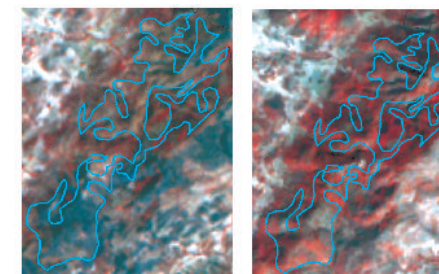
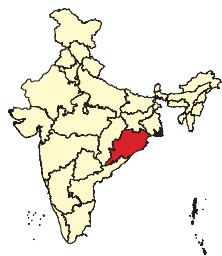


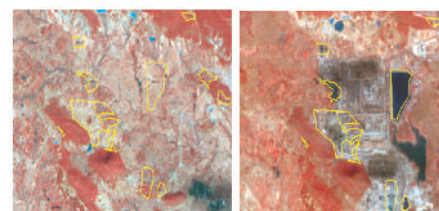
### Salient Features

- Increase in wastelands area by 465.82 sq. km.
- Increase in **shifting cultivation-abandoned jhum** area by 311.38 sq. km.
- 36.84 sq. km. converted into forest plantation, primarily from land with open scrub by 24.27 sq. km.
- Puri district has a decrease in wastelands area by 19.87 sq. km. which has been contributed by **waterlogged/marshy area (seasonal), land with dense scrub and sand (coastal)**.
- Navrangpur district has a decrease in wastelands area by 14.97 sq. km. contributed by **land with dense and open scrub**.
- Kandhamal district has an overall increase in wastelands area by 108.54 sq. km. due to Increase in area under **Shifting cultivation (current)** by 90.57 sq. km.
- Kalahandi district witnessed overall increase in wastelands area by 81.03 sq. km.; Increase in area under **shifting cultivation (abandoned)** by 60.65 sq. km. and **Under-utilized/degraded forest (Scrub domin.)** by 12.01 sq. km.
- An area of 40.00 sq. km. of wastelands is converted into forest (dense/open) contributed from Deg. Forest, shifting cultivation (abandoned)

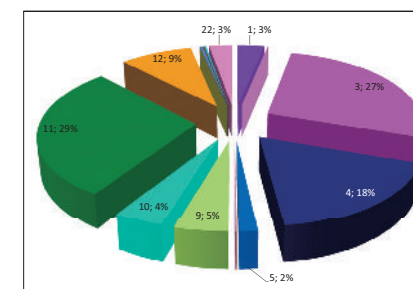
# ODISHA Spatial Distribution of Wastelands 2015-16



Lat : 18°17'41.766"N Long : 82°22'53.441"E  
District: Malkangiri  
08-09 : Current Jhum; 15-16 : Forest-Dense/Open



Lat : 19°19'56.642"N Long : 82°33'42.426"E  
District: Bhubaneswar  
08-09 : Open Scrub; 15-16 : Industry



### Legend

- Gullied and/ or ravinous land (Medium)
- Gullied and/ or ravinous land (Deep)
- Land with Dense Scrub
- Land with Open Scrub
- Waterlogged and Marshy land (Permanent)
- Waterlogged and Marshy land (Seasonal)
- Land Affected by salinity / alkalinity (Moderate)
- Land Affected by salinity / alkalinity (Strong)
- Shifting Cultivation - Current Jhum
- Shifting Cultivation - Abandoned Jhum
- Under-utilised/degraded forest (Scrub domin)
- Under-utilised/degraded forest (Agriculture)
- Degraded pastures/grazing land
- Degraded land under plantation crop
- Sands - Riverine
- Sands - Coastal
- Sands - Desertic
- Sands - Semi Stab:- Stab > 40m
- Sands - Semi Stab:- Stab 15-40m
- Mining Wastelands
- Industrial Wastelands
- Barren Rocky Area
- Snow Covered/ Glacial Area
- Non Wasteland Area
- Water ways
- District Boundary
- Railways
- Major Roads

