1.4: Fallow												1	1	68980
		Sub Total	0			2	2							10	10	691
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky														82
		2.2: Gullied / Ravinous Land														
		2.3: Rann														
		2.4: Salt Affected Land														
		2.5: Sandy Area										3	0	3	3	26
		2.6: Scrub Land			1			1						2	2	2962
	Sub Total			1			1					3	2	5	3760	
	3: Builtup	3.1: Mining														229
		3.2: Rural														3253
		3.3: Urban														941
		Sub Total														4423
	4: Forest	4.1: Deciduous	57510			16	57526							7	7	57551
		4.2: Evergreen/Semi evergreen														86
		4.3: Forest Plantation	0		85		86									86
		4.4: Scrub Forest	13		1	4154	4167							0	0	4169
		4.5: Swamp / Mangroves														
	Sub Total	57523		86	4170	61779							7	7	61806	
	5: Grass / Grazing	5.1: Grass / Grazing														
	6: Snow and Glacier	6.1: Snow and Glacier														
	7: Wetlands / Water bodies	7.1: Inland Wetland									5				5	5
		7.2: Coastal Wetland														
7.3: River/Stream/Canals											1844	0	1844	1844	1847	
7.4: Water bodies		0		0	1	1						1564	1564	1564	1585	
Sub Total		0		0	1	1				5	1844	1564	3413	3413	3437	
Grand Total			57523		87	4172	61783			5	1847	1583	3435	135194		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		DELHI																	
		2015-16																	
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup					
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	505			505													
		1.2: Current Shifting cultivation																	
		1.3: Plantation			2	2	7422												
		Farmland (FL) = 1.1+1.2+1.3	505		2	507	7927												
		1.4: Fallow			0	0	7												
		Sub Total	505		2	507	7	7934											
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky																	
		2.2: Gullied / Ravinous Land																	
		2.3: Rann																	
		2.4: Salt Affected Land																	
		2.5: Sandy Area										0		0					
		2.6: Scrub Land											75	75					
	Sub Total										0	75	75						
	3: Builtup	3.1: Mining													3			3	
		3.2: Rural														23		23	
		3.3: Urban															824	824	
		Sub Total													3	23	824	851	
	4: Forest	4.1: Deciduous																	
		4.2: Evergreen/Semi evergreen	0			0	0												
		4.3: Forest Plantation																	
		4.4: Scrub Forest																	
		4.5: Swamp / Mangroves																	
	Sub Total	0			0	0													
5: Grass / Grazing	5.1: Grass / Grazing																		
6: Snow and Glacier	6.1: Snow and Glacier																		
7: Wetlands / Water bodies	7.1: Inland Wetland																		
	7.2: Coastal Wetland																		
	7.3: River/Stream/Canals										0	0							
	7.4: Water bodies																		
Sub Total											0	0							
Grand Total		505		2	507	7	514						1	75	75	3	23	824	851

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		DELHI															
		2015-16															
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total				
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total		
2011-12	1: Agriculture	1.1: Crop land											0	0	0	506	
		1.2: Current Shifting cultivation															
		1.3: Plantation															7422
		Farmland (FL) = 1.1+1.2+1.3												0	0	0	7927
		1.4: Fallow															7
		Sub Total												0	0	0	7934
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky															
		2.2: Gullied / Ravinous Land															
		2.3: Rann															
		2.4: Salt Affected Land															
		2.5: Sandy Area															0
		2.6: Scrub Land															75
	Sub Total															75	
	3: Builtup	3.1: Mining															3
		3.2: Rural															23
		3.3: Urban															824
		Sub Total															851
	4: Forest	4.1: Deciduous	1					1									1
		4.2: Evergreen/Semi evergreen		12				12									12
		4.3: Forest Plantation															
		4.4: Scrub Forest															
		4.5: Swamp / Mangroves															
	Sub Total	1	12				14									14	
5: Grass / Grazing	5.1: Grass / Grazing																
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland									4					4	4	
	7.2: Coastal Wetland																
	7.3: River/Stream/Canals											21			21	21	
	7.4: Water bodies												3		3	3	
	Sub Total									4		21	3		28	28	
Grand Total		1	12				14			4		21	3		28	1483	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		GOA																		
		2015-16																		
		1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup							
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	434		0	434	51	486	0				0	17	17	0	9	5	14	
		1.2: Current Shifting cultivation																		
		1.3: Plantation	0		165	165		7422					0	5	5	0				0
		Farmland (FL) = 1.1+1.2+1.3	434		165	600	51	7907	0				0	22	22	1	9	5	15	
		1.4: Fallow	3			3	34	37						4	4	0	0	0	1	
	Sub Total	438		165	603	85	7944	0				0	25	26	1	9	6	16		
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky	1			1	1	2	16					32	48	0		1	1	
		2.2: Gullied / Ravinous Land																		
		2.3: Rann																		
		2.4: Salt Affected Land																		
		2.5: Sandy Area										7		7						
		2.6: Scrub Land	4		1	5	1	6	0					222	222	5	0	30	35	
	Sub Total	5		1	6	2	8	16				7	254	278	5	0	31	36		
	3: Builtup	3.1: Mining					1	1	1					19	19	64		0	64	
		3.2: Rural												1	1	0	25	25		
		3.3: Urban	0			0		0					0	10	10	3	0	249	252	
		Sub Total	0			0	1	1	1				0	30	31	67	25	249	341	
	4: Forest	4.1: Deciduous	0			0		0	0				0	7	7	1		0	1	
		4.2: Evergreen/Semi evergreen	0			0		0	0				0	0	0			0	0	
		4.3: Forest Plantation											0	0	0			0	0	
		4.4: Scrub Forest	2		2	4	0	4					0	17	17	0		5	5	
		4.5: Swamp / Mangroves																		
	Sub Total	2		2	4	0	4	0				0	25	25	2		5	7		
5: Grass / Grazing	5.1: Grass / Grazing																			
6: Snow and Glacier	6.1: Snow and Glacier																			
7: Wetlands / Water bodies	7.1: Inland Wetland	0			0	1	1						1	1	0			0		
	7.2: Coastal Wetland	0			0		0					3	3							
	7.3: River/Stream/Canals											0	0							
	7.4: Water bodies											6	6							
Sub Total	0			0	1	1					3	7	10	0			0			
Grand Total	445		168	613	89	702	18				10	342	370	74	35	291	400			

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			GOA														
			2015-16														
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total			
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	4		4	8		16			6				6	540	
		1.2: Current Shifting cultivation															
		1.3: Plantation	0			2		2			1					1	7429
		Farmland (FL) = 1.1+1.2+1.3	4		4	10		19			7					7	7970
		1.4: Fallow				0		0			1					1	43
	Sub Total	4		4	10		19			7					7	8012	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky		0		5		5								5	56
		2.2: Gullied / Ravinous Land															
		2.3: Rann															
		2.4: Salt Affected Land															
		2.5: Sandy Area	0					0								0	8
		2.6: Scrub Land	14	0	0	4		19			4				0	4	287
	Sub Total	15	1	0	8		24			4				0	4	350	
	3: Builtup	3.1: Mining	0			0		0								0	85
		3.2: Rural				0		0								0	27
		3.3: Urban	1			0		1			0					0	263
		Sub Total	1			1		1			0					0	374
	4: Forest	4.1: Deciduous	1140			4		1144			3					3	1155
		4.2: Evergreen/Semi evergreen		617		1		618									618
		4.3: Forest Plantation			41	0		41									41
		4.4: Scrub Forest	139	2		40		181			0					0	208
		4.5: Swamp / Mangroves					15	15			1					1	16
		Sub Total	1279	620	41	44	15	1999			4					4	2039
	5: Grass / Grazing	5.1: Grass / Grazing				0		0	0							0	0
	6: Snow and Glacier	6.1: Snow and Glacier															
	7: Wetlands / Water bodies	7.1: Inland Wetland					0	0			57					57	58
		7.2: Coastal Wetland										22				22	25
7.3: River/Stream/Canals					0		0					68			68	69	
7.4: Water bodies										1			23		24	30	
Sub Total					0	0	0			57	22	68	23		171	182	
Grand Total		1299	620	46	64	16	2044	0		73	22	68	23	186	3702		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		GUJARAT																			
		2015-16																			
		1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup								
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total			
2011-12	1: Agriculture	1.1: Crop land	104791		2	104792	698	105490				0		2	2	2	12	74	87		
		1.2: Current Shifting cultivation																			
		1.3: Plantation			545	545			7422												
		Farmland (FL) = 1.1+1.2+1.3	104791		546	105337	698	112912				0		2	2	2	12	74	87		
		1.4: Fallow	758		0	759	14762	15520					0	0	5	3	7	14	14		
		Sub Total	105549		547	106095	15460	128432				0		2	2	6	15	80	102		
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						16						16							
		2.2: Gullied / Ravinous Land	0			0		0		218				218				0	0		
		2.3: Rann								18590				18590							
		2.4: Salt Affected Land	1			1	0	1				3488		3488				0	0		
		2.5: Sandy Area											40	40							
		2.6: Scrub Land	13		2	15	2	17					0	19903	19903	4	4	9	17		
	Sub Total	14		2	16	2	18	16	218	18590	3488	40	19903	42255	4	4	9	17			
	3: Builtup	3.1: Mining													267			0	267		
		3.2: Rural														2527		0	2527		
		3.3: Urban															2655	2655			
		Sub Total													267	2527	2655	5450			
	4: Forest	4.1: Deciduous																0	0		
		4.2: Evergreen/Semi evergreen																			
		4.3: Forest Plantation																0	0		
		4.4: Scrub Forest																2	2		
		4.5: Swamp / Mangroves																3	3		
	Sub Total																3	3			
	5: Grass / Grazing	5.1: Grass / Grazing																			
6: Snow and Glacier	6.1: Snow and Glacier																				
7: Wetlands / Water bodies	7.1: Inland Wetland	2			2	2	4				0		0	0			0	0			
	7.2: Coastal Wetland	1			1	1	1				3		3				4	4			
	7.3: River/Stream/Canals	0			0	0	1														
	7.4: Water bodies	47			47	1	48				5		6	0				0			
	Sub Total	49			49	4	53				9		10	0			5	5			
Grand Total		105612		549	106161	15466	121627	16	218	18590	3497	40	19906	42267	278	2546	2752	5576			

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		GUJARAT															
		2015-16															
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total				
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total		
2011-12	1: Agriculture	1.1: Crop land									8	3	22	1	34	105613	
		1.2: Current Shifting cultivation															
		1.3: Plantation											1		1	7423	
		Farmland (FL) = 1.1+1.2+1.3									8	3	23	1	35	113036	
		1.4: Fallow									1	0	5	1	7	15542	
		Sub Total									9	4	28	2	43	128578	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky														16	
		2.2: Gullied / Ravinous Land														218	
		2.3: Rann										132			132	18722	
		2.4: Salt Affected Land										21	0	0	21	3510	
		2.5: Sandy Area														40	
		2.6: Scrub Land									0	16	7	1	24	19962	
	Sub Total									0	169	7	1	177	42467		
	3: Builtup	3.1: Mining														267	
		3.2: Rural														2527	
		3.3: Urban														2655	
		Sub Total														5450	
	4: Forest	4.1: Deciduous	9192					9192								9192	
		4.2: Evergreen/Semi evergreen		6				6								6	
		4.3: Forest Plantation			179			179								179	
		4.4: Scrub Forest				2809		2809								2810	
		4.5: Swamp / Mangroves					987	987				6	0	1	7	996	
	Sub Total	9192	6	179	2809	987	13173				6	0	1	7	13183		
	5: Grass / Grazing	5.1: Grass / Grazing							17							17	
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland									212	2	0	3	217	222		
	7.2: Coastal Wetland									0	6209		3	6212	6220		
	7.3: River/Stream/Canals										1	3226	0	3227	3228		
	7.4: Water bodies										0	0	3482	3482	3536		
	Sub Total									212	6212	3226	3488	13139	13206		
Grand Total		9192	6	179	2809	987	13173	17		222	6390	3262	3492	13365	196024		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		HARYANA																		
		2015-16																		
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	36748		35	36783	525	37309				19	2	54	75	58	41	138	236	
		1.2: Current Shifting cultivation																		
		1.3: Plantation	18		106	124	2	7422					0	10	10	0	0	2	2	
		Farmland (FL) = 1.1+1.2+1.3	36766		141	36907	528	44730				19	2	64	85	58	41	140	238	
		1.4: Fallow	146		2	148	317	464				1	0	4	6	7	1	8	16	
		Sub Total	36911		143	37055	844	45195				20	2	68	90	65	41	148	254	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky				0	0	4						0	4			0	0	
		2.2: Gullied / Ravinous Land	0			0	0					0		0	0					
		2.3: Rann																		
		2.4: Salt Affected Land	2		0	2	0	2				52		1	53	0	0	0	1	
		2.5: Sandy Area	2		0	2	1	3					12	9	20			0	0	
		2.6: Scrub Land	11		2	14	0	14				1		985	985	0	1	4	5	
		Sub Total	16		2	18	2	20	4			52	12	994	1063	1	1	5	7	
	3: Builtup	3.1: Mining	19		0	19	1	20				0		1	1	152		0	152	
		3.2: Rural												0	0		1021	0	1021	
		3.3: Urban	0		0	0	0	0						3	3	0		1598	1598	
		Sub Total	19		0	19	1	20				0		5	5	152	1021	1599	2771	
	4: Forest	4.1: Deciduous	2		1	3	0	4					0	4	4					
		4.2: Evergreen/Semi evergreen																		
		4.3: Forest Plantation																		
		4.4: Scrub Forest																		
		4.5: Swamp / Mangroves																		
	Sub Total	2		1	3	0	4					0	4	4						
	5: Grass / Grazing	5.1: Grass / Grazing	5		0	5	0	5				0		65	66	0	102	7	109	
	6: Snow and Glacier	6.1: Snow and Glacier																		
	7: Wetlands / Water bodies	7.1: Inland Wetland	2			2	0	2				1		1	2			0	0	
		7.2: Coastal Wetland																		
7.3: River/Stream/Canals		18			18	1	18					0	0	0						
7.4: Water bodies		1		0	1	0	1						1	1		0	0	1		
Sub Total		21		0	21	1	22				1	0	1	3		0	1	1		
Grand Total		36974		147	37121	848	37969	4			74	14	1138	1230	218	1165	1759	3142		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			HARYANA													Grand Total		
			2015-16															
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Sub Total				
			4.1	4.2	4.3	4.4	4.5	5.1	6.1	7.1	7.2	7.3	7.4					
2011-12	1: Agriculture	1.1: Crop land	1			0		1	3			12		15	9	36	37659	
		1.2: Current Shifting cultivation																
		1.3: Plantation	7					7	0			0		0	0	0	7442	
		Farmland (FL) = 1.1+1.2+1.3	8			0		8	3			12		15	9	36	45100	
		1.4: Fallow							0			2		3	1	6	492	
		Sub Total	8			0		8	3			14		18	10	42	45592	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky															5	
		2.2: Gullied / Ravinous Land															0	
		2.3: Rann																
		2.4: Salt Affected Land									0					0	56	
		2.5: Sandy Area											1	0	0	1	24	
		2.6: Scrub Land	1					1	0		1				0	1	1007	
	Sub Total	1					1	0		1		1	0	0	2	1092		
	3: Builtup	3.1: Mining	0					0			0				0	0	173	
		3.2: Rural															1021	
		3.3: Urban							0		0				0	0	1602	
		Sub Total	0					0	0		0				0	0	2796	
	4: Forest	4.1: Deciduous	651		1	1		653	0					1	1	2	663	
		4.2: Evergreen/Semi evergreen																
		4.3: Forest Plantation			16			16									16	
		4.4: Scrub Forest	7			155		163							0	0	163	
		4.5: Swamp / Mangroves																
	Sub Total	658		17	156		831	0					1	1	2	841		
5: Grass / Grazing	5.1: Grass / Grazing	0					0	434		1		0	7	8	623			
6: Snow and Glacier	6.1: Snow and Glacier																	
7: Wetlands / Water bodies	7.1: Inland Wetland							0			41			1	43	47		
	7.2: Coastal Wetland																	
	7.3: River/Stream/Canals											339	0	339	358			
	7.4: Water bodies	0					0	0		1		0	155	156	159			
	Sub Total	0					0	1		43		339	156	539	563			
Grand Total			667		17	156		841	439		58		359	175	592	44212		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		HIMACHAL PRADESH																	
		2015-16																	
		1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	6415			6415											1	1	
		1.2: Current Shifting cultivation																	
		1.3: Plantation			2174	2174	7422											2	2
		Farmland (FL) = 1.1+1.2+1.3	6415		2174	8589	13837											3	3
		1.4: Fallow					3												
		Sub Total	6415		2174	8589	3	13839										3	3
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						10521						10521					
		2.2: Gullied / Ravinous Land							82					82					
		2.3: Rann																	
		2.4: Salt Affected Land																	
		2.5: Sandy Area										64		64					
		2.6: Scrub Land											7452	7452				0	0
		Sub Total						10521	82			64	7452	18120				0	0
	3: Builtup	3.1: Mining											0	0	23				23
		3.2: Rural													0	310			310
		3.3: Urban															293		293
		Sub Total											0	0	23	310	293		626
	4: Forest	4.1: Deciduous							1				0	1				0	0
		4.2: Evergreen/Semi evergreen														0	0	1	1
		4.3: Forest Plantation																0	0
		4.4: Scrub Forest																	
		4.5: Swamp / Mangroves																	
	Sub Total							1				0	1	0	0		1	1	
	5: Grass / Grazing	5.1: Grass / Grazing													0	0			0
6: Snow and Glacier	6.1: Snow and Glacier																		
7: Wetlands / Water bodies	7.1: Inland Wetland											0	0						
	7.2: Coastal Wetland																		
	7.3: River/Stream/Canals																0	0	
	7.4: Water bodies																		
Sub Total											0	0				0	0		
Grand Total		6415		2174	8589	3	8592	10522	82			64	7453	18121	23	310	297	630	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			HIMACHAL PRADESH												
			2015-16												
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total	
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4
2011-12	1: Agriculture	1.1: Crop land						0					1	1	6418
		1.2: Current Shifting cultivation													
		1.3: Plantation						3					0	0	7427
		Farmland (FL) = 1.1+1.2+1.3						3					1	1	13845
		1.4: Fallow													3
		Sub Total						3					1	1	13847
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky											0	0	10521
		2.2: Gullied / Ravinous Land													82
		2.3: Rann													
		2.4: Salt Affected Land													
		2.5: Sandy Area													64
		2.6: Scrub Land										4	2	6	7458
		Sub Total										4	2	6	18126
	3: Builtup	3.1: Mining											3	3	27
		3.2: Rural													310
		3.3: Urban											0	0	293
		Sub Total											4	4	630
	4: Forest	4.1: Deciduous	1273					1273					0	0	1274
		4.2: Evergreen/Semi evergreen		11030				11030					1	1	11031
		4.3: Forest Plantation			2			2							2
		4.4: Scrub Forest				161		161							161
		4.5: Swamp / Mangroves													
		Sub Total	1273	11030	2	161		12465					1	1	12468
5: Grass / Grazing	5.1: Grass / Grazing				0		0	5866				0	0	5867	
6: Snow and Glacier	6.1: Snow and Glacier								8683					8683	
7: Wetlands / Water bodies	7.1: Inland Wetland									3				3	
	7.2: Coastal Wetland														
	7.3: River/Stream/Canals										873	3	876	876	
	7.4: Water bodies											420	420	420	
	Sub Total									3	873	423	1298	1299	
	Grand Total	1273	11030	2	161		12465	5870	8683	3		877	431	1311	55673

