

GEOGRAPHY OF ORISSA

Orissa extends from 17-degree 49 N to 22-degree 34N latitude and from 81-degree 27-E to 87-degree 29' E longitudes on the eastern coast of India. It is bound by the States of West Bengal on the North East, Jharkhand on the north and Chhatisgarh on the West, Andhra Pradesh on the South & Bay of Bengal on the East.

Morphologically Orissa can be divided into five parts. The coastal plains, the middle mountainous country, the rolling upland, the river valleys & the subdued plateaus.

The coastal plains of Orissa stretch from the Subarnarekha in the North to Rushikulya in the South. They are narrow in the North, widest in the middle, narrowest in the lake Chilka coast and broad in the South.

The coastal plains are the gift of six major rivers, which bring silt from their catchments, has reclaimed this area from the depths of the Bay of Bengal. The rivers from North to South are the Subarnarekha, the Budha Balanga, the Baitarani, the Brahmani, the Mahanadi and the Rushikulya. The coastal plains can be termed as a land of 'six deltas' of the Subarnarekha and the Budha Balanga, the middle coastal plains the combined deltas of the Baitarani, the Brahmani and the Mahanadi and the South coastal plains (The Rushikulya plains).

The mountainous region of Orissa covers about three-fourths of the area of the State. This region is a part of Indian peninsula. Here deep and broad valleys are cut by the Baitarani, the Brahmani, the Mahanadi, the Rushikulya, the Vansadhara and the Nagavali rivers. They are fertile, well-drained and thickly populated. Morphologically this region can be divided into the following units (a) the Simulia and the Meghasan mountains, (b) the Baitarani and the Brahmani interfluuous, (c) the water shed between the Brahmani and the Mahanadi, (d) the water shed of Rushikulya and the Vansadhara. The elevation ranges from 610 to 1, 068 meters.

The rolling uplands are lower in elevation than the plateaus. They vary from 153m. to 305m. They are the products of continued river action, are rich in soil nutrients, and are situated in the Koelsankh basin of the upper Brahmani in the IB, the Suktel and the Tel of the middle Mahanadi and the Sabari basins. The rolling uplands may be grouped as follows : the Rajgangpur uplands, the Jharsuguda uplands, the Bargarh uplands, the Bolangir-Titilagarh-Patnagarh uplands, the Bhawanipatna uplands, the Malkangiri uplands and the Rairangpur uplands.

River valleys are net product of the action of rivers. They are fertile and at times present an undulating topography. The major river valleys of Orissa are associated with the Brahmani, the Mahanadi and the Vansadhara rivers.

The subdued plateaus (305–610m.) reveal all the peculiarities of peninsular tablelands. They are almost flat and the monotony of orography is interrupted by the river valleys. These features are commonly met within the upper Baitarani and the Sabari basins of the Keonjhar and Koraput Districts, respectively. In these uplands sheet erosion is most common while gulying is confined to the river valleys. These plateaus can be divided into the Panposh-Keonjhar-Pallahara plateaus and the Nawrangpur-Jeypore plateaus.

MINERAL RESOURCES OF ORISSA

The State is endowed with vast mineral deposits like coal, iron-ore, manganese-ore, bauxite, chromite, etc. According to All India Mineral Resources Estimates, the mineral deposits of Orissa in respect of chromite, nickel, cobalt, bauxite, iron-ore were about 98.4%, 95.1%, 77.5%, 52.7% and 33.4% respectively of the total deposits of India. Other important mineral resources of the State are limestone, china clay, quartz, precious and semi-precious stones, copper, vanadium, etc.

The main exported minerals of the State are chromite, coal, dolomite, iron-ore, manganese and bauxite. The value of Mineral Production of Orissa 2000–2001 (Provisional) was 2,776.15 crore rupees and 5.23% share to All India value.

The total productions of Minerals and Ores in the State during 2001-2002 was 749.79 lakh tonnes valued at Rs. 2,776.15 crore in 2000-2001 registering an increase of 8.79% in quantity and 4.84% in value.