**Partner Inst.**  
Odisha Space Applications Centre  
Department of S&T, Government of Odisha,  
45 / 48, JayadevVihar, Unit - 16  
Bhubaneswar - 751 023

**Executed By**  
Land Use & Cover Monitoring Divn.  
LRUMG, Remote Sensing Application  
National Remote Sensing Centre  
ISRO, Dept. of Space, GOI  
Balanagar, Hyderabad - 500037

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

Total Geog. Area (TGA): 155707.00 sq. km.  
Total wasteland area : 18422.36 sq. km.  
Wasteland Percentage: 11.83

Source: Wasteland Maps: 2008-09 on 1:50,000 scale,  
Three seasons IRS P6 LISS-III data of Kharif (Oct/Nov-2015),  
Rabi (Jan/Feb-2016) and Zaid (April/May-2016) & Ground truth



**ODISHA**  
Wastelands Area Change Matrix : 2008-09 and 2015-16

Area in sq.km

WL Categories	WL during 2008-09 remaining as WL in 2015-16																		WL 2008-09 becoming non WL in 2015-16								2008-09		
	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	20	21	22	24	25	26	27	28	29	30	31	32	Category Total	Grand Total
1	544.04		0.12	0.81																	1.65		0.16	0.26			547.05	17956.54	
2		14.69																											14.69
3	0.10		4769.42	183.59	0.37				8.91	3.44		0.11				0.01		0.53	0.47	0.83	1.34	0.67	0.75	24.27	0.53	1.75	4997.11		
4	0.66		148.05	3065.40	0.21				3.61	2.07		0.61			0.96	0.19		0.83	0.62	0.12	0.21	0.88	0.27	5.09	0.17	0.60	3230.56		
5				0.18	240.71	2.32						0.06						0.13		9.14	0.08	1.41	1.62	0.26		1.93	257.82		
6			0.26	0.06	20.46	1.63						0.72								19.23			0.10			0.04	42.49		
7							5.81																				5.81		
8							4.83	15.45							0.03												20.31		
9	0.30		6.87	2.49					495.53	334.17	2.45	0.39								1.60	0.21		8.03	0.02	0.04	852.11			
10			2.62	2.69					73.70	395.33	3.87									0.42			18.38		0.22	497.22			
11	48.74					0.54			9.55	1.50	5074.69	4.91			0.08	0.07	0.15		0.47	1.05	1.14	2.18	0.19	6.99	5.65	0.38	5158.28		
12	0.08	0.05	0.55	10.57	0.03				2.38	0.47	96.50	1603.70							0.70	0.52	1.48	0.68	1.89			1719.60			
13																							0.00				0.00		
15			0.35	0.44										1.16						1.26							3.22		
16				0.39			0.13							0.26	56.72			0.18		0.06			1.56	1.29	1.48		62.07		
20				0.17												8.48				1.15			0.01				9.82		
21				0.19																			0.24				30.19		
22																											508.19		
999	0.37		45.60	33.90	31.96		0.06		261.95	71.62	128.48	2.95	0.06	2.26	5.10	7.33	9.63										508.19		
Category Total (2015-16)	594.28	14.74	4973.84	3300.90	293.74	4.49	10.82	15.45	855.65	808.60	5306.77	1612.67	0.06	3.68	61.92	16.83	39.74	508.19	2.15	4.00	35.97	5.50	3.83	40.00	36.84	0.70	6.45		
Grand Total (2015-16)	18422.36																												

WL Category	Reduction from 0809 to 1516		Increase from 0809 to 1516	
	Area	No of polygons	Area	No of polygons
1	2.08	12	0.37	67
2				
3	31.15	431	45.60	223
4	8.80	146	33.90	240
5	14.56	125	31.96	254
6	19.37	41		
7			0.06	2
8				
9	9.90	266	261.95	1894
10	19.01	282	71.62	560
11	18.04	1453	128.48	831
12	5.26	38	2.95	16
13	0.00	2		
14			0.06	1
15	1.26	3	2.26	24
16	4.58	25	5.10	39
20	1.16	5	7.33	24
21	0.24	1	9.63	42
Total	135.43	2830	601.27	4217

Wastelands becoming Non-wastelands (-) **135.43** **Green** denotes Change from wasteland to non-wasteland  
 Non-wastelands becoming Wastelands (+) **601.27** **Red** denotes change from non-wasteland to wastelands  
 NET Change (2015 - 16)- (2008 - 09) (+) **465.82** **Blue** denotes no change in the wasteland category  
 2008 - 09 Wastelands statistics are revised version.  
 Area under category total is rounded to nearest decimal.