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

Annexure 1.2

(Area in Sq. km)

LULC_CLASSES		JAMMU & KASHMIR																		
		2015-16																		
		1: Agriculture					2: Barren/Unculturable/ Wastelands							3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	10970		10	10980	0	10980	67	2			7	174	250	0	5	2	7	
		1.2: Current Shifting cultivation																		
		1.3: Plantation	3		2140	2142		7422	3	2			0	17	23	0	5	1	6	
		Farmland (FL) = 1.1+1.2+1.3	10973		2149	13122	0	18402	71	4			7	191	273	0	10	3	13	
		1.4: Fallow	1			1	53	54	0				0	0	0				0	
	Sub Total	10974		2149	13124	53	18456	71	4			7	191	273	0	10	3	13		
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky	7			7		7	73195	2526		9	3035	102	78867	0	0	0	0	
		2.2: Gullied / Ravinous Land							20	835			3	4	861					
		2.3: Rann																		
		2.4: Salt Affected Land										151			151					
		2.5: Sandy Area							105	37		0	5088	12	5242					
		2.6: Scrub Land	11			11		11	827				35	4034	4896		1	0	1	
	Sub Total	18			18		18	74146	3398		160	8162	4152	90017	0	1	0	1		
	3: Builtup	3.1: Mining							3				0		3	9		0	9	
		3.2: Rural	0			0		0	2				0	4	6		326		326	
		3.3: Urban	0			0		0	1	5			1	7	14	2		375	377	
		Sub Total	0			0		0	6	5			1	11	23	11	326	375	712	
	4: Forest	4.1: Deciduous	0		0	0		0	3	3				0	6					
		4.2: Evergreen/Semi evergreen	15			15		15	35	13			0	74	123					
		4.3: Forest Plantation																		
		4.4: Scrub Forest	242		1	244		244	239	15			5	119	380					
		4.5: Swamp / Mangroves																		
	Sub Total	258		1	259		259	278	31			5	194	509						
5: Grass / Grazing	5.1: Grass / Grazing	2			2		2	74	3			55	132							
6: Snow and Glacier	6.1: Snow and Glacier							1018	24		1	19	17	1078						
7: Wetlands / Water bodies	7.1: Inland Wetland	0			0		0	62			21	76	61	221		0		0		
	7.2: Coastal Wetland																			
	7.3: River/Stream/Canals	0			0		0	13	17		0	43	19	92	0			0		
	7.4: Water bodies	0			0		0	17				1	2	19	0			0		
	Sub Total	0			0		0	93	17		21	120	82	332	1	0		1		
Grand Total		11253		2151	13403	53	13456	75685	3482		181	8314	4702	92364	12	337	378	727		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			JAMMU & KASHMIR													
			2015-16													
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total		
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	0	0		64		64		3	0				0	11303
		1.2: Current Shifting cultivation														
		1.3: Plantation	31			2		33	0	5	0			0	1	7490
		Farmland (FL) = 1.1+1.2+1.3	32	0		66		97	0	8	1			0	1	18793
		1.4: Fallow				0		0								55
		Sub Total	32	0		66		97	0	8	1			0	1	18848
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky	1			434		435	0	62850						142160
		2.2: Gullied / Ravinous Land				61		61		27						949
		2.3: Rann														
		2.4: Salt Affected Land														151
		2.5: Sandy Area								305						5548
		2.6: Scrub Land				86		86	0	2134			0		0	7129
		Sub Total	1			582		583	0	65316			0		0	155936
	3: Builtup	3.1: Mining														12
		3.2: Rural	0			1		1		0						333
		3.3: Urban				4		4		0	0				0	396
		Sub Total	0			5		5		0	0				0	740
	4: Forest	4.1: Deciduous	542			6		548								554
		4.2: Evergreen/Semi evergreen	1	11257		502		11760	8	133	0				0	12040
		4.3: Forest Plantation			12439	0		12439		0						12439
		4.4: Scrub Forest	2	0		7741		7742	56	333	1				1	8755
		4.5: Swamp / Mangroves					0	0								0
		Sub Total	545	11257	12439	8249	0	32489	65	466	1				1	33790
5: Grass / Grazing	5.1: Grass / Grazing		0		241		241	409	106					890		
6: Snow and Glacier	6.1: Snow and Glacier	2			125		127	1	7386				0	8593		
7: Wetlands / Water bodies	7.1: Inland Wetland							0	1	238				238	461	
	7.2: Coastal Wetland															
	7.3: River/Stream/Canals	0			8		8		11			1676		1676	1787	
	7.4: Water bodies				3		3	1	52	0			6395	6395	6471	
	Sub Total	0			11		11	1	64	238		1676	6395	8310	8719	
	Grand Total	580	11257	12439	9278	0	33554	477	73347	240	1676	6396	8312	222236		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		JHARKHAND																	
		2015-16																	
		1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	26536		2	26538	6961	33499	3	16			190	209	12	0	1	13	
		1.2: Current Shifting cultivation																	
		1.3: Plantation			70	70	1	7422					1	1					
		Farmland (FL) = 1.1+1.2+1.3	26536		72	26608	6962	40921	3	16			191	210	12	0	1	13	
		1.4: Fallow	1044		2	1046	5242	6288	0	1			10	12	5		1	6	
		Sub Total	27580		74	27654	12203	47208	3	17			201	222	17	0	2	19	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky							400					400	1			1	
		2.2: Gullied / Ravinous Land								276				276					
		2.3: Rann																	
		2.4: Salt Affected Land																	
		2.5: Sandy Area										0		0					
		2.6: Scrub Land			1	1		1	0	0				4739	4740	9		1	10
	Sub Total			1	1		1	401	276			0	4739	5416	10		1	11	
	3: Builtup	3.1: Mining			0	0							5	5	470			470	
		3.2: Rural														2924		2924	
		3.3: Urban													0		1124	1124	
		Sub Total			0	0		0					5	5	470	2924	1124	4518	
	4: Forest	4.1: Deciduous					0	0					0	0	7		1	8	
		4.2: Evergreen/Semi evergreen																	
		4.3: Forest Plantation																	
		4.4: Scrub Forest					0	0		0			0	0	1		0	1	
		4.5: Swamp / Mangroves											1	1	8		1	9	
	Sub Total					0	0		0			1	1	8		1	9		
	5: Grass / Grazing	5.1: Grass / Grazing																	
6: Snow and Glacier	6.1: Snow and Glacier																		
7: Wetlands / Water bodies	7.1: Inland Wetland																		
	7.2: Coastal Wetland																		
	7.3: River/Stream/Canals	0			0		0					0	0				0		
	7.4: Water bodies														0		0		
	Sub Total	0			0		0					0	0	0			0		
Grand Total		27580		74	27655	12203	39858	404	294			0	4946	5644	506	2924	1128	4558	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		JHARKHAND															
		2015-16															
		4: Forest						5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies					Grand Total		
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4	Sub Total			
2011-12	1: Agriculture	1.1: Crop land	0			43		43					0	2	2	33766	
		1.2: Current Shifting cultivation															
		1.3: Plantation				0		0									7423
		Farmland (FL) = 1.1+1.2+1.3	0			43		43					0	2	2	41188	
		1.4: Fallow				1		1						2	2	6309	
		Sub Total	0			44		44					0	4	4	47497	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky				0		0						0	0	401	
		2.2: Gullied / Ravinous Land				1		1								277	
		2.3: Rann															
		2.4: Salt Affected Land														0	
		2.5: Sandy Area														0	
		2.6: Scrub Land				0		0						0	0	4751	
		Sub Total				1		1						0	0	5429	
	3: Builtup	3.1: Mining				0		0					1	1	2	478	
		3.2: Rural														2924	
		3.3: Urban														1124	
		Sub Total				0		0					1	1	2	4526	
	4: Forest	4.1: Deciduous	22109			0		22110								22117	
		4.2: Evergreen/Semi evergreen		0				0								0	
		4.3: Forest Plantation				43		43								43	
		4.4: Scrub Forest			1	5382		5383						0	0	5385	
		4.5: Swamp / Mangroves					0	0								0	
	Sub Total	22109	0	44	5382	0	27535						0	0	27545		
5: Grass / Grazing	5.1: Grass / Grazing																
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland									13				13	13		
	7.2: Coastal Wetland																
	7.3: River/Stream/Canals											1372		1372	1372		
	7.4: Water bodies												674	674	674		
	Sub Total									13		1372	674	2059	2059		
Grand Total		22109	0	44	5427	0	27580			13		1374	679	2066	79706		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		KARNATAKA																	
		2015-16																	
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup					
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	110921		7	110927						0	409	410	99	4	40	143	
		1.2: Current Shifting cultivation																	
		1.3: Plantation	0		17579	17579	7422						1	1					
		Farmland (FL) = 1.1+1.2+1.3	110921		17585	128506	118349						0	410	411	99	4	40	143
		1.4: Fallow	6		1	8	3627	3635					77	77	8	1	5	13	
		Sub Total	110927		17587	128514	3627	121984					0	487	488	107	5	44	156
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						1915						1915	28		0	28	
		2.2: Gullied / Ravinous Land							103				6	109	1			1	
		2.3: Rann																	
		2.4: Salt Affected Land	0		0	0	0		6		654		22	681	0		1	1	
		2.5: Sandy Area						0				5	2	7					
		2.6: Scrub Land	3		0	4	4		4		10	1	6964	6979	23	0	5	28	
	Sub Total	3		0	4	4	4	1915	113	664	6	6994	9692	53	0	6	59		
	3: Builtup	3.1: Mining											2	2	550		0	551	
		3.2: Rural													3	3459	0	3462	
		3.3: Urban											11	11	7	0	2824	2830	
		Sub Total											13	13	559	3459	2824	6843	
	4: Forest	4.1: Deciduous						0				0	3	3	3	0		3	
		4.2: Evergreen/Semi evergreen						0				0		0	0	0		0	
		4.3: Forest Plantation										0		0	2		0	2	
		4.4: Scrub Forest							1		0			1	5			5	
		4.5: Swamp / Mangroves																	
	Sub Total							0	1	0	0	3	4	10	0	0	11		
5: Grass / Grazing	5.1: Grass / Grazing			0	0	0						12	12						
6: Snow and Glacier	6.1: Snow and Glacier																		
7: Wetlands / Water bodies	7.1: Inland Wetland									0				0	0	0	0		
	7.2: Coastal Wetland										2		2						
	7.3: River/Stream/Canals								1	1	3		5			0	0		
	7.4: Water bodies						0	0		1		1	2	0			0		
	Sub Total						0	1		2	5	1	8	0	0	0	1		
Grand Total		110930		17587	128517	3627	132145	1916	114		666	12	7510	10217	730	3465	2875	7069	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		KARNATAKA															
		2015-16															
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total				
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total		
2011-12	1: Agriculture	1.1: Crop land											0	1	1	111481	
		1.2: Current Shifting cultivation															7423
		1.3: Plantation												0	1	1	118904
		Farmland (FL) = 1.1+1.2+1.3												0	1	1	3725
		1.4: Fallow												0	1	1	122629
		Sub Total												0	1	1	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky															1943
		2.2: Gullied / Ravinous Land				1		1									111
		2.3: Rann															
		2.4: Salt Affected Land	0			0		0									682
		2.5: Sandy Area															7
		2.6: Scrub Land	0			64		64					0	0	0	0	7076
	Sub Total	0			65		65					0	0	0	0	9820	
	3: Builtup	3.1: Mining															553
		3.2: Rural															3462
		3.3: Urban															2842
		Sub Total															6857
	4: Forest	4.1: Deciduous	14925			789		15715						0	0	0	15721
		4.2: Evergreen/Semi evergreen		10595		356		10951									10952
		4.3: Forest Plantation			2069	554		2623									2626
		4.4: Scrub Forest				5340		5340									5346
		4.5: Swamp / Mangroves				0	6	6									6
	Sub Total	14925	10595	2069	7040	6	34636							0	0	34651	
5: Grass / Grazing	5.1: Grass / Grazing							301								313	
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland									30					30	31	
	7.2: Coastal Wetland				0		0				24				24	26	
	7.3: River/Stream/Canals	0					0					1998			1998	2003	
	7.4: Water bodies				6		6						5297		5297	5305	
	Sub Total	0			6		6			30	24	1998	5297		7350	7365	
Grand Total		14925	10595	2069	7111	6	34707	301		30	24	1999	5298	7351	191791		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		KERALA																	
		2015-16																	
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup					
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	2719		21	2740	2	2741						2	2	0	11	4	15
		1.2: Current Shifting cultivation																	
		1.3: Plantation	0		18824	18825	0	7422						63	63	0	0	123	124
		Farmland (FL) = 1.1+1.2+1.3	2719		18846	21565	2	10163						65	65	0	11	127	138
		1.4: Fallow			1	1	70	71						1	1			0	0
		Sub Total	2719		18847	21566	72	10234						65	65	0	11	127	139
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky					0	0	294						294	3			3
		2.2: Gullied / Ravinous Land																	
		2.3: Rann																	
		2.4: Salt Affected Land																	
		2.5: Sandy Area	1		8	9		9					7		7				
		2.6: Scrub Land	30			30	1	32						885	885	2		16	19
	Sub Total	31		8	39	1	41	294				7	885	1186	6		16	22	
	3: Builtup	3.1: Mining											5	5	105			0	105
		3.2: Rural														2656	24		2680
		3.3: Urban															736		736
		Sub Total											5	5	105	2656	759		3521
	4: Forest	4.1: Deciduous	1			1		1					1	1					
		4.2: Evergreen/Semi evergreen			2	2		2					6	6					
		4.3: Forest Plantation			1	1		1					3	3					
		4.4: Scrub Forest	34			34		34									0		0
		4.5: Swamp / Mangroves																	
	Sub Total	35		3	38		38						10	10		0		0	
5: Grass / Grazing	5.1: Grass / Grazing			40	40		40					1	1						
6: Snow and Glacier	6.1: Snow and Glacier																		
7: Wetlands / Water bodies	7.1: Inland Wetland	33		2	35	0	35						1	1			0	0	
	7.2: Coastal Wetland										3		3						
	7.3: River/Stream/Canals												1	1			0	0	
	7.4: Water bodies			0	0		0	0					0	0					
	Sub Total	33		2	36	0	36	0				3	2	5			0	0	
Grand Total		2818		18900	21718	73	21791	294				10	968	1272	111	2668	903	3682	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		KERALA														Grand Total	
		2015-16															
		4: Forest						5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Sub Total			
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4				
2011-12	1: Agriculture	1.1: Crop land									0				0	2758	
		1.2: Current Shifting cultivation															
		1.3: Plantation				1		1	1		0					0	7610
		Farmland (FL) = 1.1+1.2+1.3				1		1	1		0					0	10368
		1.4: Fallow				0		0									72
		Sub Total				1		1	1		0					0	10439
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky															297
		2.2: Gullied / Ravinous Land															
		2.3: Rann															
		2.4: Salt Affected Land															
		2.5: Sandy Area			0			0					0			0	16
		2.6: Scrub Land	5		3	24		31	1		0		0			0	967
	Sub Total	5		3	24		31	1		0		0			0	1281	
	3: Builtup	3.1: Mining															111
		3.2: Rural															2680
		3.3: Urban															736
		Sub Total															3526
	4: Forest	4.1: Deciduous	1549	0	1	0		1550									1552
		4.2: Evergreen/Semi evergreen	0	6286	0			6286	0					0		0	6293
		4.3: Forest Plantation	0		2065			2065	1								2071
		4.4: Scrub Forest	23	0	18	568		609	0				0			0	643
		4.5: Swamp / Mangroves					0	0			0					0	0
	Sub Total	1572	6286	2084	568	0	10510	1		0		0	0		0	10560	
	5: Grass / Grazing	5.1: Grass / Grazing			16	8		24	57								121
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland									186					186	222	
	7.2: Coastal Wetland										102				102	105	
	7.3: River/Stream/Canals				0		0					575			575	576	
