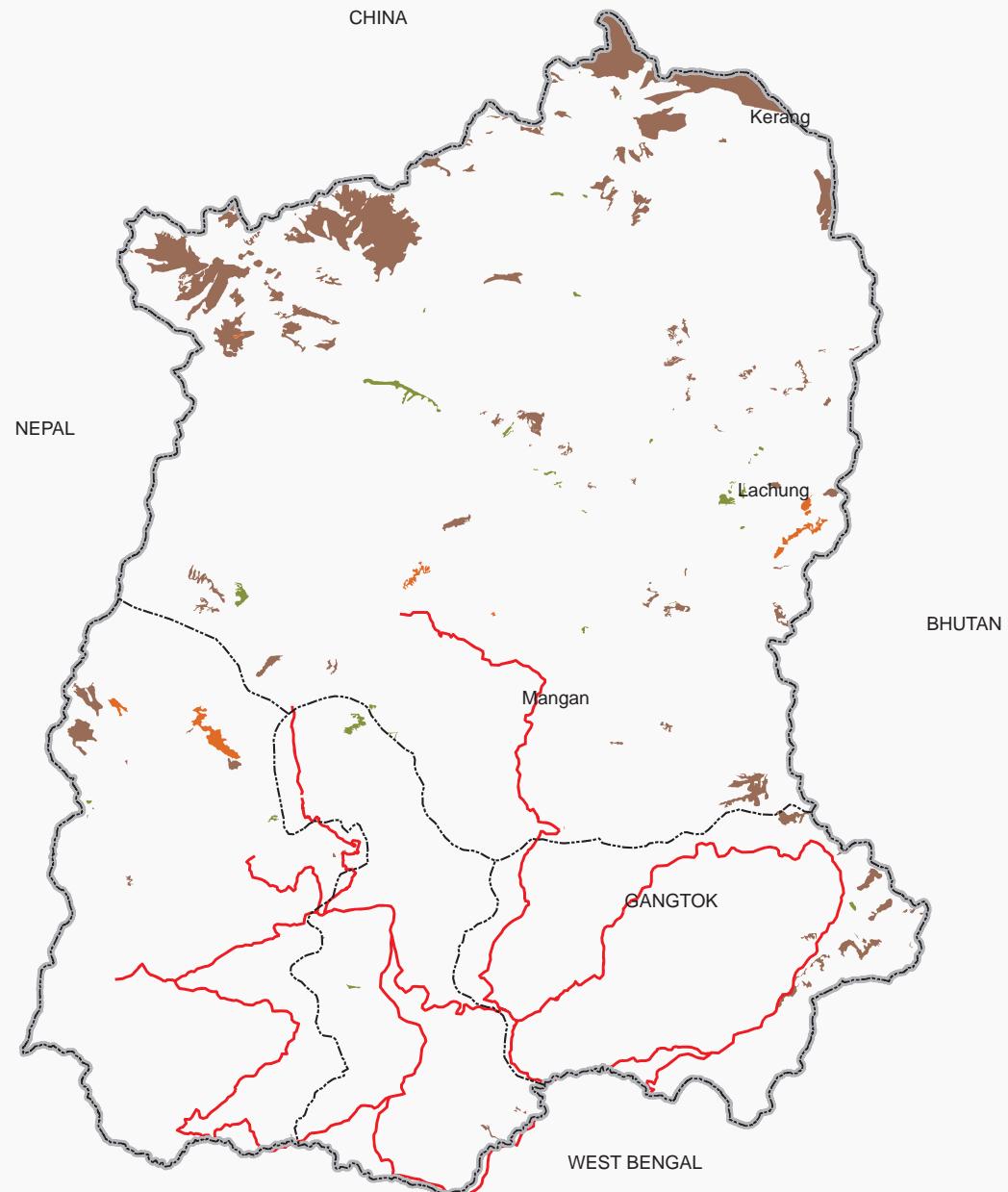


WASTELAND CHANGE MAP

From 2005-06 to 2008-09
Sikkim



LEGEND

- Wastelands to Non Wastelands (11.83 km.)
- Wastelands to another Wasteland (249.35 sq. km.)
- Non Wasteland to Wasteland (4.29 sq. km.)
- State boundary
- District Boundary
- Railway line
- Major roads



Source: Wasteland Maps-2005-06 on 1:50,000 scale, three season IRS P6 LISS-III data & limited field check

Coordination / Partner Inst.