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

## Odisha

## Wastelands Area Changes – 2008-09 and 2015-16

District	WL_Class	1	2	3	4	5	6	7	8	9	10	11
Angul	2008-09	103.31	2.73	93.93	180.67	3.07	--	--	--	--	--	313.89
	2015-16	105.59	2.73	98.23	177.52	3.76	--	--	--	--	--	311.63
	Change	2.28	--	4.30	-3.15	0.69	--	--	--	--	--	-2.25
Baleswar	2008-09	1.21	--	21.69	24.89	6.49	1.07	--	--	--	--	35.64
	2015-16	1.21	--	23.45	23.31	9.17	0.19	--	--	--	--	35.67
	Change	--	--	1.76	-1.58	2.68	-0.88	--	--	--	--	0.04
Bargarh	2008-09	8.22	--	82.18	136.42	0.53	--	--	--	--	--	287.93
	2015-16	8.22	--	82.05	136.55	0.53	--	--	--	--	--	301.55
	Change	0.00	--	-0.14	0.13	0.00	--	--	--	--	--	13.62
Bhadrak	2008-09	--	--	0.22	2.71	12.92	1.31	--	--	--	--	--
	2015-16	--	--	0.27	2.52	15.78	0.18	--	--	--	--	--
	Change	--	--	--	-0.19	2.86	-1.13	--	--	--	--	--
Balangir	2008-09	2.22	--	163.77	213.34	1.21	0.10	--	--	--	1.92	197.35
	2015-16	8.55	--	135.41	242.84	1.19	--	--	--	--	2.11	203.14
	Change	6.32	--	-28.36	29.50	-0.02	-0.10	--	--	--	0.20	5.79
Boudh	2008-09	1.90	--	125.23	89.22	--	--	--	--	0.65	1.24	132.77
	2015-16	1.90	--	100.76	113.70	--	--	--	--	0.63	0.97	133.51
	Change	0.00	0.00	-24.48	24.48	0.00	0.00	0.00	0.00	-0.02	-0.27	0.74
Cuttack	2008-09	--	--	100.59	76.87	26.24	2.36	--	--	0.05	--	72.53
	2015-16	--	--	96.40	79.66	31.91	0.02	--	--	--	--	74.07
	Change	--	--	-4.19	2.79	5.66	-2.34	0.00	0.00	-0.05	0.00	1.55
Deogarh	2008-09	18.37	0.10	72.20	99.03	0.23	--	--	--	--	--	107.11
	2015-16	18.36	0.10	72.91	98.60	0.23	--	--	--	--	--	106.80
	Change	-0.01	0.00	0.72	-0.43	0.00	0.00	0.00	0.00	0.00	0.00	-0.32
Dhenkanal	2008-09	15.67	--	217.40	100.15	0.58	--	--	--	--	0.56	105.66
	2015-16	15.67	--	214.95	102.77	0.59	--	--	--	0.47	0.56	105.21
	Change	0.00	0.00	-2.45	2.62	0.01	0.00	0.00	0.00	0.47	0.00	-0.45
Gajapati	2008-09	11.19	--	194.95	320.86	0.12	1.68	--	--	246.33	105.58	196.92
	2015-16	11.85	--	216.41	314.54	2.17	--	--	--	101.89	304.81	201.11
	Change	0.66	0.00	21.46	-6.32	2.06	-1.68	0.00	0.00	-144.45	199.24	4.19
Ganjam	2008-09	68.65	--	262.83	146.67	24.64	--	--	--	24.32	71.95	440.93
	2015-16	70.93	--	285.25	125.96	24.09	--	--	--	48.99	47.87	445.38
	Change	2.28	0.00	22.42	-20.71	-0.55	0.00	0.00	0.00	24.67	-24.07	4.44
Jagatsinghpur	2008-09	--	--	0.91	4.64	18.79	0.42	5.81	11.79	--	--	6.32
	2015-16	--	--	0.73	6.46	20.12	0.05	5.99	11.79	--	--	6.32
	Change	--	--	-0.18	1.82	1.33	-0.37	0.18	0.00	0.00	0.00	0.00
Jajapur	2008-09	0.20	--	33.44	77.87	20.85	7.54	--	--	0.42	--	58.15
	2015-16	0.20	--	33.86	77.65	30.07	--	--	--	0.97	0.03	58.69
	Change	0.00	0.00	0.42	-0.21	9.22	-7.54	0.00	0.00	0.55	0.03	0.54
Jharsuguda	2008-09	0.93	--	59.00	95.52	1.38	--	--	--	--	--	34.35
	2015-16	1.02	--	51.16	103.60	1.50	--	--	--	--	--	34.87
	Change	0.09	0.00	-7.84	8.08	0.12	0.00	0.00	0.00	0.00	0.00	0.52