	7.4: Water bodies		1		0		1							629	629	630	
	Sub Total		1		0		1			186	102	575	629	1491	1491	1533	
Grand Total		1577	6287	2103	600	0	10567	59		187	102	575	629	1492	1492	38863	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		MADHYA PRADESH																	
		2015-16																	
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup					
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	182451		56	182507	13	182520		0			6	7	32	60	152	244	
		1.2: Current Shifting cultivation																	
		1.3: Plantation	0		338	339		7422							0			0	
		Farmland (FL) = 1.1+1.2+1.3	182451		394	182845	13	189942		0			6	7	32	60	152	244	
		1.4: Fallow	431		1	432	4159	4592					2	2	4	4	13	20	
		Sub Total	182882		396	183278	4172	194533		0			9	9	36	64	165	265	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky	2			2		2	380					380	1	2	3	6	
		2.2: Gullied / Ravinous Land	12			12		12		1491				1491	0	0	0	0	
		2.3: Rann																	
		2.4: Salt Affected Land																	
		2.5: Sandy Area																	
		2.6: Scrub Land	530		5	536	1	536					22973	22973	35	13	84	133	
		Sub Total	545		5	550	1	551	380	1491			22973	24844	36	15	88	139	
	3: Builtup	3.1: Mining			1	1		1							389	1	1	390	
		3.2: Rural														3111	0	3111	
		3.3: Urban													0	0	1791	1791	
		Sub Total			1	1		1							389	3111	1792	5292	
	4: Forest	4.1: Deciduous	5			5		5							12	0	2	15	
		4.2: Evergreen/Semi evergreen																	
		4.3: Forest Plantation																	
		4.4: Scrub Forest	2			2		2							1		10	11	
		4.5: Swamp / Mangroves																	
	Sub Total	7			7		7							13	0	12	25		
5: Grass / Grazing	5.1: Grass / Grazing																		
6: Snow and Glacier	6.1: Snow and Glacier																		
7: Wetlands / Water bodies	7.1: Inland Wetland																		
	7.2: Coastal Wetland																		
	7.3: River/Stream/Canals	0			0		0												
	7.4: Water bodies	129		0	129	0	129					1	1	0	0	0	1		
	Sub Total	129		0	129	0	129					1	1	0	0	0	1		
Grand Total		183563		402	183965	4173	188139	380	1491			22983	24854	474	3190	2057	5722		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		MADHYA PRADESH															
		2015-16															
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total				
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	2		0			3					1	357	358	183132	
		1.2: Current Shifting cultivation															
		1.3: Plantation															7422
		Farmland (FL) = 1.1+1.2+1.3	2		0			3					1	357	358	190553	
		1.4: Fallow			0			0					0	14	14	4628	
		Sub Total	2		0			3					1	371	372	195181	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky												1	1	389	
		2.2: Gullied / Ravinous Land												1	1	1505	
		2.3: Rann															
		2.4: Salt Affected Land															
		2.5: Sandy Area															
		2.6: Scrub Land			1			1					1	58	59	23702	
	Sub Total			1			1					1	61	61	25597		
	3: Builtup	3.1: Mining	2					2						1	1	394	
		3.2: Rural			0			0						0	0	3111	
		3.3: Urban												0	0	1792	
		Sub Total	2		0			2						2	2	5297	
	4: Forest	4.1: Deciduous	67917		6	0		67924						30	30	67974	
		4.2: Evergreen/Semi evergreen		0				0								0	
		4.3: Forest Plantation			72			72								72	
		4.4: Scrub Forest			8	12605		12613						11	11	12637	
		4.5: Swamp / Mangroves															
	Sub Total	67917	0	86	12606		80609						41	41	80683		
	5: Grass / Grazing	5.1: Grass / Grazing							2							2	
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland																
	7.2: Coastal Wetland																
	7.3: River/Stream/Canals											3203	13	3216	3216		
	7.4: Water bodies	0			1		2					1	5227	5228	5360		
	Sub Total	0			1		2					3203	5240	8443	8576		
Grand Total		67922	0	88	12607		80617	2				3205	5714	8919	308252		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		MAHARASHTRA																	
		2015-16																	
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup					
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	171227		572	171799	12763	184561	45	91		1	1	873	1012	14	4	37	55
		1.2: Current Shifting cultivation																	
		1.3: Plantation	206		5204	5410	39	7422	1	0		0	0	26	27	0		0	0
		Farmland (FL) = 1.1+1.2+1.3	171433		5775	177209	12802	191983	45	92		1	1	899	1039	14	4	37	55
		1.4: Fallow	4067		9	4076	12631	16706	33	11			0	354	398	5	1	28	33
		Sub Total	175500		5784	181285	25432	208689	78	103		1	1	1253	1437	19	4	65	88
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky					29	29	1192					10	1202	0		0	0
		2.2: Gullied / Ravinous Land	65		1	66	36	102	2	344				31	377				
		2.3: Rann																	
		2.4: Salt Affected Land										34			34				
		2.5: Sandy Area											1		1				
		2.6: Scrub Land	39		0	39	1	39	212	37			0	19639	19888	8		9	17
		Sub Total	104		1	105	66	171	1406	381		34	1	19680	21502	8		9	18
	3: Builtup	3.1: Mining	0			0		0	8	1				46	54	329		1	330
		3.2: Rural	0		0	0		0	1	1				19	21	0	3383	0	3384
		3.3: Urban	0			0		0	3	0		2		57	63	4	0	4203	4207
		Sub Total	0		0	0		0	12	2		2		122	138	334	3384	4204	7921
	4: Forest	4.1: Deciduous	1			1	1	1	34	1				1476	1511	3		1	4
		4.2: Evergreen/Semi evergreen	0			0		0	1				0	142	142	0			0
		4.3: Forest Plantation																	
		4.4: Scrub Forest	0			0		0	19	0				37	56	0			0
		4.5: Swamp / Mangroves												2	2				
	Sub Total	1			1	1	2	54	1			0	1656	1711	4		1	4	
5: Grass / Grazing	5.1: Grass / Grazing																		
6: Snow and Glacier	6.1: Snow and Glacier																		
7: Wetlands / Water bodies	7.1: Inland Wetland																		
	7.2: Coastal Wetland							1			14	13	2	30			1	1	
	7.3: River/Stream/Canals							0	3			3	6	12					
	7.4: Water bodies	511			511	13	524	1	4				22	27	0		0	0	
	Sub Total	511			511	13	524	2	7		14	16	30	70	0		1	1	
Grand Total		176116		5785	181901	25512	207413	1552	495		51	19	22741	24857	364	3388	4281	8033	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		MAHARASHTRA															
		2015-16															
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total				
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	2			236		238			9	1	0	79	89	185955	
		1.2: Current Shifting cultivation															
		1.3: Plantation	0			4		5						1	1	7454	
		Farmland (FL) = 1.1+1.2+1.3	2			240		243			9	1	0	80	90	193409	
		1.4: Fallow	0			51		51					1	7	7	17197	
		Sub Total	2			291		294			9	1	1	86	98	210606	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky	1			1		2								1233	
		2.2: Gullied / Ravinous Land	2			3		5					1	0	1	485	
		2.3: Rann															
		2.4: Salt Affected Land									0			0	0	34	
		2.5: Sandy Area														1	
		2.6: Scrub Land	10	0		28		38			0		0	2	2	19986	
		Sub Total	12	0		32		44			0	0	1	2	4	21739	
	3: Builtup	3.1: Mining	4			5		9						1	1	395	
		3.2: Rural	0			2		2						0	0	3407	
		3.3: Urban				3		3								4273	
		Sub Total	4			9		14						2	2	8075	
	4: Forest	4.1: Deciduous	39692		16	972		40680			0			14	15	42210	
		4.2: Evergreen/Semi evergreen	0	6557		249		6806						2	2	6951	
		4.3: Forest Plantation	25		219	10		254						0	0	255	
		4.4: Scrub Forest	32			8316		8348						1	1	8405	
		4.5: Swamp / Mangroves					295	295			0				0	296	
	Sub Total	39750	6557	235	9547	295	56383			0	0		17	17	58118		
	5: Grass / Grazing	5.1: Grass / Grazing															
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland									7				7	7		
	7.2: Coastal Wetland				0		0				1102		0	1103	1134		
	7.3: River/Stream/Canals				1		1						3953	2	3955		
	7.4: Water bodies	2			23		25			0			5441	5441	6017		
	Sub Total	2			24		26			7	1102	3953	5443	10505	11126		
Grand Total		39771	6557	235	9904	295	56761			16	1104	3955	5550	10625	307690		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		MANIPUR																
		2015-16																
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup				
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total
2011-12	1: Agriculture	1.1: Crop land	1496	26	0	1522	1	1523					38	38		2		2
		1.2: Current Shifting cultivation	147	151		298		298	0	0			107	107		1		1
		1.3: Plantation		1	19	20		7422					11	11				
		Farmland (FL) = 1.1+1.2+1.3	1644	178	19	1840	1	9243	0	0			156	156		3		3
		1.4: Fallow					9	9										
	Sub Total	1644	178	19	1840	9	9251	0	0			156	156		3		3	
	2: Barren/unculturable/ Wastelands	2.1: Barren Rocky						0						0				0
		2.2: Gullied / Ravinous Land							0					0				0
		2.3: Rann																
		2.4: Salt Affected Land								0				0				0
		2.5: Sandy Area																
		2.6: Scrub Land	25	77		103		103	1				2372	2373		1		1
	Sub Total	25	77		103		103	2	0		0	2372	2374		1		1	
	3: Builtup	3.1: Mining																
		3.2: Rural														404		404
		3.3: Urban															106	106
		Sub Total														404	106	510
	4: Forest	4.1: Deciduous	210	237	1	448		448	0	1			853	854	0	31		31
		4.2: Evergreen/Semi evergreen	29	33	2	64		64					56	56		0		0
		4.3: Forest Plantation											0	0				
		4.4: Scrub Forest	15	112		127		127					187	187		0		0
		4.5: Swamp / Mangroves																
	Sub Total	254	383	3	639		639	0	1			1096	1097	0	31		31	
	5: Grass / Grazing	5.1: Grass / Grazing																
6: Snow and Glacier	6.1: Snow and Glacier																	
7: Wetlands / Water bodies	7.1: Inland Wetland											0	0					
	7.2: Coastal Wetland																	
	7.3: River/Stream/Canals		1		1		1					4	4					
	7.4: Water bodies											0	0					
	Sub Total		1		1		1					4	4					
Grand Total		1923	639	22	2584	9	2593	2	1	0	3628	3632	0	440	106	546		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		MANIPUR													
		2015-16													
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total		
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total
2011-12	1: Agriculture	1.1: Crop land	1			16	17	0		9			4	13	1594
		1.2: Current Shifting cultivation	2	0		54	56								462
		1.3: Plantation	1			0	2								7434
		Farmland (FL) = 1.1+1.2+1.3	4	0		70	75	0		9			4	13	9490
		1.4: Fallow								0					9
		Sub Total	4	0		70	75	0		10			4	14	9499
	2:Barren/unculturable/ Wastelands	2.1: Barren Rocky													0
		2.2:Gullied / Ravinous Land													0
		2.3: Rann													0
		2.4: Salt Affected Land													0
		2.5: Sandy Area													0
		2.6: Scrub Land	5			562	567					0	0	0	3044
	Sub Total	5			562	567					0	0	0	3044	
	3: Builtup	3.1: Mining													404
		3.2: Rural													106
		3.3: Urban													510
		Sub Total													510
	4: Forest	4.1: Deciduous	9994	3		238	10236	0					0	0	11569
		4.2: Evergreen/Semi evergreen	7	2596	0	30	2633								2754
		4.3: Forest Plantation			1	0	1								2
		4.4: Scrub Forest	203			1271	1474						0	0	1789
		4.5: Swamp / Mangroves													0
	Sub Total	10205	2599	2	1539	14345	0					0	0	16113	
	5: Grass / Grazing	5.1: Grass / Grazing						3							3
6: Snow and Glacier	6.1: Snow and Glacier													0	
7: Wetlands / Water bodies	7.1: Inland Wetland								107					107	
	7.2: Coastal Wetland													0	
	7.3: River/Stream/Canals				1	1					133	9	142	148	
	7.4: Water bodies								2			303	304	304	
	Sub Total				1	1			109	133	311	553	559	559	
Grand Total		10214	2600	2	2172	14987	3		118	133	315	567	22327		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		MEGHALAYA																		
		2015-16																		
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	1357			1357						0		0			1		1	
		1.2: Current Shifting cultivation	0	24	2	25									0	0	0	0	0	
		1.3: Plantation			563	563														
		Farmland (FL) = 1.1+1.2+1.3	1357	24	565	1945							0		0	0	1	0	1	
		1.4: Fallow					0													
		Sub Total	1357	24	565	1945	0	8804					0		0	0	1	0	1	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						272							272	0	0	0	0	
		2.2: Gullied / Ravinous Land																		
		2.3: Rann																		
		2.4: Salt Affected Land																		
		2.5: Sandy Area										5		5						
		2.6: Scrub Land	0	5	0	5		5						2736	2736	1	3	1	5	
	Sub Total	0	5	0	5		5	272				5	2736	3012	1	4	1	5		
	3: Builtup	3.1: Mining														63			63	
		3.2: Rural														1	751	0	751	
		3.3: Urban														0		85	85	
		Sub Total														64	751	85	899	
	4: Forest	4.1: Deciduous	6	138	2	147	0	147	0				0	6	7	3	4	1	7	
		4.2: Evergreen/Semi evergreen		2		2		2									0	0	0	
		4.3: Forest Plantation															0	1	1	
		4.4: Scrub Forest		12		12		12								0	0	0	0	
		4.5: Swamp / Mangroves																		
	Sub Total	6	152	2	161	0	161	0				0	6	7	3	4	1	8		
5: Grass / Grazing	5.1: Grass / Grazing																			
6: Snow and Glacier	6.1: Snow and Glacier																			
7: Wetlands / Water bodies	7.1: Inland Wetland																			
	7.2: Coastal Wetland																			
	7.3: River/Stream/Canals	0			0		0						0	0						
	7.4: Water bodies																			
	Sub Total	0			0		0						0	0						
Grand Total		1363	181	568	2112	1	2112	272				5	2742	3019	67	759	88	914		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			MEGHALAYA												Grand Total	
			2015-16													
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies						
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4		Sub Total
2011-12	1: Agriculture	1.1: Crop land										0		0	1358	
		1.2: Current Shifting cultivation				205	205								0	230
		1.3: Plantation											0		0	7422
		Farmland (FL) = 1.1+1.2+1.3				205	205						0		0	9010
		1.4: Fallow														0
		Sub Total				205	205						0		0	9010
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky														272
		2.2: Gullied / Ravinous Land														
		2.3: Rann														
		2.4: Salt Affected Land														
		2.5: Sandy Area														5
		2.6: Scrub Land	0			0	1						0	0	0	2747
	Sub Total	0			0	1						0	0	0	3024	
	3: Builtup	3.1: Mining														63
		3.2: Rural											0		0	751
		3.3: Urban														85
		Sub Total											0		0	899
	4: Forest	4.1: Deciduous	14462					14462					0	0	0	14623
		4.2: Evergreen/Semi evergreen		754		0		754								756
		4.3: Forest Plantation			13			13								14
		4.4: Scrub Forest	0			595		595					0		0	608
		4.5: Swamp / Mangroves					1	1								1
		Sub Total	14462	754	13	595	1	15825					0	0	0	16001
5: Grass / Grazing	5.1: Grass / Grazing							0							0	
6: Snow and Glacier	6.1: Snow and Glacier															
7: Wetlands / Water bodies	7.1: Inland Wetland									56				56	56	
	7.2: Coastal Wetland															
	7.3: River/Stream/Canals				0		0					278		278	279	
	7.4: Water bodies												18	18	18	
	Sub Total				0		0			56		278	18	352	353	
Grand Total			14462	754	13	801	1	16030	0		56		279	18	353	22429