Mineral Reserves in Orissa and India

(in million tonne)

Sl. No.	Mineral / Ore	Reserve in Orissa	Grade	Reserve in India	State Share to country's Reserves(%)
1	2	3	4	5	6
1.	Bauxite	1733	Metallurgical +40% $A_1_2O_3$	2911	59.5
2.	Base Metal (Lead & Copper)	9	1.5% Cu(Avg.) 6.73% Pb(Avg.)	485	2.9
3.	Chromite	183	Metallurgical Chemical Refractory	186	98.4
4.	Chinaclay	311	Paper, Rubber Textile, Ceramics	986	31.5
5.	Coal	49406	High ash-Non-coking	199282	24.8
6.	Dolomite	889	Flux grade	4967	17.9
7.	Fireclay	178	Plastic & Non-Plastic	696	25.6
8.	Graphite	2.2	Foundry, Refractory Pencil, Battery	3.1	71.0
9.	Iron ore	4200	B.F., S.M.S. & Sponge Iron + 58% Fe.	12745	32.9
10.	Kyanite & Sillimanite	1.4		53.41	2.6
11.	Limestone	1609	BF & Cement	76446	2.1
12.	Manganese ore	119	BF., Ferro Alloys Battery & Chemical	176	67.6
13.	Mineral sands	82		266	30.8
14.	Pyrophyllite	8.6		13.2	65.1
15.	Nickel ore	270	+ 0.5% Nickel	294	91.8
16.	Quartz & Quartzite & Silica sand	93	Metallurgical, Silicon Carbide, Ferro Silicon, Ceramics	1350	6.9
17.	Tale / Steatite	0.8		84	0.95
18.	Tin ore	0.01	+ 50 gms / MT	28.91	-
19.	Vanadiferrous Magnetite	4	0.6 to 1.5% V3O5	Not available	-

MAJOR IRRIGATION PROJECTS OF ORISSA

COMPLETED PROJECTS

1. Baitarani System
2. Hirakud System
3. Mahanadi Delta System
4. Rusikulya System
5. Salandi System
6. Potteru
7. Anandapur Barrage

ONGOING PROJECTS

1. Rengali Irrigation Project
2. Subarnarekha Irrigation Project
3. Upper Indravati Irrigation Project
4. Kanupur Irrigation Project
5. Upper Kokab Irrigation Project
6. Lower Indra Project
7. Lower Suktel Project
8. M.C.I.I. Project

MEDIUM IRRIGATION PROJECTS OF ORISSA

COMPLETED PROJECTS

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|-------------------|--------------------------|
| 1. Aunli | 25. Khadkhai |
| 2. Bagh Barrage | 26. Kuanria |
| 3. Baghalati | 27. Nessa |
| 4. Baghua | 28. Ong |
| 5. Bahuda | 29. Pillasalki |
| 6. balidiha | 30. Pitamahal |
| 7. Bankabahal | 31. Ramnadi |
| 8. Bhaskel | 32. Ramial |
| 9. Badnalla | 33. Remal |
| 10. Budhabudhiani | 34. Saipal |
| 11. Dabaraghati | 35. Salia |
| 12. Daha | 36. Salki |
| 13. Dahuka | 37. Sarafgarh |
| 14. Derjang | 38. Satiguda |
| 15. Dhanei | 39. Sundar |
| 16. Dumerbahal | 40. Sunei |
| 17. Ghodahada | 41. Talsara |
| 18. Gohira | 42. Titilagarh |
| 19. Hiradharbati | 43. Upper Suktel |
| 20. Jayamangal | 44. Uttei |
| 21. Jharabandha | 45. Gobardhanpur Barrage |
| 22. Kalo | 46. Upper Jonk |
| 23. Kanjhari | 47. Harabhangi |
| 24. Kansbahal | 48. Hariharjore |
| | 49. Birupa Genguti |

ON GOING PROJECTS

A. NEW PROJECTS

1. Baghua Dhanei Doab
2. Chheligarh
3. Deo
4. Manjore
5. Rajua D/W
6. Ret
7. Rukura
8. Telengir
9. Upper Jonk (Kharkhara)
10. Sapua-Badjore

B. EXTENSION PROJECTS

1. Bagh Barrage
2. Baghlati
3. Titilagarh