Note: "--" Denotes this Class is not existing in the District / State

2008-09 Wastelands statistics are revised version.

- |  |  |
|--|--|
| 1. Gullied and/ or ravine land (Medium)    | 7. Land affected by salinity/alkalinity (Medium) |
| 2. Gullied and/ or ravine land (Deep)      | 8. Land affected by salinity/alkalinity (Strong) |
| 3. Land with Dense Scrub                   | 9. Shifting Cultivation - Current Jhum           |
| 4. Land with Open Scrub                    | 10. Shifting Cultivation - Abandoned Jhum        |
| 5. Waterlogged and Marshy land (Permanent) | 11. Under-utilised/degraded forest (Scrub domin) |
| 6. Waterlogged and Marshy land (Seasonal)  | 12. Under-utilised/degraded forest (Agriculture) |

Area in sq.km

12	13	14	15	16	17	18	19	20	21	22	23	Total	TGA
14.75	--	--	--	--	--	--	--	0.29	10.14	4.16	--	726.92	6375
13.91	--	--	--	--	--	--	--	3.14	11.06	4.16	--	731.73	
-0.84	0.00	--	--	--	--	--	--	2.86	0.93	--	--	4.81	
5.69	--	--	0.30	2.88	--	--	--	--	--	2.80	--	102.65	3806
5.69	--	--	0.12	1.00	--	--	--	--	--	2.80	--	102.61	
--	--	--	-0.18	-1.88	--	--	--	--	--	--	--	-0.04	
11.13	--	--	--	--	--	--	--	0.68	--	3.87	--	530.97	5837
11.11	--	--	--	--	--	--	--	0.68	--	3.87	--	544.56	
-0.02	--	--	--	--	--	--	--	--	--	--	--	13.58	
--	--	--	0.24	--	--	--	--	--	0.04	--	--	17.42	2505
--	--	--	0.24	--	--	--	--	--	0.06	--	--	19.05	
--	--	--	--	--	--	--	--	--	--	--	--	1.62	
87.64	--	--	--	--	--	--	--	--	--	37.18	--	704.74	6575
87.64	--	0.06	--	--	--	--	--	--	--	37.18	--	718.12	
--	--	--	--	--	--	--	--	--	--	--	--	13.38	
5.57	--	--	--	--	--	--	--	--	--	8.79	--	365.37	3098
5.57	--	--	--	--	--	--	--	--	--	8.79	--	365.82	
0.00	0.00	0.00	0.00	0.00	--	--	--	0.00	0.00	0.00	--	0.45	