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		MIZORAM																
		2015-16																
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup				
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total
2011-12	1: Agriculture	1.1: Crop land	135	0		135						15	15					
		1.2: Current Shifting cultivation		47		47						135	135					
		1.3: Plantation	0	3	67	71	7422					5	5		0	0	1	
		Farmland (FL) = 1.1+1.2+1.3	135	50	67	252	7603						156	156		0	0	1
		1.4: Fallow																
		Sub Total	135	50	67	252	7603						156	156		0	0	1
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						1						1				
		2.2: Gullied / Ravinous Land																
		2.3: Rann																
		2.4: Salt Affected Land																
		2.5: Sandy Area																
		2.6: Scrub Land	0	6	0	6	6						79	79		1		1
	Sub Total	0	6	0	6	6	1					79	80		1		1	
	3: Builtup	3.1: Mining																
		3.2: Rural													135	0	135	
		3.3: Urban														70	70	
		Sub Total													135	71	206	
	4: Forest	4.1: Deciduous	9	278	3	290	290					368	368		7	1	8	
		4.2: Evergreen/Semi evergreen	12	132	2	146	146											
		4.3: Forest Plantation	0	2		2	2											
		4.4: Scrub Forest	15	217	4	237	237						345	345		5	1	6
		4.5: Swamp / Mangroves																
	Sub Total	36	629	9	674	674						714	714		12	2	14	
	5: Grass / Grazing	5.1: Grass / Grazing	5	3		8	8					33	33		1		1	
6: Snow and Glacier	6.1: Snow and Glacier																	
7: Wetlands / Water bodies	7.1: Inland Wetland																	
	7.2: Coastal Wetland																	
	7.3: River/Stream/Canals										0	0						
	7.4: Water bodies																	
Sub Total											0	0						
Grand Total		177	687	77	941	941	1				982	982		149	73	222		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			MIZORAM													
			2015-16													
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total		
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total
2011-12	1: Agriculture	1.1: Crop land						0					0	0	151	
		1.2: Current Shifting cultivation	308	0		89	397						0	0	579	
		1.3: Plantation				8	8							0	0	7436
		Farmland (FL) = 1.1+1.2+1.3	308	0		98	406	0						0	0	8166
		1.4: Fallow														
		Sub Total	308	0		98	406	0						0	0	8166
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky														1
		2.2: Gullied / Ravinous Land														
		2.3: Rann														
		2.4: Salt Affected Land														
		2.5: Sandy Area														
		2.6: Scrub Land	39			12	52	0								139
		Sub Total	39			12	52	0								140
	3: Builtup	3.1: Mining														
		3.2: Rural												0	0	135
		3.3: Urban														70
		Sub Total												0	0	206
	4: Forest	4.1: Deciduous	5835	1		448	6284	7				1	1	2	2	6959
		4.2: Evergreen/Semi evergreen		7465		469	7934						2	2	2	8082
		4.3: Forest Plantation		0	93	0	94							0	0	96
		4.4: Scrub Forest	546	1096		2247	3889							1	1	4477
		4.5: Swamp / Mangroves														
		Sub Total	6380	8562	93	3164	18200	7				1	4	5	19614	
	5: Grass / Grazing	5.1: Grass / Grazing	0			29	29	84								155
6: Snow and Glacier	6.1: Snow and Glacier															
7: Wetlands / Water bodies	7.1: Inland Wetland															
	7.2: Coastal Wetland															
	7.3: River/Stream/Canals				0	0						125		125	125	
	7.4: Water bodies	0			0	0							27	27	27	
	Sub Total	0			0	0						125	27	152	152	
	Grand Total	6728	8562	93	3304	18687	91					126	31	157	21081	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			NAGALAND																
			2015-16																
			1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup					
			1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total
2011-12	1: Agriculture	1.1: Crop land	717		0	717	20	738									0	1	1
		1.2: Current Shifting cultivation		104	1	105						398	398		0			0	
		1.3: Plantation			11	11		7422											
		Farmland (FL) = 1.1+1.2+1.3	717	104	12	834	20	8264					398	398		0	1	1	
		1.4: Fallow	2			2	19	21					0	0					
		Sub Total	719	104	12	836	39	8285					399	399		0	1	1	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky							4					4					
		2.2: Gullied / Ravinous Land																	
		2.3: Rann																	
		2.4: Salt Affected Land																	
		2.5: Sandy Area																	
		2.6: Scrub Land	9	212	0	221		221					1182	1182	0	1	3	4	
	Sub Total	9	212	0	221		221	4				1182	1186	0	1	3	4		
	3: Builtup	3.1: Mining													15			15	
		3.2: Rural														278		278	
		3.3: Urban															139	139	
		Sub Total													15	278	139	432	
	4: Forest	4.1: Deciduous	13	248		260		260					476	476	2	2	0	4	
		4.2: Evergreen/Semi evergreen	0	1		1		1									0	0	
		4.3: Forest Plantation	2			2		2											
		4.4: Scrub Forest	1	305		306		306					1089	1089		0		0	
		4.5: Swamp / Mangroves																	
	Sub Total	16	553		569		569					1565	1565	2	2	0	4		
	5: Grass / Grazing	5.1: Grass / Grazing																	
6: Snow and Glacier	6.1: Snow and Glacier																		
7: Wetlands / Water bodies	7.1: Inland Wetland																		
	7.2: Coastal Wetland																		
	7.3: River/Stream/Canals																		
	7.4: Water bodies																		
	Sub Total																		
Grand Total			744	869	12	1625	39	1664	4				3146	3150	17	282	143	442	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			NAGALAND													
			2015-16													
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total		
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total
2011-12	1: Agriculture	1.1: Crop land			0			0								739
		1.2: Current Shifting cultivation	2		0	403		405								909
		1.3: Plantation														7422
		Farmland (FL) = 1.1+1.2+1.3	2		1	403		406								9070
		1.4: Fallow														21
		Sub Total	2		1	403		406								9091
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky														4
		2.2: Gullied / Ravinous Land														
		2.3: Rann														
		2.4: Salt Affected Land														
		2.5: Sandy Area														
		2.6: Scrub Land	170		3	137		309								1716
	Sub Total	170		3	137		309								1720	
	3: Builtup	3.1: Mining														15
		3.2: Rural														278
		3.3: Urban														139
		Sub Total														432
	4: Forest	4.1: Deciduous	9384		4	283		9671								10412
		4.2: Evergreen/Semi evergreen		175				175								175
		4.3: Forest Plantation			223			223								225
		4.4: Scrub Forest	24		0	297		322								1716
		4.5: Swamp / Mangroves														
	Sub Total	9408	175	227	581		10391								12529	
	5: Grass / Grazing	5.1: Grass / Grazing							6							6
6: Snow and Glacier	6.1: Snow and Glacier															
7: Wetlands / Water bodies	7.1: Inland Wetland															
	7.2: Coastal Wetland															
	7.3: River/Stream/Canals										187				187	
	7.4: Water bodies											24			24	
Sub Total										187	24			211		
Grand Total			9580	175	231	1120		11106	6			187	24	211	16579	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		ODISHA																			
		2015-16																			
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup							
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total			
2015-16	1: Agriculture	1.1: Crop land	76131		21	76153	13	76165					1		0	1	11	3	26	39	
		1.2: Current Shifting cultivation		603		603		603					13	13							
		1.3: Plantation	1		352	353		7422												0	0
		Farmland (FL) = 1.1+1.2+1.3	76132	603	373	77109	13	84190				1	13	14	11	3	26	40			
		1.4: Fallow	372		2	374	1335	1709		0			2	2	1	0	1	2			
	Sub Total	76505	603	375	77483	1348	85899		0		1	14	15	12	4	26	42				
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						507						507	0			0			
		2.2: Gullied / Ravinous Land		0		0		0		603				3	605		0			0	
		2.3: Rann																			
		2.4: Salt Affected Land										15		15							
		2.5: Sandy Area			0	0		0			0	64	1	64							
		2.6: Scrub Land	8	31	3	42		42		5		0	9869	9874	8	0	3	11			
		Sub Total	8	31	4	43		43	507	607		15	64	9873	11067	8	0	3	12		
	3: Builtup	3.1: Mining											2	2	231		0	232			
		3.2: Rural														5076	1	5077			
		3.3: Urban															1107	1107			
		Sub Total											2	2	231	5076	1108	6415			
	4: Forest	4.1: Deciduous	23	189		212		212				0	66	66	8		1	9			
		4.2: Evergreen/Semi evergreen																			
		4.3: Forest Plantation														1		1			
		4.4: Scrub Forest		33		33		33		1			33	35	1		0	1			
		4.5: Swamp / Mangroves										1		1							
	Sub Total	23	222		244		244		1		1	0	99	101	9		2	11			
	5: Grass / Grazing	5.1: Grass / Grazing																			
	6: Snow and Glacier	6.1: Snow and Glacier																			
	7: Wetlands / Water bodies	7.1: Inland Wetland	39		0	40		40													
		7.2: Coastal Wetland	12			12		12				0	0	0	1						
7.3: River/Stream/Canals		2			2		2				0	1	2	0		0	0				
7.4: Water bodies		2			2	4	6				9		9			0	0				
Sub Total		55		0	55	4	59				10	2	0	12	0	0	0				
Grand Total		76591	856	379	77825	1351	79177	507	609		26	65	9988	11197	261	5080	1140	6481			