Regional Centre - East
National Remote Sensing Centre
IIT Campus
Kharagpur, West Bengal, 721 301

Land Use Division, RS & GIS AA
National Remote Sensing Centre
ISRO, Dept. of Space, GOI
Balanagar, Hyderabad - 500 625

Sponsored by
Dept. of Land Resources
Min. of Rural Development
G - Wing, Nirman Bhawan
GOI, New Delhi - 110 011

Figure - 31b

Table-30 (a): Change matrix showing inter-class area changes in different wasteland categories in Sikkim during 2005-06 and 2008-09

WL Categories	WL during 2005-06 remaining as WL in 2008-09				WL 2005-06 becoming non-WL in 2008-09	(2005-06)	
	4	11	22	23		Category Total	Grand Total
1	5.26	0.45	0.47	0.17	0.02	6.37	3280.69
3	--	60.19	0.29	--	0.29	60.77	
4	14.98	0.55	342.59	213.61	8.17	579.90	
5	--	--	18.84	2611.47	3.35	2633.66	
999	--	--	0.04	4.25	--	--	
Category Total (2008-09)	20.23	61.18	362.22	2829.51	11.83		
Grand Total (2008-09)	3273.15						

WL Category	Reduction from 0506 to 0809		Increase from 0506 to 0809	
	Area	No of polygons	Area	No of polygons
4	0.02	1	--	--
11	0.29	1	--	--
22	8.17	34	0.04	3
23	3.35	3	4.25	6
Total	11.83	39	4.29	9

Wastelands becoming Non-wastelands (-)
Non-wastelands becoming Wastelands (+)
NET Decrease (-)

11.83
4.29
7.54

Green denotes Change from wasteland to non-wasteland
Red denotes change from non-wasteland to wastelands
Blue denotes no change in the wasteland category
Brown denotes class/ category change within wastelands

Wasteland Classes			Non-Wasteland Classes
1. Gullied and/ or ravinous land (Medium)	9. Shifting Cultivation - Current Jhum	17. Sands-Desertic	24. Built-up
2. Gullied and/ or ravinous land (Deep)	10. Shifting Cultivation - Abandoned Jhum	18. Sands-Semi Stab.-Stab>40m	25. Industrial Area
3. Land with Dense Scrub	11. Under-utilised/degraded forest (Scrub domin)	19. Sands-Semi Stab.-Stab 15-40m	26. Cropland
4. Land with Open Scrub	12. Under-utilised/degraded forest (Agriculture)	20. Mining Wastelands	27. Fallow Land
5. Waterlogged and Marshy land (Permanent)	13. Degraded pastures/ grazing land	21. Industrial wastelands	28. Plantation
6. Waterlogged and Marshy land (Seasonal)	14. Degraded land under plantation crop	22. Barren Rocky/Stony waste	29. Forest-Dense/Open
7. Land affected by salinity/alkalinity (Medium)	15. Sands-Riverine	23. Snow covered /Glacial area	30. Forest Plantation
8. Land affected by salinity/alkalinity (Strong)	16. Sands-Coastal	999. Non-Wasteland Area	31. Grasslands
			32. Waterbodies

Table-30 (b): Sikkim

District-wise and category-wise distribution of wastelands(sq.km.) during 2008-09 vis-a-vis 2005-06

WL class	East Sikkim			North Sikkim			South Sikkim			West Sikkim			Total		
	2005-06	2008-09	Change	2005-06	2008-09	Change	2005-06	2008-09	Change	2005-06	2008-09	Change	2005-06	2008-09	Change
1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	1.03	10.57	9.54	2.54	7.43	4.89	2.26	1.68	-0.58	0.53	0.55	0.02	6.37	20.23	13.87
5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11	4.51	4.21	-0.30	24.45	24.93	0.48	15.05	14.95	-0.11	16.94	17.10	0.16	60.96	61.18	0.23
12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	111.67	104.15	-7.52	351.15	145.17	-205.98	5.09	3.66	-1.43	111.99	109.24	-2.75	579.90	362.22	-217.67
23	5.12	2.52	-2.60	2474.07	2662.62	188.55	29.19	29.54	0.35	125.28	134.83	9.55	2633.66	2829.51	195.85
Total WL	122.34	121.45	-0.89	2852.21	2840.15	-12.05	51.58	49.82	-1.77	254.75	261.72	6.97	3280.88	3273.15	-7.73
TGA	954.00			4226.00			750.00			1166.00			7096.00		

- | | | |
|--|--|----------------------------------|
| 1. Gullied and/ or ravinous land (Medium) | 9. Shifting Cultivation - Current Jhum | 17. Sands-Desertic |
| 2. Gullied and/ or ravinous land (Deep) | 10. Shifting Cultivation - Abandoned Jhum | 18. Sands-Semi Stab.-Stab>40m |
| 3. Land with Dense Scrub | 11. Under-utilised/degraded forest (Scrub domin) | 19. Sands-Semi Stab.-Stab 15-40m |
| 4. Land with Open Scrub | 12. Under-utilised/degraded forest (Agriculture) | 20. Mining Wastelands |
| 5. Waterlogged and Marshy land (Permanent) | 13. Degraded pastures/ grazing land | 21. Industrial wastelands |
| 6. Waterlogged and Marshy land (Seasonal) | 14. Degraded land under plantation crop | 22. Barren Rocky/Stony waste |
| 7. Land affected by salinity/alkalinity (Medium) | 15. Sands-Riverine | 23. Snow covered /Glacial area |
| 8. Land affected by salinity/alkalinity (Strong) | 16. Sands-Coastal | |