11.29	--	--	0.27	--	--	--	--	0.12	--	2.76	--	293.09	3932
10.08	--	--	0.17	--	--	--	--	1.05	0.16	2.76	--	296.29	
-1.21	0.00	0.00	-0.10	0.00	--	--	--	0.93	0.16	0.00	--	3.20	
54.87	--	--	--	--	--	--	--	--	--	5.26	--	357.16	2940
55.03	--	--	--	--	--	--	--	0.04	--	5.26	--	357.33	
0.16	0.00	0.00	0.00	0.00	--	--	--	0.04	0.00	0.00	--	0.17	
78.18	--	--	--	--	--	--	--	--	1.66	7.19	--	527.06	4452
78.32	--	--	--	--	--	--	--	--	1.66	7.19	--	527.41	
0.14	0.00	0.00	0.00	0.00	--	--	--	0.00	0.00	0.00	--	0.35	
30.63	--	--	--	--	--	--	--	--	--	49.22	--	1157.47	4325
28.46	--	--	--	--	--	--	--	--	--	49.22	--	1230.46	
-2.17	0.00	0.00	0.00	0.00	--	--	--	0.00	0.00	0.00	--	72.99	
74.51	--	--	--	9.07	--	--	--	--	--	32.22	--	1155.79	8206
68.95	--	--	0.12	11.31	--	--	--	--	--	32.22	--	1161.06	
-5.57	0.00	0.00	0.12	2.24	--	--	--	0.00	0.00	0.00	--	5.27	
--	--	--	0.02	22.96	--	--	--	--	10.33	--	--	81.98	1668
--	--	--	1.08	23.12	--	--	--	--	10.51	--	--	86.16	
0.00	0.00	0.00	1.06	0.16	--	--	--	0.00	0.18	0.00	--	4.18	
19.00	--	--	0.11	--	--	--	--	0.99	0.07	2.29	--	220.93	2899
18.99	--	--	0.11	--	--	--	--	0.83	0.60	2.29	--	224.31	
-0.01	0.00	0.00	0.00	0.00	--	--	--	-0.16	0.54	0.00	--	3.37	
1.87	--	--	--	--	--	--	--	6.03	1.75	0.94	--	201.77	2080
1.61	--	--	--	--	--	--	--	7.25	4.68	0.94	--	206.63	
-0.26	0.00	0.00	0.00	0.00	--	--	--	1.22	2.93	0.00	--	4.86	

TGA - Total Geographical Area

13. Degraded pastures/ grazing land	19. Sands-Semi Stab.-Stab 15-40m
14. Degraded land under plantation crop	20. Mining Wastelands
15. Sands-Riverine	21. Industrial wastelands
16. Sands-Coastal	22. Barren Rocky/Stony waste
17. Sands-Desertic	23. Snow covered /Glacial area
18. Sands-Semi Stab.-Stab>40m	