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		ODISHA																
		2015-16																
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total					
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4	Sub Total	Grand Total			
2015-16	1: Agriculture	1.1: Crop land			30			30				3	0	5	29	37	76273	
		1.2: Current Shifting cultivation	3			49											669	
		1.3: Plantation									0						0	7422
		Farmland (FL) = 1.1+1.2+1.3	3		30	49		83			3	0	5	29	37		84364	
		1.4: Fallow	0		8			8							1		1	1722
		Sub Total	4		38	49		91			3	0	5	29	38		86085	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky																508
		2.2: Gullied / Ravinous Land	4			18		21										627
		2.3: Rann																
		2.4: Salt Affected Land												1		1		16
		2.5: Sandy Area	1		2			3				0	1			1		69
		2.6: Scrub Land	139		34	11		184				0	0	0		1		10113
	Sub Total	144		36	29		208				0	2	1		3		11333	
	3: Builtup	3.1: Mining			0			0										234
		3.2: Rural																5077
		3.3: Urban																1107
		Sub Total			0			0										6418
	4: Forest	4.1: Deciduous	43628		5	167		43800					0	0		0		44087
		4.2: Evergreen/Semi evergreen																
		4.3: Forest Plantation	0		1131	0		1131										1133
		4.4: Scrub Forest	91		6	6015	1	6112						0		0		6181
		4.5: Swamp / Mangroves				0	250	250				0		1		1		252
	Sub Total	43719		1142	6182	251	51294				0	0	1		1		51652	
	5: Grass / Grazing	5.1: Grass / Grazing																
	6: Snow and Glacier	6.1: Snow and Glacier																
	7: Wetlands / Water bodies	7.1: Inland Wetland			0		0	0			314		0	4		318		357
		7.2: Coastal Wetland					8	8				1338		4		1342		1362
		7.3: River/Stream/Canals				0	2	2					3031	0		3032		3038
7.4: Water bodies											0	0	2516		2516		2531	
Sub Total				0	0	10	10			314	1338	3032	2523		7207		7288	
Grand Total		43866		1216	6260	261	51604			317	1339	3039	2554	7249		155707		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		PUNJAB																		
		2015-16																		
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total		
2015-16	1: Agriculture	1.1: Crop land	42315		51	42367	10	42377		1		8	31	19	59	57	83	186	325	
		1.2: Current Shifting cultivation																		
		1.3: Plantation	409		400	809	0	7422				0	1	4	6	0	1	2	4	
		Farmland (FL) = 1.1+1.2+1.3	42725		451	43176	11	49799		1		9	32	23	65	57	83	189	329	
		1.4: Fallow	28		2	30	27	57				0	2	1	3	2	1	5	8	
		Sub Total	42753		452	43206	38	49856		1		9	34	24	68	59	85	194	338	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky																		
		2.2: Gullied / Ravinous Land	14			14	1	15		15				1	16	0	0	1	1	
		2.3: Rann																		
		2.4: Salt Affected Land	11		0	11	1	12		0		9	0	1	10	0	0	2	2	
		2.5: Sandy Area	52		1	53	4	56				0	55	4	59	1	1	7	8	
		2.6: Scrub Land	101		13	114	40	154		0		1	5	132	138	1	4	26	31	
		Sub Total	177		14	191	46	237		16		10	60	138	224	2	5	36	43	
	3: Builtup	3.1: Mining	33		0	33	0	33		0		1	1	2	80	1	5	86		
		3.2: Rural	26		0	26	0	26		1		0	1	0	2	1	1693	9	1703	
		3.3: Urban	25		1	26	6	32			0	2	5	7	1	5	1778	1784		
		Sub Total	84		1	84	7	91		1		0	4	6	11	82	1699	1791	3572	
	4: Forest	4.1: Deciduous	4			4	0	4		4			0	1	6	0	0	0	1	
		4.2: Evergreen/Semi evergreen																		
		4.3: Forest Plantation	1			1		1					0	0	0					
		4.4: Scrub Forest	6		1	7	1	8		1			0	2	3	0	0	1	1	
		4.5: Swamp / Mangroves																		
	Sub Total	10		1	12	1	12		5			0	4	9	0	0	2	2		
5: Grass / Grazing	5.1: Grass / Grazing															0		0		
6: Snow and Glacier	6.1: Snow and Glacier																			
7: Wetlands / Water bodies	7.1: Inland Wetland	32		2	33	2	35				1	0	7	8		0	2	2		
	7.2: Coastal Wetland																			
	7.3: River/Stream/Canals	21		0	21	0	21		0			13	9	22	1	0	0	1		
	7.4: Water bodies	2		0	2		2			0			0	0		0	1	1		
	Sub Total	54		2	56	2	58		0		1	13	17	31	1	0	2	3		
Grand Total		43078		470	43549	93	43642		23		20	112	188	342	144	1789	2025	3958		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			PUNJAB												Grand Total		
			2015-16														
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies							
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4		Sub Total	
2015-16	1: Agriculture	1.1: Crop land	9		0	5	0	14			8		15	3	26	42802	
		1.2: Current Shifting cultivation															
		1.3: Plantation	0		0	0		0			1		0	0	2	7433	
		Farmland (FL) = 1.1+1.2+1.3	9		0	5	0	15			9		15	3	27	50235	
		1.4: Fallow				0		0			0		0	0	1	69	
		Sub Total	9		0	5	0	15			9		15	4	28	50304	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky															
		2.2: Gullied / Ravinous Land	3		0			3									35
		2.3: Rann															
		2.4: Salt Affected Land									1			0	1	25	
		2.5: Sandy Area	0					0			0		1	0	2	126	
		2.6: Scrub Land	18	1	1	2		22			1		9	1	11	356	
	Sub Total	21	1	1	2		25			2		11	1	13	541		
	3: Builtup	3.1: Mining	0		0	0		0			0		0	0	0	121	
		3.2: Rural	1			0		1			0		0	1	1	1734	
		3.3: Urban	0			0		0			0		0	0	0	1823	
		Sub Total	1		0	1		2			0		0	1	2	3678	
	4: Forest	4.1: Deciduous	1379			1	32	1412			0		1	0	1	1423	
		4.2: Evergreen/Semi evergreen		13				13								13	
		4.3: Forest Plantation			13	1		14								15	
		4.4: Scrub Forest	19		2	36		57			0		0	1	1	70	
		4.5: Swamp / Mangroves															
	Sub Total	1398	13	16	69		1495			0		1	1	3	1521		
5: Grass / Grazing	5.1: Grass / Grazing				0		0	0							0		
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland	0		0			1			28		13	28	69	115		
	7.2: Coastal Wetland																
	7.3: River/Stream/Canals	1			0		1			1		684	1	686	732		
	7.4: Water bodies	0					0			1			80	81	84		
Sub Total	2		0	0		2			30		698	108	836	930			
Grand Total			1431	14	18	77	0	1539	0	41	725	115	881	50362			

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		RAJASTHAN																	
		2015-16																	
		1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	111148		6	111153	42576	153729							2	7	22	31	
		1.2: Current Shifting cultivation																	
		1.3: Plantation			117	117		7422											
		Farmland (FL) = 1.1+1.2+1.3	111148		122	111270	42576	161151							2	7	22	31	
		1.4: Fallow	12949		0	12949	65724	78673							2	9	28	39	
		Sub Total	124097		123	124219	108299	239823							4	16	50	69	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky							4552					4552	2	0	0	3	
		2.2: Gullied / Ravinous Land								1319				1319	0		0	0	
		2.3: Rann									100			100			0	0	
		2.4: Salt Affected Land									798			798			4	4	
		2.5: Sandy Area										23713		23713			0	0	
		2.6: Scrub Land											34934	34934	5		38	43	
		Sub Total							4552	1319	100	798	23713	34934	65415	7	0	43	51
	3: Builtup	3.1: Mining													397			397	
		3.2: Rural														3276		3276	
		3.3: Urban															2148	2148	
		Sub Total													397	3276	2148	5821	
	4: Forest	4.1: Deciduous													0		0	0	
		4.2: Evergreen/Semi evergreen																	
		4.3: Forest Plantation																	
		4.4: Scrub Forest															1	1	
		4.5: Swamp / Mangroves																	
	Sub Total													0		1	1		
5: Grass / Grazing	5.1: Grass / Grazing													2		4	6		
6: Snow and Glacier	6.1: Snow and Glacier																		
7: Wetlands / Water bodies	7.1: Inland Wetland	16			16	1	17												
	7.2: Coastal Wetland																		
	7.3: River/Stream/Canals																		
	7.4: Water bodies															0	0		
	Sub Total	16			16	1	17									0	0		
Grand Total		124112		123	124235	108300	232535	4552	1319	100	798	23713	34934	65415	410	3291	2247	5948	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			RAJASTHAN													
			2015-16													
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total		
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total
2011-12	1: Agriculture	1.1: Crop land											11	11	153770	
		1.2: Current Shifting cultivation														
		1.3: Plantation														7422
		Farmland (FL) = 1.1+1.2+1.3												11	11	161192
		1.4: Fallow										0	3	3	3	78715
		Sub Total										0	14	14	14	239906
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky														4554
		2.2: Gullied / Ravinous Land												0	0	1320
		2.3: Rann														100
		2.4: Salt Affected Land														802
		2.5: Sandy Area														23713
		2.6: Scrub Land												1	1	34978
		Sub Total												1	1	65467
	3: Builtup	3.1: Mining														397
		3.2: Rural														3276
		3.3: Urban														2148
		Sub Total														5821
	4: Forest	4.1: Deciduous	16886			332		17218								17218
		4.2: Evergreen/Semi evergreen														
		4.3: Forest Plantation	1		123	10		135								135
		4.4: Scrub Forest	650			10432		11082								11083
		4.5: Swamp / Mangroves														
	Sub Total	17537		123	10774		28434								28436	
5: Grass / Grazing	5.1: Grass / Grazing							3303					0	0	3309	
6: Snow and Glacier	6.1: Snow and Glacier															
7: Wetlands / Water bodies	7.1: Inland Wetland									175					175	192
	7.2: Coastal Wetland															
	7.3: River/Stream/Canals										3284	0		3284	3284	
	7.4: Water bodies												3129		3129	
	Sub Total									175		3284	3129	6588	6605	
Grand Total			17537		123	10774		28434	3303		175		3284	3144	6604	342239

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		SIKKIM																	
		2015-16																	
		1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	587			587							0	0			0	0	
		1.2: Current Shifting cultivation																	
		1.3: Plantation			4	4	7422												
		Farmland (FL) = 1.1+1.2+1.3	587		4	591	8008							0	0			0	0
		1.4: Fallow					1	1											
		Sub Total	587		4	591	1	8009						0	0			0	0
	2:Barren/unculturable/ Wastelands	2.1: Barren Rocky						776											
		2.2:Gullied / Ravinous Land																	
		2.3: Rann																	
		2.4: Salt Affected Land																	
		2.5: Sandy Area										4	0	4					
		2.6: Scrub Land												21	21				
		Sub Total						776					4	21	800				
	3: Builtup	3.1: Mining													0				0
		3.2: Rural														6			6
		3.3: Urban															18		18
		Sub Total													0	6	18		24
	4: Forest	4.1: Deciduous											0	0					0
		4.2: Evergreen/Semi evergreen										0		0		0			0
		4.3: Forest Plantation												0					0
		4.4: Scrub Forest																	
		4.5: Swamp / Mangroves																	
		Sub Total											0	0	0		0	0	0
	5: Grass / Grazing	5.1: Grass / Grazing											2	2					
6: Snow and Glacier	6.1: Snow and Glacier						333						333						
7: Wetlands / Water bodies	7.1: Inland Wetland																		
	7.2: Coastal Wetland																		
	7.3: River/Stream/Canals																		
	7.4: Water bodies																		
	Sub Total																		
Grand Total		587		4	591	1	592	1109					4	23	1136	0	6	18	24