## Odisha contd...

Wastelands Area Changes – 2008-09 and 2015-16

District	WL_Class	1	2	3	4	5	6	7	8	9	10	11
Kalahandi	2008-09	21.12	--	217.87	171.59	0.44	0.01	--	--	84.01	66.02	291.24
	2015-16	22.75	--	216.78	174.83	0.44	--	--	--	91.36	126.67	303.25
	Change	1.63	0.00	-1.08	3.25	0.00	-0.01	0.00	0.00	7.35	60.65	12.01
Kandhamal	2008-09	2.40	--	514.14	132.58	--	--	--	--	158.94	54.90	230.80
	2015-16	2.74	--	525.65	123.97	--	--	--	--	249.51	65.36	236.73
	Change	0.34	0.00	11.50	-8.61	0.00	0.00	0.00	0.00	90.57	10.46	5.93
Kendrapara	2008-09	--	--	3.65	5.67	19.02	3.08	--	8.52	--	--	5.89
	2015-16	--	--	3.59	5.67	23.43	3.95	4.84	3.67	--	--	5.20
	Change	--	--	-0.06	0.00	4.41	0.87	4.84	-4.86	0.00	0.00	-0.69
Keonjhar	2008-09	66.74	10.08	250.31	289.65	10.13	1.34	--	--	4.79	10.55	161.27
	2015-16	70.07	10.13	250.57	296.09	11.49	--	--	--	22.80	7.94	160.60
	Change	3.34	0.05	0.25	6.44	1.37	-1.34	0.00	0.00	18.02	-2.61	-0.67
Khordha	2008-09	0.02	--	118.05	121.97	22.71	1.12	--	--	0.03	0.39	117.33
	2015-16	0.02	--	104.11	137.02	25.48	--	--	--	0.25	0.39	118.99
	Change	0.00	0.00	-13.95	15.05	2.77	-1.12	0.00	0.00	0.22	0.00	1.65
Koraput	2008-09	49.38	1.79	836.33	8.00	2.58	--	--	--	110.00	44.85	156.77
	2015-16	49.88	1.79	841.33	11.92	2.60	--	--	--	95.97	92.65	172.47
	Change	0.50	0.00	5.00	3.91	0.01	0.00	0.00	0.00	-14.03	47.80	15.70
Malkangiri	2008-09	1.01	--	373.15	101.71	--	--	--	--	175.90	128.26	349.03
	2015-16	1.01	--	374.79	99.41	--	--	--	--	196.94	116.12	353.01
	Change	0.00	0.00	1.65	-2.29	0.00	0.00	0.00	0.00	21.03	-12.14	3.98
Mayurbhanj	2008-09	2.33	--	71.45	118.61	0.41	0.01	--	--	--	--	170.60
	2015-16	2.33	--	88.37	110.43	0.43	0.01	--	--	--	--	189.63
	Change	0.00	0.00	16.92	-8.18	0.01	0.00	0.00	0.00	0.00	0.00	19.04
Nabarangpur	2008-09	3.74	--	126.41	158.31	0.57	--	--	--	10.92	1.51	216.43
	2015-16	6.03	--	119.14	150.03	0.55	--	--	--	9.86	1.29	257.83
	Change	2.29	0.00	-7.27	-8.28	-0.02	0.00	0.00	0.00	-1.06	-0.22	41.40
Nayagarh	2008-09	42.94	--	261.77	89.96	1.29	--	--	--	0.42	0.21	259.36
	2015-16	57.27	--	261.60	89.68	1.37	--	--	--	0.42	0.21	254.67
	Change	14.33	0.00	-0.16	-0.28	0.08	0.00	0.00	0.00	0.00	0.00	-4.69
Nuapada	2008-09	0.25	--	96.67	118.84	0.01	--	--	--	--	--	322.95
	2015-16	0.35	--	95.86	119.00	--	--	--	--	--	--	323.69
	Change	0.10	0.00	-0.81	0.16	-0.01	0.00	0.00	0.00	0.00	0.00	0.74
Puri	2008-09	--	--	15.80	11.60	82.08	22.45	--	--	--	--	8.10
	2015-16	--	--	14.36	12.31	85.25	0.08	--	--	--	--	9.10
	Change	--	--	-1.44	0.70	3.17	-22.37	0.00	0.00	0.00	0.00	1.00
Rayagada	2008-09	86.72	--	309.55	15.91	--	--	--	--	34.76	8.61	163.46
	2015-16	98.87	--	309.58	29.23	--	--	--	--	33.08	40.94	196.46
	Change	12.15	0.00	0.03	13.33	0.00	0.00	0.00	0.00	-1.69	32.33	33.00
Sambalpur	2008-09	29.95	--	126.56	211.57	1.31	0.01	--	--	--	0.62	275.07
	2015-16	31.06	--	119.80	218.45	1.37	0.01	--	--	--	0.62	273.59
	Change	1.11	0.00	-6.77	6.88	0.06	0.00	0.00	0.00	0.00	0.00	-1.48

Note: "--" Denotes this Class is not existing in the District / State

2008-09 Wastelands statistics are revised version.

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|--|--|
| 1. Gullied and/ or ravinous land (Medium)  | 7. Land affected by salinity/alkalinity (Medium) |
| 2. Gullied and/ or ravinous land (Deep)    | 8. Land affected by salinity/alkalinity (Strong) |
| 3. Land with Dense Scrub                   | 9. Shifting Cultivation - Current Jhum           |
| 4. Land with Open Scrub                    | 10. Shifting Cultivation - Abandoned Jhum        |
| 5. Waterlogged and Marshy land (Permanent) | 11. Under-utilised/degraded forest (Scrub domin) |
| 6. Waterlogged and Marshy land (Seasonal)  | 12. Under-utilised/degraded forest (Agriculture) |



Area in sq.km

12	13	14	15	16	17	18	19	20	21	22	23	Total	TGA
121.50	--	--	1.70	--	--	--	--	0.07	2.07	55.09	--	1032.73	7920
120.30	--	--	--	--	--	--	--	0.07	2.23	55.09	--	1113.80	
-1.20	0.00	0.00	-1.70	0.00	--	--	--	0.00	0.17	0.00	--	81.07	
103.33	--	--	--	--	--	--	--	--	--	15.32	--	1212.43	8021
101.69	--	--	--	--	--	--	--	--	--	15.32	--	1320.97	
-1.64	0.00	0.00	0.00	0.00	--	--	--	0.00	0.00	0.00	--	108.54	
9.41	--	--	0.19	6.28	--	--	--	--	--	--	--	61.72	2644
9.38	--	--	0.97	7.00	--	--	--	--	--	--	--	67.70	
-0.03	0.00	0.00	0.77	0.72	--	--	--	0.00	0.00	0.00	--	5.98	
112.20	--	--	--	--	--	--	--	1.52	0.43	37.70	--	956.69	8303
110.27	--	--	--	--	--	--	--	1.23	0.29	37.70	--	979.17	
-1.93	0.00	0.00	0.00	0.00	--	--	--	-0.29	-0.14	0.00	--	22.48	
4.62	--	--	0.36	0.02	--	--	--	0.02	0.01	4.20	--	390.86	2813
4.16	--	--	0.36	0.02	--	--	--	0.02	0.01	4.20	--	395.03	
-0.46	0.00	0.00	0.00	0.00	--	--	--	0.00	0.00	0.00	--	4.17	
37.42	--	--	--	0.06	--	--	--	--	0.01	23.44	--	1270.63	8807
35.84	--	--	--	0.06	--	--	--	--	2.68	23.44	--	1330.62	
-1.58	0.00	0.00	0.00	0.00	--	--	--	0.00	2.67	0.00	--	59.99	
179.28	0.00	--	--	--	--	--	--	--	--	32.51	--	1340.84	5791
173.87	--	--	--	--	--	--	--	--	--	32.51	--	1347.66	
-5.41	0.00	0.00	0.00	0.00	--	--	--	0.00	0.00	0.00	--	6.81	
121.02	--	--	0.02	--	--	--	--	--	--	75.52	--	559.97	10418
99.83	--	--	0.02	--	--	--	--	0.06	--	75.52	--	566.62	
-21.20	0.00	0.00	0.00	0.00	--	--	--	0.06	0.00	0.00	--	6.65	
402.31	--	--	--	--	--	--	--	--	--	5.26	--	925.46	5291
360.51	--	--	--	--	--	--	--	--	--	5.26	--	910.49	
-41.80	0.00	0.00	0.00	0.00	--	--	--	0.00	0.00	0.00	--	-14.97	
25.92	--	--	--	--	--	--	--	--	0.27	50.53	--	732.68	3890
16.28	--	--	--	--	--	--	--	--	0.27	50.53	--	732.31	
-9.64	0.00	0.00	0.00	0.00	--	--	--	0.00	0.00	0.00	--	-0.37	
27.51	--	--	--	--	--	--	--	--	--	10.66	--	576.89	3852
26.49	--	--	--	--	--	--	--	--	--	10.66	--	576.06	
-1.02	0.00	0.00	0.00	0.00	--	--	--	0.00	0.00	0.00	--	-0.84	
0.70	--	--	--	20.80	--	--	--	--	--	--	--	161.53	3479
0.66	--	--	0.49	19.41	--	--	--	--	--	--	--	141.66	
-0.04	0.00	0.00	0.49	-1.39	--	--	--	0.00	0.00	0.00	--	-19.87	
66.77	--	--	--	--	--	--	--	--	2.16	13.31	--	701.25	7073
55.46	--	--	--	--	--	--	--	1.63	2.29	13.31	--	780.85	
-11.31	0.00	0.00	0.00	0.00	--	--	--	1.63	0.13	0.00	--	79.60	
22.74	--	--	--	--	--	--	--	0.03	1.20	2.26	--	671.32	6657
22.75	--	--	--	--	--	--	--	0.03	1.61	2.26	--	671.55	
0.01	0.00	0.00	0.00	0.00	--	--	--	0.00	0.42	0.00	--	0.23	