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			SIKKIM															
			2015-16															
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total				
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	2					2									589	
		1.2: Current Shifting cultivation																
		1.3: Plantation																7422
		Farmland (FL) = 1.1+1.2+1.3	2					2										8010
		1.4: Fallow																1
		Sub Total	2					2										8011
	2:Barren/unculturable/ Wastelands	2.1: Barren Rocky								152					0	0		928
		2.2:Gullied / Ravinous Land																
		2.3: Rann																
		2.4: Salt Affected Land																
		2.5: Sandy Area																4
		2.6: Scrub Land									0							21
		Sub Total								152					0	0		952
	3: Builtup	3.1: Mining																0
		3.2: Rural																6
		3.3: Urban																18
		Sub Total																24
	4: Forest	4.1: Deciduous	183					183										183
		4.2: Evergreen/Semi evergreen		2526		22		2549		24								2573
		4.3: Forest Plantation			4			4										4
		4.4: Scrub Forest				53		53		0								53
		4.5: Swamp / Mangroves																
	Sub Total	183	2526	4	75		2788		24								2813	
5: Grass / Grazing	5.1: Grass / Grazing				0		0	553	64					1	1		621	
6: Snow and Glacier	6.1: Snow and Glacier		1				1		1690					0	0		2025	
7: Wetlands / Water bodies	7.1: Inland Wetland																	
	7.2: Coastal Wetland																	
	7.3: River/Stream/Canals											47					47	
	7.4: Water bodies												21				21	
	Sub Total											47	21				68	
Grand Total			184	2528	4	75		2791	553	1930			47	22	69		7096	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		TAMIL NADU																		
		2015-16																		
		1: Agriculture					2: Barren/Unculturable/ Wastelands							3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total		
2015-16	1: Agriculture	1.1: Crop land	49161		2094	51254	8051	59306		1		1	0	4	5	9		87	96	
		1.2: Current Shifting cultivation																		
		1.3: Plantation	480		9085	9565	356	7422				0	0	1	1	0		14	14	
		Farmland (FL) = 1.1+1.2+1.3	49641		11179	60820	8407	66727		1		1	0	5	6	9		101	110	
		1.4: Fallow	4196		239	4435	14517	18952				0		13	14	4		44	48	
		Sub Total	53837		11419	65255	22924	85680		1		1	0	18	20	13		145	158	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky					1	1	337							337	0			0
		2.2: Gullied / Ravinous Land					0	0		182				0	182					
		2.3: Rann																		
		2.4: Salt Affected Land					28	28				276		7	282	1		1	1	
		2.5: Sandy Area			0	0	0	0		0		1	298	1	301			0	0	
		2.6: Scrub Land	13			13		13		1		1	1	4149	4151	3		4	8	
	Sub Total	13		0	13	29	42	337	183		278	299	4157	5254	4		5	9		
	3: Builtup	3.1: Mining									0		1	1	597		0	597		
		3.2: Rural														6137		6137		
		3.3: Urban											1	1	1		2646	2647		
		Sub Total									0		2	2	598	6137	2646	9382		
	4: Forest	4.1: Deciduous											2	2	0		0	1		
		4.2: Evergreen/Semi evergreen													0		0	0		
		4.3: Forest Plantation										2		2	0		0	0		
		4.4: Scrub Forest																		
		4.5: Swamp / Mangroves								0	1	0	1				0	0		
	Sub Total									0	3	2	5	0		0	1			
5: Grass / Grazing	5.1: Grass / Grazing															0	0			
6: Snow and Glacier	6.1: Snow and Glacier																			
7: Wetlands / Water bodies	7.1: Inland Wetland																			
	7.2: Coastal Wetland								0	1	1	1								
	7.3: River/Stream/Canals					0	0				0	0	1							
	7.4: Water bodies	0		0	1	1	1					0	0	0			0			
	Sub Total	0		0	1	1	1			0	1	1	2	0			0			
Grand Total			53850		11419	65269	22954	88223	337	184		279	303	4180	5283	616	6137	2797	9550	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			TAMIL NADU													Grand Total	
			2015-16														
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Sub Total			
			4.1	4.2	4.3	4.4	4.5	5.1	6.1	7.1	7.2	7.3	7.4				
2015-16	1: Agriculture	1.1: Crop land				3		3	7					9	9	59426	
		1.2: Current Shifting cultivation															
		1.3: Plantation				0		0							1	1	7439
		Farmland (FL) = 1.1+1.2+1.3				3		3	7						11	11	66864
		1.4: Fallow	0			0		0	39								19054
		Sub Total	0			3		3	46						11	11	85918
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky															338
		2.2: Gullied / Ravinous Land				0		0									182
		2.3: Rann															
		2.4: Salt Affected Land				0		0									312
		2.5: Sandy Area	5					5									306
		2.6: Scrub Land	1			3		4	6						0	0	4182
	Sub Total	6			3		9	6						0	0	5320	
	3: Builtup	3.1: Mining															598
		3.2: Rural															6137
		3.3: Urban															2648
		Sub Total															9383
	4: Forest	4.1: Deciduous	11198			1		11200									11203
		4.2: Evergreen/Semi evergreen	154	4319	0	0		4474									4474
		4.3: Forest Plantation	0		1319	1		1320									1322
		4.4: Scrub Forest				0		0									0
		4.5: Swamp / Mangroves					78	78									80
	Sub Total	11353	4319	1319	3	78	17072									17078	
5: Grass / Grazing	5.1: Grass / Grazing							200								200	
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland										130					130	
	7.2: Coastal Wetland					2	2				711					711	
	7.3: River/Stream/Canals					0	0					1750				1750	
	7.4: Water bodies	0			1	0	2						7062			7062	
	Sub Total	0			1	2	3				130	711	1750	7062		9652	
Grand Total	11359	4319	1319	10	80	17087	252			130	711	1750	7072	9663	130058		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		TRIPURA																
		2015-16																
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup				
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total
2011-12	1: Agriculture	1.1: Crop land	1397	0	0	1397						1	9	10	0	0	0	1
		1.2: Current Shifting cultivation		2		2							0	0				
		1.3: Plantation		0	766	766						1	34	35		0	0	0
		Farmland (FL) = 1.1+1.2+1.3	1397	2	766	2165	8820					1	44	45	0	0	0	1
		1.4: Fallow	0			0	29						0	4	4			
		Sub Total	1397	2	766	2165	29	8849					1	47	49	0	0	0
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky																
		2.2: Gullied / Ravinous Land							0					0				
		2.3: Rann																
		2.4: Salt Affected Land																
		2.5: Sandy Area											1	0	2			
		2.6: Scrub Land		1	1	3	3		0				0	175	176		1	
	Sub Total		1	1	3	3		0				1	176	177		1		1
	3: Builtup	3.1: Mining											0	0	6		0	6
		3.2: Rural														561		561
		3.3: Urban		0		0	0						1	1			320	320
		Sub Total		0		0	0						1	1	6	561	321	887
	4: Forest	4.1: Deciduous	0	3	5	8	8						77	77		2	0	2
		4.2: Evergreen/Semi evergreen	0	19	0	19	19		0					0		0		0
		4.3: Forest Plantation		1		1	1											
		4.4: Scrub Forest		5		5	5						0	0		0		0
		4.5: Swamp / Mangroves																
	Sub Total	0	27	5	33	33		0					78	78		2	0	2
5: Grass / Grazing	5.1: Grass / Grazing																	
6: Snow and Glacier	6.1: Snow and Glacier																	
7: Wetlands / Water bodies	7.1: Inland Wetland											1	1					
	7.2: Coastal Wetland																	
	7.3: River/Stream/Canals		0		0	0						1	0	1				
	7.4: Water bodies												0	0				
Sub Total		0		0	0						1	1	2					
Grand Total		1397	31	773	2200	29	2229	0			3	303	307	6	564	321	891	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		TRIPURA													Grand Total	
		2015-16														
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Sub Total			
		4.1	4.2	4.3	4.4	4.5	5.1	6.1	7.1	7.2	7.3	7.4				
2011-12	1: Agriculture	1.1: Crop land	1			6		7								1415
		1.2: Current Shifting cultivation	3			11		15								16
		1.3: Plantation	1			11		12				0		0	0	7469
		Farmland (FL) = 1.1+1.2+1.3	5			29		34				0		0	0	8900
		1.4: Fallow	0			1		1								34
		Sub Total	5			30		35				0		0	0	8934
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky														0
		2.2: Gullied / Ravinous Land														
		2.3: Rann														
		2.4: Salt Affected Land														
		2.5: Sandy Area				0		0								2
		2.6: Scrub Land	1			75		76								255
	Sub Total	1			75		76								257	
	3: Builtup	3.1: Mining				0		0								6
		3.2: Rural														561
		3.3: Urban				0		0								321
		Sub Total				1		1								889
	4: Forest	4.1: Deciduous	2189			101		2290								2377
		4.2: Evergreen/Semi evergreen	22	3654	0	97		3774								3793
		4.3: Forest Plantation	1		292	7		300								301
		4.4: Scrub Forest	350	2		121		473								478
		4.5: Swamp / Mangroves														
	Sub Total	2562	3655	292	327		6836								6949	
5: Grass / Grazing	5.1: Grass / Grazing															
6: Snow and Glacier	6.1: Snow and Glacier															
7: Wetlands / Water bodies	7.1: Inland Wetland									5				5	6	
	7.2: Coastal Wetland															
	7.3: River/Stream/Canals				0		0					50		50	51	
	7.4: Water bodies												57	57	57	
Sub Total				0		0			5		50	57	112	114		
Grand Total		2568	3655	292	432		6948			5		50	57	112	10486	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		TELANGANA																	
		2015-16																	
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup					
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	56724		102	56826	2162	58989	15	21		42	0	488	565	34	51	77	162
		1.2: Current Shifting cultivation																	
		1.3: Plantation	55		1032	1087	3	7422	0			1		21	22	2	0	1	3
		Farmland (FL) = 1.1+1.2+1.3	56780		1134	57914	2166	66410	15	21		42	0	509	587	36	51	78	165
		1.4: Fallow	1587		13	1600	7045	8646	5	7		121	1	278	411	19	12	43	74
	Sub Total	58367		1147	59514	9211	75056	19	28		163	1	787	998	55	63	121	239	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky	3			3	17	20	641				0	80	721	5	0	1	6
		2.2: Gullied / Ravinous Land	8			8	3	11	0	95		0		14	109	0			0
		2.3: Rann																	
		2.4: Salt Affected Land	23			23		23		0		227		1	229	0			0
		2.5: Sandy Area	0			0		0					2	0	2				
		2.6: Scrub Land	403		7	410	445	855	58	1		26	0	4007	4092	20	2	13	35
	Sub Total	438		7	445	465	909	699	96		253	2	4102	5152	25	2	14	42	
	3: Builtup	3.1: Mining	2		1	3	10	13	23			3		65	91	363	0	5	368
		3.2: Rural	12		0	12	3	15	1	0		0		10	12	1	1965	17	1984
		3.3: Urban	26		20	45	43	89	1	1		2		56	60	10	4	1704	1718
		Sub Total	40		20	60	56	116	24	1		6		131	162	374	1970	1726	4070
	4: Forest	4.1: Deciduous	869		2	872	7	878	20	1		1	1	37	61	5	1	1	7
		4.2: Evergreen/Semi evergreen																	
		4.3: Forest Plantation	36			36		36						0	0	2			2
		4.4: Scrub Forest	604			604	1	604	4	2		1	0	3	9	2	0	1	3
		4.5: Swamp / Mangroves																	
	Sub Total	1509		2	1512	8	1519	24	3		2	1	40	71	9	1	2	12	
5: Grass / Grazing	5.1: Grass / Grazing	0			0	0	0						0	0			2	2	
6: Snow and Glacier	6.1: Snow and Glacier																		
7: Wetlands / Water bodies	7.1: Inland Wetland																		
	7.2: Coastal Wetland																		
	7.3: River/Stream/Canals	5			5	0	6	0	1		2	1	8	12	2	0		2	
	7.4: Water bodies	83		0	83	9	92	1			8	0	18	27	2	0	1	3	
	Sub Total	88		0	89	9	97	1	1		10	1	27	39	3	0	1	4	
Grand Total		60442		1177	61619	9749	71368	767	129		434	5	5087	6422	466	2036	1866	4369	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		TELANGANA														Grand Total	
		2015-16															
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Sub Total				
		4.1	4.2	4.3	4.4	4.5	5.1	6.1	7.1	7.2	7.3	7.4					
2011-12	1: Agriculture	1.1: Crop land	6		0	126	0	132	3			0		14	64	78	59928
		1.2: Current Shifting cultivation															
		1.3: Plantation	4			0		4						0	0	0	7451
		Farmland (FL) = 1.1+1.2+1.3	10		0	126	0	136	3			0		14	64	78	67379
		1.4: Fallow	0			6		7	0			1		3	15	19	9157
	Sub Total	10		0	132	0	143	3			1		17	79	97	76536	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky				13		13							0	0	759
		2.2: Gullied / Ravinous Land				1		1						0	0	1	122
		2.3: Rann															
		2.4: Salt Affected Land										1			0	1	254
		2.5: Sandy Area												1		1	2
		2.6: Scrub Land	0	0	2	15		17						0	1	1	5001
	Sub Total	0	0	2	29		31				1		1	2	4	6138	
	3: Builtup	3.1: Mining	0			8		8							0	0	479
		3.2: Rural	0			3		3	0				0	1	1	2015	
		3.3: Urban	3		2	5		9	1			0			0	0	1877
		Sub Total	3		2	15		20	1			0		0	2	2	4371
	4: Forest	4.1: Deciduous	17983		13	299		18295						1	5	6	19248
		4.2: Evergreen/Semi evergreen															
		4.3: Forest Plantation	14		330	37		380									418
		4.4: Scrub Forest	4		8	4099		4110	0						1	1	4727
		4.5: Swamp / Mangroves															
	Sub Total	18000		350	4435		22786	0					1	6	6	24394	
5: Grass / Grazing	5.1: Grass / Grazing							28								31	
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland				0		0				14		1	0	16	16	
	7.2: Coastal Wetland																
	7.3: River/Stream/Canals	0			2		2	0			0		2163	5	2169	2190	
	7.4: Water bodies	0			2		2	0			3		13	4594	4610	4734	
Sub Total	0			4		4	0			17		2177	4600	6794	6940		
Grand Total		18014	0	354	4616	0	22985	32			19		2197	4688	6903	112079	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		UTTARAKHAND																		
		2015-16																		
		1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup							
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	9666			9666	0	9666					10	0	10	2	1	5	8	
		1.2: Current Shifting cultivation																		
		1.3: Plantation			175	175		7422									0	0	0	0
		Farmland (FL) = 1.1+1.2+1.3	9666		175	9841	0	17087					10	0	10	2	1	5	8	
		1.4: Fallow	1			1	924	925						0	0	0	1	1	2	
		Sub Total	9667		175	9842	924	18012					10	0	10	3	1	6	10	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						3039					0	86	3125					
		2.2: Gullied / Ravinous Land							0						0					
		2.3: Rann																		
		2.4: Salt Affected Land																		
		2.5: Sandy Area										25	0	25						
		2.6: Scrub Land	0			0	0	0	2			1	1083	1087	0	0	4	4	4	
		Sub Total	0			0	0	0	3041	0			26	1170	4237	0	0	4	4	
	3: Builtup	3.1: Mining														23			23	
		3.2: Rural															210		210	
		3.3: Urban																402	402	
		Sub Total													23	210	402	635		
	4: Forest	4.1: Deciduous										0	0	1	0	0	0	0		
		4.2: Evergreen/Semi evergreen										4	0	4	0	0	0	0		
		4.3: Forest Plantation																0		
		4.4: Scrub Forest										0		0	0	0	0	1		
		4.5: Swamp / Mangroves																		
	Sub Total										4	0	5	0	0	1	2			
5: Grass / Grazing	5.1: Grass / Grazing										1	1	2							
6: Snow and Glacier	6.1: Snow and Glacier						195						195							
7: Wetlands / Water bodies	7.1: Inland Wetland																			
	7.2: Coastal Wetland																			
	7.3: River/Stream/Canals	9			9		9				7	13	21	0			0			
	7.4: Water bodies	3			3		3				0	0	0				0			
	Sub Total	13			13		13				7	13	21	0			0			
Grand Total		9680		175	9855	924	10779	3236	0			49	1184	4470	26	212	413	651		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			UTTARAKHAND													Grand Total	
			2015-16														
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Sub Total			
			4.1	4.2	4.3	4.4	4.5	5.1	6.1	7.1	7.2	7.3	7.4				
2011-12	1: Agriculture	1.1: Crop land											7	0	7	9691	
		1.2: Current Shifting cultivation															
		1.3: Plantation										0				0	7422
		Farmland (FL) = 1.1+1.2+1.3										7	0			7	17113
		1.4: Fallow										0				0	927
		Sub Total										7	0			7	18040
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky									2901						6026
		2.2: Gullied / Ravinous Land															0
		2.3: Rann															
		2.4: Salt Affected Land															
		2.5: Sandy Area											0			0	26
		2.6: Scrub Land									0		1	0		1	1092
		Sub Total									2901		1	0		1	7143
	3: Builtup	3.1: Mining											0	0		0	24
		3.2: Rural											0			0	210
		3.3: Urban															402
		Sub Total											0	0		0	635
	4: Forest	4.1: Deciduous	6278						6278					1		1	6279
		4.2: Evergreen/Semi evergreen		16160					16160					0	0	0	16164
		4.3: Forest Plantation	0		792				792					0		0	793
		4.4: Scrub Forest				2089			2089					0		0	2089
		4.5: Swamp / Mangroves					7		7								7
	Sub Total	6278	16160	792	2089	7		25326					1	0	1	25333	
	5: Grass / Grazing	5.1: Grass / Grazing								3797	530						4329
	6: Snow and Glacier	6.1: Snow and Glacier									3791						3986
	7: Wetlands / Water bodies	7.1: Inland Wetland											0			0	0
		7.2: Coastal Wetland															
7.3: River/Stream/Canals									7	5			1021	0	1021	1063	
7.4: Water bodies										1				195	195	199	
Sub Total									7	6	0		1021	195	1216	1262	
Grand Total			6278	16160	792	2089	7	25326	3804	7228	0	1031	196	1226	53483		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		UTTAR PRADESH																		
		2015-16																		
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	180998		167	181164	1550	182714		0		5	2	19	27	18	31	119	168	
		1.2: Current Shifting cultivation																		
		1.3: Plantation	0		4739	4739		7422									0		1	1
		Farmland (FL) = 1.1+1.2+1.3	180998		4906	185903	1550	190136		0		5	2	19	27	18	31	120	169	
		1.4: Fallow	647			647	5632	6279				1		4	5	21	9	47	77	
		Sub Total	181645		4906	186550	7182	196415		0		6	2	23	32	39	40	167	246	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						220							220					
		2.2: Gullied / Ravinous Land							1278					4	1281	0		1	1	
		2.3: Rann																		
		2.4: Salt Affected Land	1		0	2	2				2563		5	2568	0	2	4	6	6	
		2.5: Sandy Area											13	13						
		2.6: Scrub Land	60		0	60	1	61		0		5	0	3284	3289	2	0	5	7	
	Sub Total	61		0	62	1	63	220	1278		2567	13	3293	7371	2	2	11	15		
	3: Builtup	3.1: Mining	1			1	1								366			0	366	
		3.2: Rural	5		0	5	5				0	0		0	0	8247	3	8251		
		3.3: Urban	0			0	0									0	3919	3920		
		Sub Total	6		0	6	0	6			0	0		0	366	8248	3923	12537		
	4: Forest	4.1: Deciduous	0			0	0		0				5	5	0		1	1		
		4.2: Evergreen/Semi evergreen																		
		4.3: Forest Plantation																		
		4.4: Scrub Forest	1			1	1										0	0		
		4.5: Swamp / Mangroves																		
	Sub Total	1			1	1	1		0				5	5	0		1	1		
5: Grass / Grazing	5.1: Grass / Grazing	1			1	1						10	10							
6: Snow and Glacier	6.1: Snow and Glacier																			
7: Wetlands / Water bodies	7.1: Inland Wetland	114		0	114	6	121						4	4		1	1			
	7.2: Coastal Wetland																			
	7.3: River/Stream/Canals	350		0	350	86	436		0		0	1	28	29	0	0	0			
	7.4: Water bodies	128		0	128	10	138						1	1		0	0			
	Sub Total	592		0	593	102	695		0		0	1	34	35	0	1	1			
Grand Total		182306		4907	187213	7286	194498	220	1278		2574	17	3364	7452	408	8289	4102	12799		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		UTTAR PRADESH																
		2015-16																
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total					
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total			
2011-12	1: Agriculture	1.1: Crop land	1		0	1		2				27		472	14	514	183424	
		1.2: Current Shifting cultivation																
		1.3: Plantation									0		1	1	2		7425	
		Farmland (FL) = 1.1+1.2+1.3	1		0	1		2			27		473	15	515		190848	
		1.4: Fallow									1		54	1	56		6417	
		Sub Total	1		0	1		2			28		528	16	572		197266	
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky													4		4	220
		2.2: Gullied / Ravinous Land					0		0									1287
		2.3: Rann																
		2.4: Salt Affected Land	0				0		0				5	0	6		2581	
		2.5: Sandy Area																13
		2.6: Scrub Land	1					1			5		121	2	127		3486	
	Sub Total	2				1	2			5		130	2	137		7588		
	3: Builtup	3.1: Mining	0					0										368
		3.2: Rural									0		3	0	3		8259	
		3.3: Urban											1		1		3921	
		Sub Total	0					0			0		4	0	4		12548	
	4: Forest	4.1: Deciduous	12950			0	52		13002			2		11	0	13		13020
		4.2: Evergreen/Semi evergreen		231					231									231
		4.3: Forest Plantation				117			117					0		0		117
		4.4: Scrub Forest	5			5	2033		2043			0		4	0	4		2047
		4.5: Swamp / Mangroves					1	67	68					1		1		69
	Sub Total	12955	231	122	2085	67	15461				2		16	0	18		15485	
5: Grass / Grazing	5.1: Grass / Grazing								139					7		7	157	
6: Snow and Glacier	6.1: Snow and Glacier																	
7: Wetlands / Water bodies	7.1: Inland Wetland					3		3				2155		19	0	2175	2303	
	7.2: Coastal Wetland																	
	7.3: River/Stream/Canals	0				2		2				35		6182	10	6226	6693	
	7.4: Water bodies											0		0	1430	1431	1570	
	Sub Total	0				5		5				2190		6202	1440	9832	10567	
Grand Total		12958	231	122	2091	67	15470	139			2225		6886	1458	10570	240928		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		WEST BENGAL																	
		2015-16																	
		1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	51456		12	51468					1	1	0	2	25	10	33	68	
		1.2: Current Shifting cultivation																	
		1.3: Plantation	0		2507	2507	7422						0	0	0		0	1	1
		Farmland (FL) = 1.1+1.2+1.3	51456		2519	53975	58890				1	1	0	2	25	10	34	69	
		1.4: Fallow	3			3	39							0	0			0	0
	Sub Total	51459		2519	53978	36	58929				1	1	1	2	25	10	34	69	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky						51						51					
		2.2: Gullied / Ravinous Land							16					17		0			0
		2.3: Rann																	
		2.4: Salt Affected Land									1			1					
		2.5: Sandy Area	4		1	5	5				0	12	1	14		1			1
		2.6: Scrub Land	49		0	49	49		2			0	1055	1058	11	10	9		30
	Sub Total	53		1	54	54	51	18		1	13	1058	1140	11	11	9		31	
	3: Builtup	3.1: Mining	1			1	0	1					2	2	251			0	251
		3.2: Rural									0			0		13273	6		13278
		3.3: Urban												0	0	0	2412		2413
	Sub Total	1			1	0	1			0			2	2	251	13273	2418	15942	
	4: Forest	4.1: Deciduous	3		0	3	3	0				0	23	23	3	1	9		13
		4.2: Evergreen/Semi evergreen																	
		4.3: Forest Plantation	0			0	0					0		0			2		2
		4.4: Scrub Forest	8		0	8	8		0					0			0		0
		4.5: Swamp / Mangroves										1		1	0				0
	Sub Total	11		0	12	12	0				1	23	24	3	1	10		14	
	5: Grass / Grazing	5.1: Grass / Grazing	8			8	8						0	0		0		0	
	6: Snow and Glacier	6.1: Snow and Glacier																	
	7: Wetlands / Water bodies	7.1: Inland Wetland	63			63	63						0	0		1	3		4
		7.2: Coastal Wetland									0	1		1	0				0
7.3: River/Stream/Canals		26		0	26	0	27			0	4	1	5	1	0	1		2	
7.4: Water bodies		0			0	0						0	0	1				1	
Sub Total		90		0	90	0	90			0	5	1	6	1	1	4		6	
Grand Total		51622		2521	54142	36	54179	51	18		2	19	1085	1175	291	13295	2476	16062	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		WEST BENGAL															
		2015-16															
		4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total				
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	10					10			0	0	61	99	161	51709	
		1.2: Current Shifting cultivation															
		1.3: Plantation											1	0	1	7423	
		Farmland (FL) = 1.1+1.2+1.3	10					10			0	0	61	100	161	59132	
		1.4: Fallow											2	0	2	41	
	Sub Total	10					10			0	0	63	100	163	59174		
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky														51	
		2.2: Gullied / Ravinous Land	2					2						0	0	19	
		2.3: Rann															
		2.4: Salt Affected Land														1	
		2.5: Sandy Area	1		0		1	2	1				7	0	7	29	
		2.6: Scrub Land	180					180	21				20	0	20	1358	
	Sub Total	183		0		1	184	22				27	0	28	1459		
	3: Builtup	3.1: Mining	2			0		2	0			0	1	1	1	257	
		3.2: Rural											3		3	13281	
		3.3: Urban	0					0					1		1	2415	
	Sub Total	2			0		2	0			0	5	1	6	15953		
	4: Forest	4.1: Deciduous	6444		12	14		6470			0	0	1	0	2	6510	
		4.2: Evergreen/Semi evergreen		199		0		199								199	
		4.3: Forest Plantation	16		662	22		700								702	
		4.4: Scrub Forest	115		60	329	0	504					0		0	512	
		4.5: Swamp / Mangroves					1756	1756					7	7	14	1771	
	Sub Total	6574	199	734	365	1756	9628			0	0	9	7	16	9694		
	5: Grass / Grazing	5.1: Grass / Grazing					2	2	122				7	31	38	171	
	6: Snow and Glacier	6.1: Snow and Glacier															
	7: Wetlands / Water bodies	7.1: Inland Wetland							0		117		0	9	126	194	
		7.2: Coastal Wetland	0			4	4					88	0	1	90	94	
7.3: River/Stream/Canals		2		0		17	19	4			4	5555	1	5560	5616		
7.4: Water bodies												0	0	1312	1313		
Sub Total	2		0		20	22	4		117	92	5556	1323	7088	7217			
Grand Total	6771	199	735	365	1779	9849	149		118	93	5668	1461	7339	88752			