TGA - Total Geographical Area

13. Degraded pastures/ grazing land	19. Sands-Semi Stab.-Stab 15-40m
14. Degraded land under plantation crop	20. Mining Wastelands
15. Sands-Riverine	21. Industrial wastelands
16. Sands-Coastal	22. Barren Rocky/Stony waste
17. Sands-Desertic	23. Snow covered /Glacial area
18. Sands-Semi Stab.-Stab>40m	



## Odisha

### Wastelands Area Changes – 2008-09 and 2015-16

District	WL_Class	1	2	3	4	5	6	7	8	9	10	11	12	13
Sonepur	2008-09	1.16	--	65.00	30.88	0.04	0.02	--	--	--	--	153.17	6.42	--
	2015-16	1.16	--	53.95	41.88	0.04	--	--	--	--	--	153.15	6.42	--
	Change	0.00	0.00	-11.06	11.00	0.00	-0.02	0.00	0.00	0.00	0.00	-0.02	0.00	0.00
Sundargarh	2008-09	7.40	--	182.05	74.84	0.19	--	--	--	0.55	0.04	287.25	83.29	--
	2015-16	7.23	--	182.52	75.27	0.21	--	--	--	2.51	0.04	280.46	83.38	--
	Change	-0.18	0.00	0.47	0.43	0.01	0.00	0.00	0.00	1.96	0.00	-6.80	0.10	0.00
Grand Total	2008-09	547.05	14.69	4997.11	3230.56	257.82	42.49	5.81	20.31	852.11	497.22	5158.28	1719.60	0.00
	2015-16	594.28	14.74	4973.84	3300.90	293.74	4.49	10.82	15.45	855.65	808.60	5306.77	1612.67	--
	Change	47.23	0.05	-23.27	70.34	35.91	-38.00	5.02	-4.86	3.54	311.38	148.49	-106.93	0.00

## Odisha contd...

### Wastelands Area Changes – 2008-09 and 2015-16

Area in sq.km

District	WL_Class	14	15	16	17	18	19	20	21	22	23	Total	TGA
Sonepur	2008-09	--	--	--	--	--	--	--	--	11.85	--	268.54	2337
	2015-16	--	--	--	--	--	--	--	--	11.85	--	268.44	
	Change	0.00	0.00	0.00	--	--	--	0.00	0.00	0.00	--	-0.10	
Sundargarh	2008-09	--	--	--	--	--	--	0.09	0.08	13.87	--	649.65	9712.2
	2015-16	--	--	--	--	--	--	0.80	1.62	13.87	--	647.90	
	Change	0.00	0.00	0.00	--	--	--	0.72	1.54	0.00	--	-1.75	
Grand Total	2008-09	--	3.22	62.07	--	--	--	9.82	30.19	508.19	--	17956.54	155707
	2015-16	0.06	3.68	61.92	--	--	--	16.83	39.74	508.19	--	18422.36	
	Change	0.06	0.47	-0.15	--	--	--	7.01	9.54	0.00	--	465.82	

Note: "--" Denotes this Class is not existing in the District / State  
TGA - Total Geographical Area

2008-09 Wastelands statistics are revised version.

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	