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		CHANDIGARH																	
		2015-16																	
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup					
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	11			11											1	1	
		1.2: Current Shifting cultivation																	
		1.3: Plantation			1	1	7422												
		Farmland (FL) = 1.1+1.2+1.3	11		1	12	7433											1	1
		1.4: Fallow					0												
		Sub Total	11		1	12	0	7433										1	1
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky																	
		2.2: Gullied / Ravinous Land																	
		2.3: Rann																	
		2.4: Salt Affected Land																	
		2.5: Sandy Area																	
		2.6: Scrub Land											0	0				0	0
	Sub Total											0	0				0	0	
	3: Builtup	3.1: Mining													0			0	
		3.2: Rural														1		1	
		3.3: Urban															88	88	
		Sub Total													0	1	88	89	
	4: Forest	4.1: Deciduous																	
		4.2: Evergreen/Semi evergreen																	
		4.3: Forest Plantation																	
		4.4: Scrub Forest																	
		4.5: Swamp / Mangroves																	
	Sub Total																		
5: Grass / Grazing	5.1: Grass / Grazing																		
6: Snow and Glacier	6.1: Snow and Glacier																		
7: Wetlands / Water bodies	7.1: Inland Wetland																		
	7.2: Coastal Wetland																		
	7.3: River/Stream/Canals																		
	7.4: Water bodies																		
Sub Total																			
Grand Total			11		1	12	0	12						0	0	0	1	89	90

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		CHANDIGARH															
		2015-16															
		4: Forest						5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total			
		4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4		Sub Total		
2011-12	1: Agriculture	1.1: Crop land														12	
		1.2: Current Shifting cultivation															
		1.3: Plantation															7422
		Farmland (FL) = 1.1+1.2+1.3															7433
		1.4: Fallow															0
		Sub Total															7433
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky															
		2.2: Gullied / Ravinous Land															
		2.3: Rann															
		2.4: Salt Affected Land															
		2.5: Sandy Area															
		2.6: Scrub Land												0	0		1
	Sub Total												0	0		1	
	3: Builtup	3.1: Mining															0
		3.2: Rural															1
		3.3: Urban															88
		Sub Total															89
	4: Forest	4.1: Deciduous	1						1								1
		4.2: Evergreen/Semi evergreen		8					8								8
		4.3: Forest Plantation			0				0								0
		4.4: Scrub Forest				0			0								0
		4.5: Swamp / Mangroves															
	Sub Total	1	8	0	0			10								10	
5: Grass / Grazing	5.1: Grass / Grazing																
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland																
	7.2: Coastal Wetland																
	7.3: River/Stream/Canals											0			0	0	
	7.4: Water bodies												2		2	2	
Sub Total											0	2		2	2		
Grand Total		1	8	0	0			10				0	2	2	2	114	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			DADAR & NAGAR HAVELI																	
			2015-16																	
			1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup						
			1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	155			155	0	156									0	0		
		1.2: Current Shifting cultivation																		
		1.3: Plantation			14	14		7422										0	0	
		Farmland (FL) = 1.1+1.2+1.3	155		14	170	0	7577										0	0	
		1.4: Fallow					112	112										1	1	
		Sub Total	155		14	170	112	7689										1	1	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky																		
		2.2: Gullied / Ravinous Land																		
		2.3: Rann																		
		2.4: Salt Affected Land																		
		2.5: Sandy Area																		
		2.6: Scrub Land																0	0	
		Sub Total																0	0	
	3: Builtup	3.1: Mining													1				1	
		3.2: Rural														2			2	
		3.3: Urban					0	0										31	31	
		Sub Total					0	0							1	2	31		33	
	4: Forest	4.1: Deciduous																		
		4.2: Evergreen/Semi evergreen																		
		4.3: Forest Plantation																		
		4.4: Scrub Forest																		
		4.5: Swamp / Mangroves																		
	Sub Total																			
5: Grass / Grazing	5.1: Grass / Grazing																			
6: Snow and Glacier	6.1: Snow and Glacier																			
7: Wetlands / Water bodies	7.1: Inland Wetland																			
	7.2: Coastal Wetland																			
	7.3: River/Stream/Canals																			
	7.4: Water bodies																			
Sub Total																				
Grand Total			155		14	170	112	281									1	2	33	35

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			DADAR & NAGAR HAVELI													
			2015-16													
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total		
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total
2011-12	1: Agriculture	1.1: Crop land											0	0	156	
		1.2: Current Shifting cultivation														
		1.3: Plantation														7422
		Farmland (FL) = 1.1+1.2+1.3												0	0	7578
		1.4: Fallow														112
		Sub Total												0	0	7690
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky														
		2.2: Gullied / Ravinous Land														
		2.3: Rann														
		2.4: Salt Affected Land														
		2.5: Sandy Area														
		2.6: Scrub Land														0
		Sub Total														0
	3: Builtup	3.1: Mining														1
		3.2: Rural														2
		3.3: Urban														31
		Sub Total														34
	4: Forest	4.1: Deciduous	147					147						0	0	147
		4.2: Evergreen/Semi evergreen		6				6								6
		4.3: Forest Plantation			0			0								0
		4.4: Scrub Forest				1		1								1
		4.5: Swamp / Mangroves														
		Sub Total	147	6	0	1		154						0	0	154
5: Grass / Grazing	5.1: Grass / Grazing															
6: Snow and Glacier	6.1: Snow and Glacier															
7: Wetlands / Water bodies	7.1: Inland Wetland															
	7.2: Coastal Wetland															
	7.3: River/Stream/Canals										8			8	8	
	7.4: Water bodies											12		12	12	
	Sub Total										8	12		20	20	
Grand Total			147	6	0	1		154					8	12	20	491

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			LAKSHADWEEP															
			2015-16															
			1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup				
			1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3
2011-12	1: Agriculture	1.1: Crop land	27			27	27											
		1.2: Current Shifting cultivation																
		1.3: Plantation					7422											
		Farmland (FL) = 1.1+1.2+1.3	27			27	7448											
		1.4: Fallow																
		Sub Total	27			27	7448											
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky																
		2.2: Gullied / Ravinous Land																
		2.3: Rann																
		2.4: Salt Affected Land																
		2.5: Sandy Area																
		2.6: Scrub Land																
		Sub Total																
	3: Builtup	3.1: Mining																
		3.2: Rural														0		0
		3.3: Urban															5	5
		Sub Total														0	5	5
	4: Forest	4.1: Deciduous																
		4.2: Evergreen/Semi evergreen																
		4.3: Forest Plantation																
		4.4: Scrub Forest																
		4.5: Swamp / Mangroves																
	Sub Total																	
	5: Grass / Grazing	5.1: Grass / Grazing																
6: Snow and Glacier	6.1: Snow and Glacier																	
7: Wetlands / Water bodies	7.1: Inland Wetland																	
	7.2: Coastal Wetland																	
	7.3: River/Stream/Canals																	
	7.4: Water bodies																	
Sub Total																		
Grand Total			27			27	27								0	5	5	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			LAKSHADWEEP												Grand Total		
			2015-16														
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Sub Total			
			4.1	4.2	4.3	4.4	4.5	5.1	6.1	7.1	7.2	7.3	7.4				
2011-12	1: Agriculture	1.1: Crop land														27	
		1.2: Current Shifting cultivation															
		1.3: Plantation															7422
		Farmland (FL) = 1.1+1.2+1.3															7448
		1.4: Fallow															
		Sub Total															7448
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky															
		2.2: Gullied / Ravinous Land															
		2.3: Rann															
		2.4: Salt Affected Land															
		2.5: Sandy Area															
		2.6: Scrub Land															
		Sub Total															
	3: Builtup	3.1: Mining															
		3.2: Rural															0
		3.3: Urban															5
		Sub Total															5
	4: Forest	4.1: Deciduous															
		4.2: Evergreen/Semi evergreen															
		4.3: Forest Plantation															
		4.4: Scrub Forest															
		4.5: Swamp / Mangroves															
	Sub Total																
5: Grass / Grazing	5.1: Grass / Grazing																
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland																
	7.2: Coastal Wetland																
	7.3: River/Stream/Canals																
	7.4: Water bodies														0	0	
	Sub Total														0	0	
Grand Total															0	0	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		ANDAMAN & NICOBAR ISLANDS																		
		2015-16																		
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup						
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total		
2011-12	1: Agriculture	1.1: Crop land	314			314	0	314						1	1			0	0	
		1.2: Current Shifting cultivation																		
		1.3: Plantation			74	74													0	0
		Farmland (FL) = 1.1+1.2+1.3	314		74	388	0	7736							1	1			0	0
		1.4: Fallow					0	0												
		Sub Total	314		74	388	0	7736							1	1			0	0
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky																		
		2.2: Gullied / Ravinous Land																		
		2.3: Rann																		
		2.4: Salt Affected Land																		
		2.5: Sandy Area										7		7						
		2.6: Scrub Land											2	2						
		Sub Total										7	2	9						
	3: Builtup	3.1: Mining																		
		3.2: Rural															7			7
		3.3: Urban																63		63
		Sub Total															7	63		69
	4: Forest	4.1: Deciduous	1			1	0	1											0	0
		4.2: Evergreen/Semi evergreen	0			0	0	0											0	0
		4.3: Forest Plantation																		
		4.4: Scrub Forest			2	2		2											0	0
		4.5: Swamp / Mangroves	0		0	0	0	0											1	1
		Sub Total	1		2	3	0	3											1	1
5: Grass / Grazing	5.1: Grass / Grazing																			
6: Snow and Glacier	6.1: Snow and Glacier																			
7: Wetlands / Water bodies	7.1: Inland Wetland	0			0	0	0													
	7.2: Coastal Wetland	0			0	0	0													
	7.3: River/Stream/Canals																			
	7.4: Water bodies			0	0	0	0													
	Sub Total	0		0	0	0	0													
Grand Total		315		76	391	0	392						7	3	10		7	64	70	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			ANDAMAN & NICOBAR ISLANDS														
			2015-16														
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total			
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total	
2011-12	1: Agriculture	1.1: Crop land		0		0	0	0								316	
		1.2: Current Shifting cultivation															
		1.3: Plantation															7422
		Farmland (FL) = 1.1+1.2+1.3		0		0	0	0									7737
		1.4: Fallow															0
		Sub Total		0		0	0	0									7737
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky															
		2.2: Gullied / Ravinous Land															
		2.3: Rann															
		2.4: Salt Affected Land															
		2.5: Sandy Area															7
		2.6: Scrub Land															2
		Sub Total															9
	3: Builtup	3.1: Mining															
		3.2: Rural															7
		3.3: Urban															63
		Sub Total															69
	4: Forest	4.1: Deciduous	1425			2	0	1427									1427
		4.2: Evergreen/Semi evergreen		5058		1		5059				0				0	5059
		4.3: Forest Plantation															
		4.4: Scrub Forest	0	0		268	2	270				0				0	273
		4.5: Swamp / Mangroves	1			1	816	818				0				0	819
		Sub Total	1425	5058		271	819	7574				0			0	7578	
5: Grass / Grazing	5.1: Grass / Grazing																
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland										18				18	18	
	7.2: Coastal Wetland				0	6	7				118				118	124	
	7.3: River/Stream/Canals				2		2					51			51	53	
	7.4: Water bodies												8		8	8	
	Sub Total				2	6	9			18	118	51	8	194	203		
	Grand Total	1425	5058		274	825	7583			18	118	51	8	195	8249		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			PUDUCHERRY															
			2015-16															
			1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup				
			1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3
2015-16	1: Agriculture	1.1: Crop land	143			143					0	0	0			0	0	
		1.2: Current Shifting cultivation																
		1.3: Plantation			115	115	7422					0	0	0				
		Farmland (FL) = 1.1+1.2+1.3	143		115	258	7565					0	0	1			0	0
		1.4: Fallow	0			0	61					0	0	0				
		Sub Total	144		115	258	61	7626					0	0	1			0
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky																
		2.2: Gullied / Ravinous Land																
		2.3: Rann																
		2.4: Salt Affected Land																
		2.5: Sandy Area									2		2					
		2.6: Scrub Land											1	1			0	0
		Sub Total										2	1	3			0	0
	3: Builtup	3.1: Mining													0			0
		3.2: Rural										0	0	0		35		35
		3.3: Urban											0	0			86	86
		Sub Total										0	0	0	0	35	86	120
	4: Forest	4.1: Deciduous																
		4.2: Evergreen/Semi evergreen																
		4.3: Forest Plantation																
		4.4: Scrub Forest																
		4.5: Swamp / Mangroves																
		Sub Total																
5: Grass / Grazing	5.1: Grass / Grazing																	
6: Snow and Glacier	6.1: Snow and Glacier																	
7: Wetlands / Water bodies	7.1: Inland Wetland																	
	7.2: Coastal Wetland										0	0	1					
	7.3: River/Stream/Canals										2	0	2					
	7.4: Water bodies	0			0	0						0	0					
	Sub Total	0			0	0					2	0	3					
Grand Total			144		115	258	61	319				5	2	7	0	35	86	121

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			PUDUCHERRY														
			2015-16														
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies				Grand Total			
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3		7.4	Sub Total	
2015-16	1: Agriculture	1.1: Crop land												0	0	144	
		1.2: Current Shifting cultivation															
		1.3: Plantation															7422
		Farmland (FL) = 1.1+1.2+1.3													0	0	7565
		1.4: Fallow															61
		Sub Total													0	0	7626
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky															
		2.2: Gullied / Ravinous Land															
		2.3: Rann															
		2.4: Salt Affected Land															
		2.5: Sandy Area															2
		2.6: Scrub Land															2
		Sub Total															4
	3: Builtup	3.1: Mining															0
		3.2: Rural															35
		3.3: Urban															86
		Sub Total															121
	4: Forest	4.1: Deciduous	0					0									0
		4.2: Evergreen/Semi evergreen															
		4.3: Forest Plantation			0			0									0
		4.4: Scrub Forest															
4.5: Swamp / Mangroves						2	2									2	
Sub Total		0		0		2	2									2	
5: Grass / Grazing	5.1: Grass / Grazing																
6: Snow and Glacier	6.1: Snow and Glacier																
7: Wetlands / Water bodies	7.1: Inland Wetland									1					1	1	
	7.2: Coastal Wetland										7				7	8	
	7.3: River/Stream/Canals											16			16	18	
	7.4: Water bodies												20		20	20	
	Sub Total									1	7	16	20		43	46	
Grand Total			0	0		2	2				1	7	16	20	43	492	

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			DAMAN & DIU																	
			2015-16																	
			1: Agriculture					2: Barren/Unculturable/ Wastelands						3: Builtup						
			1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	17			17							0	0			2	2		
		1.2: Current Shifting cultivation																		
		1.3: Plantation			10	10	7422											0	0	
		Farmland (FL) = 1.1+1.2+1.3	17		10	27	7438							0	0			2	2	
		1.4: Fallow				10	10							0	0					
		Sub Total	17		10	27	10	7449						0	0			2	2	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky																		
		2.2: Gullied / Ravinous Land																		
		2.3: Rann																		
		2.4: Salt Affected Land								0				0				0	0	
		2.5: Sandy Area									3			3						
		2.6: Scrub Land				0	0							0	0		0	0	0	
		Sub Total				0	0				0	3		4			0	0	0	
	3: Builtup	3.1: Mining														1		0	1	
		3.2: Rural															1		1	
		3.3: Urban												0	0			20	20	
		Sub Total												0	0	1	1	20	22	
	4: Forest	4.1: Deciduous																		
		4.2: Evergreen/Semi evergreen																		
		4.3: Forest Plantation																		
		4.4: Scrub Forest																		
		4.5: Swamp / Mangroves																		
	Sub Total																			
	5: Grass / Grazing	5.1: Grass / Grazing																		
	6: Snow and Glacier	6.1: Snow and Glacier																		
	7: Wetlands / Water bodies	7.1: Inland Wetland												0	0					
		7.2: Coastal Wetland																		
		7.3: River/Stream/Canals																		
7.4: Water bodies													0	0						
Sub Total													0	0						
Grand Total			17		10	27	11	37					0	3	1	4	1	1	23	24

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			DAMAN & DIU												Grand Total	
			2015-16													
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wet lands / Water bodies						
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4		Sub Total
2011-12	1: Agriculture	1.1: Crop land													19	
		1.2: Current Shifting cultivation														
		1.3: Plantation														7422
		Farmland (FL) = 1.1+1.2+1.3														7440
		1.4: Fallow														11
		Sub Total														7451
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky														
		2.2: Gullied / Ravinous Land														
		2.3: Rann														
		2.4: Salt Affected Land														0
		2.5: Sandy Area														3
		2.6: Scrub Land														1
		Sub Total														4
	3: Builtup	3.1: Mining														1
		3.2: Rural														1
		3.3: Urban														20
		Sub Total														22
	4: Forest	4.1: Deciduous	1					1								1
		4.2: Evergreen/Semi evergreen														
		4.3: Forest Plantation														
		4.4: Scrub Forest														
		4.5: Swamp / Mangroves					13	13								13
Sub Total		1				13	14								14	
5: Grass / Grazing	5.1: Grass / Grazing															
6: Snow and Glacier	6.1: Snow and Glacier															
7: Wetlands / Water bodies	7.1: Inland Wetland									8					8	
	7.2: Coastal Wetland										19				19	
	7.3: River/Stream/Canals											4			4	
	7.4: Water bodies												0		0	
	Sub Total									8	19	4	0		31	
Grand Total			1				13	14			8	19	4	0	31	112

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES		All India																	
		2015-16																	
		1: Agriculture						2: Barren/Unculturable/ Wastelands						3: Builtup					
		1.1	1.2	1.3	FL	1.4	Sub Total	2.1	2.2	2.3	2.4	2.5	2.6	Sub Total	3.1	3.2	3.3	Sub Total	
2011-12	1: Agriculture	1.1: Crop land	1462900	29	3709	1466638	78276	1544914	130	134	0	94	71	2722	3150	454	366	1195	2015
		1.2: Current Shifting cultivation	148	1391	2	1541	0	1541	0	0	0	0	0	701	702	0	2	0	2
		1.3: Plantation	1618	4	80771	82394	582	82976	4	4	0	1	2	217	229	7	11	174	191
		Farmland (FL) = 1.1+1.2+1.3	1464666	1423	84483	1550572	78859	1629431	135	138	0	95	73	3640	4081	461	378	1369	2208
		1.4: Fallow	30951	0	429	31380	148222	179602	37	20	0	126	7	831	1022	103	48	289	440
	Sub Total	1495617	1423	84911	1581952	227081	1809033	172	159	0	221	80	4471	5103	564	426	1658	2648	
	2: Barren/Unculturable/ Wastelands	2.1: Barren Rocky	16	0	0	16	50	66	101614	2526	0	9	3036	316	107501	46	2	6	54
		2.2: Gullied / Ravinous Land	193	0	4	198	40	238	21	7044	0	0	3	67	7136	2	1	4	6
		2.3: Rann	0	0	0	0	0	0	0	18690	0	0	0	18690	0	0	0	0	
		2.4: Salt Affected Land	102	0	0	102	29	132	0	6	0	9382	0	39	9428	3	2	14	18
		2.5: Sandy Area	85	0	12	97	5	103	105	37	0	1	29964	33	30141	3	1	8	12
		2.6: Scrub Land	2616	348	75	3039	660	3699	1107	58	0	60	55	174283	175564	159	45	295	498
		Sub Total	3013	349	91	3453	784	4237	102849	9671	18690	9453	33059	174738	348460	212	51	326	589
	3: Builtup	3.1: Mining	56	0	2	58	12	70	34	1	0	4	1	150	189	5713	2	17	5732
		3.2: Rural	43	0	0	43	3	47	4	2	0	1	1	59	67	7	74420	91	74519
		3.3: Urban	52	0	20	72	50	121	5	6	0	4	3	169	187	28	10	37949	37988
		Sub Total	150	0	23	173	65	238	43	9	0	9	5	377	442	5749	74432	38058	118239
	4: Forest	4.1: Deciduous	1244	1097	18	2359	9	2368	58	15	0	1	4	4058	4137	59	49	37	145
		4.2: Evergreen/Semi evergreen	92	443	12	547	1	548	51	14	0	0	6	390	460	1	8	2	10
		4.3: Forest Plantation	86	2	1	90	0	90	0	0	0	0	2	11	13	5	0	4	9
		4.4: Scrub Forest	1360	705	11	2076	3	2079	263	21	0	1	6	1932	2222	12	6	21	38
		4.5: Swamp / Mangroves	0	0	0	0	0	0	0	0	0	1	2	2	5	0	0	3	3
	Sub Total	2783	2247	43	5072	13	5085	372	50	0	3	21	6392	6838	76	62	66	205	
	5: Grass / Grazing	5.1: Grass / Grazing	95	3	40	138	9	147	76	3	0	0	15	315	408	2	103	14	118
	6: Snow and Glacier	6.1: Snow and Glacier	0	0	0	0	0	0	1547	24	0	1	19	53	1643	0	0	0	0
	7: Wetlands / Water bodies	7.1: Inland Wetland	501	0	4	505	29	535	62	0	0	23	77	103	265	7	2	10	18
		7.2: Coastal Wetland	15	0	0	15	1	16	1	0	0	17	22	3	44	0	0	12	13
7.3: River/Stream/Canals		805	1	2	809	125	934	14	22	0	4	137	374	551	6	1	2	9	
7.4: Water bodies		978	0	3	981	71	1051	20	4	0	23	1	58	106	5	1	3	9	
Sub Total		2299	1	9	2310	226	2536	97	26	0	67	237	538	966	18	5	27	49	
Grand Total	1503956	4023	85118	1593097	228179	1821276	105154	9941	18690	9754	33436	186885	363860	6620	75079	40150	121848		

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.

Land Use Land Cover (LULC) Change Matrix

(Area in Sq. km)

LULC_CLASSES			All India													
			2015-16													
			4: Forest					5: Grass / Grazing	6: Snow and Glacier	7: Wetlands / Water bodies					Grand Total	
			4.1	4.2	4.3	4.4	4.5	Sub Total	5.1	6.1	7.1	7.2	7.3	7.4		Sub Total
2011-12	1: Agriculture	1.1: Crop land	102	0	37	509	0	648	48	3	222	5	1014	987	2229	1553007
		1.2: Current Shifting cultivation	321	1	0	1176	0	1498	1	0	0	0	0	0	0	3743
		1.3: Plantation	53	0	0	30	0	83	4	5	3	0	12	9	25	83514
		Farmland (FL) = 1.1+1.2+1.3	476	1	37	1714	0	2229	53	8	226	5	1027	996	2253	1640263
		1.4: Fallow	2	0	8	60	0	70	41	0	122	0	106	65	294	181469
		Sub Total	479	1	45	1774	0	2299	94	8	348	6	1133	1061	2547	1821732
	2: Barren/Unculturable/Wastelands	2.1: Barren Rocky	7	0	0	453	0	460	0	65902	0	0	0	1	1	173986
		2.2: Gullied / Ravinous Land	10	0	0	86	0	96	0	27	0	0	6	4	10	7511
		2.3: Rann	0	0	0	0	0	0	0	0	0	132	0	0	132	18822
		2.4: Salt Affected Land	0	0	0	0	0	1	0	0	2	21	5	3	32	9610
		2.5: Sandy Area	8	0	2	1	2	13	31	305	4	0	35	0	39	30644
		2.6: Scrub Land	623	6	45	1042	0	1716	30	2237	26	16	279	79	400	184144
		Sub Total	648	7	47	1583	2	2285	61	68471	32	169	325	88	614	424717
	3: Builtup	3.1: Mining	9	0	0	13	0	23	0	0	0	0	2	8	10	6024
		3.2: Rural	1	0	0	6	0	7	0	0	0	0	11	2	14	74653
		3.3: Urban	5	0	2	12	0	18	1	0	1	0	3	1	5	38321
		Sub Total	14	0	2	32	0	48	2	0	1	0	16	12	29	118998
	4: Forest	4.1: Deciduous	433133	5	86	4410	0	437633	10	0	6	0	66	68	139	444433
		4.2: Evergreen/Semi evergreen	288	151911	8	2416	0	154623	139	303	1	0	15	5	21	156105
		4.3: Forest Plantation	58	0	23025	699	0	23782	1	0	0	0	0	0	1	23895
		4.4: Scrub Forest	2248	1113	125	88154	3	91643	57	333	1	0	14	17	33	96406
		4.5: Swamp / Mangroves	1	0	0	2	4657	4660	0	0	13	6	9	8	36	4704
		Sub Total	435728	153029	23244	95680	4661	712342	207	637	21	7	104	98	230	725543
	5: Grass / Grazing	5.1: Grass / Grazing	6	4	16	340	2	368	22502	1333	5	0	475	40	521	25397
	6: Snow and Glacier	6.1: Snow and Glacier	2	3	0	126	0	131	7	30799	0	0	0	1	1	32581
	7: Wetlands / Water bodies	7.1: Inland Wetland	2	0	1	8	0	11	18	1	7148	2	61	116	7327	8175
		7.2: Coastal Wetland	0	0	0	0	38	38	0	0	0	10598	1	10	10609	10719
7.3: River/Stream/Canals		5	1	0	38	19	62	659	20	40	6	58699	52	58797	61032	
7.4: Water bodies		3	1	0	38	1	43	1	56	11	0	15	57074	57101	58367	
Sub Total		10	2	1	84	58	155	679	77	7200	10606	58776	57251	133833	138294	
Grand Total			436886	153045	23355	99620	4723	717629	23551	101325	7606	10787	60829	58552	137774	3287263

Source: National Remote Sensing Centre

Note: Totals may not match due to rounding off.