

# District Environmental Atlas

(1:250,000 scale)

S. No.	Name of the Map	Features to be included
<b>Part I: General</b>		
1.	<b>Administrative Divisions (Base map)</b>	District boundary, Taluka/Block boundaries, major rivers/water bodies, major settlements/towns, National Highway/State Highway, other major district roads
2.	<b>Settlement map</b>	- Classification of towns – metro & mega cities, Class I and Class II towns - Population density - Village boundaries
3.	<b>Transportation network</b>	Road network, rail, water ways, air port, harbours
4.	<b>Climate</b>	Temperature – max. & min, rainfall - annual average, monthly & no. of rainy days, relative humidity, wind – direction & velocity
5.	<b>Natural Hazards</b>	Earthquake, cyclone, flood, drought, hot desert, cold desert
<b>Part II: Physical Characteristics</b>		
6.	<b>Land use map</b> (Real land use based on remote sensing data)	<p><b>Forest:</b> Evergreen/semi-evergreen forest, deciduous forest, forest plantation, degraded forest/scrubs, forest blank, Mangrove</p> <p><b>Agriculture:</b> Kharif, Rabi, Double crop land (Kharif+ Rabi), plantation, fallow land, shifting cultivation</p> <p><b>Wastelands</b></p> <p><b>Water bodies</b> Rivers, streams (perennial/seasonal), lakes, reservoirs and other water bodies</p> <p><b>Roads</b> National Highway, State Highway, Major District Roads</p> <p><b>Railways</b></p> <p><b>Settlements</b>/built-up land, built-up land with plantation</p>
7.	<b>Physiography map</b>	- contours - elevation ranges
8.	<b>Wastelands map</b>	- gullied and/or ravenous land - upland with or without scrub - water logged and marshy land/salt pan - land affected by salinity/alkalinity-coastal/inland - shifting cultivation area - under utilized/degraded notified forest land - degraded pastures/grazing land - degraded land under plantation crops

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		<ul style="list-style-type: none"> <li>- sands-desertic/coastal</li> <li>- mining/industrial wasteland</li> <li>- barren rocky/stony waste/sheet rock area</li> <li>- steep sloping area</li> <li>- snow covered and/or glacial area</li> </ul>
9.	<b>Soil Types</b>	Different types of soils
10.	<b>Land capability map</b>	Land Capability classes
<b>Part III: Surface/Ground Water Features</b>		
11.	<b>Drainage map</b>	Rivers/streams (perennial/seasonal), lakes and other water bodies and watershed/river basin boundaries, order of river (3 <sup>rd</sup> order and onwards)
12.	<b>Irrigation map</b>	Major rivers, canal system, barrages/submerged areas, catchment areas, command areas-for present and proposed projects, irrigation projects, dams & reservoirs
13.	<b>Ground water table map</b>	<ul style="list-style-type: none"> <li>- Contours of different depths - pre-monsoon</li> <li>- Contours of different depths - post-monsoon</li> </ul>
14.	<b>Hydrogeomorphology Map</b>	<ul style="list-style-type: none"> <li>- Geomorphic features</li> <li>- Ground water potential</li> </ul>
15.	<b>Surface water use map</b>	<ul style="list-style-type: none"> <li>- Use classification (depict best use) <ul style="list-style-type: none"> <li>➤ Public drinking water supply or industrial water supply areas from rivers/surface water bodies with or without conventional treatment</li> <li>➤ areas known to be entirely dependence on surface water for drinking</li> <li>➤ Coastal water used for salt pans, shell fishing, marine culture, aquaculture, shrimp farming, bathing, contact water sports, and commercial fishing or having other ecological sensitivity</li> <li>➤ River stretches or water bodies used for propagation of wild life and fisheries</li> </ul> </li> <li>- Location of major towns</li> <li>- Public water supply abstraction points</li> <li>- Discharge points, disposal points</li> <li>- Major industrial use</li> <li>- Pilgrim centers, organized bathing</li> <li>- Hydel power projects, irrigation projects, dams &amp; barrages</li> </ul>
16.	<b>Surface water flow map</b>	<ul style="list-style-type: none"> <li>- Perennial, non-perennial</li> <li>- Maximum and minimum discharge</li> <li>- No. of days of flow per annum</li> </ul>
17.	<b>Ground water use map</b>	<ul style="list-style-type: none"> <li>- Ground water recharge zone</li> <li>- Public supply abstraction points for piped supply</li> <li>- Dependency on ground water for irrigation purpose</li> </ul>
<b>Part IV: Environmentally Sensitive Zones</b>		

<b>S. No.</b>	<b>Name of the Map</b>	<b>Features to be included</b>
18.	<b>Biological Diversity</b>	<ol style="list-style-type: none"> <li>1. National parks</li> <li>2. Wild life sanctuaries</li> <li>3. Game reserve</li> <li>4. Tiger reserve/elephant reserve/turtle nesting ground, breeding grounds</li> <li>5. Core zone of biosphere reserve</li> <li>6. Habitat for migratory birds</li> <li>7. Mangrove area</li> <li>8. Areas with threatened (rare, vulnerable, endangered) flora/fauna , protected corals</li> <li>9. Wetlands</li> <li>10. Botanical gardens, Zoological gardens, Gene Banks</li> <li>11. Reserved forests, Protected forests</li> <li>12. Any other closed/protected area under the Wild Life (Protection) Act, 1972</li> <li>13. Any other area as locally applicable</li> </ol>
14.	<b>Incompatible land use areas</b>	<ol style="list-style-type: none"> <li>1. Public water supply areas from rivers/surface water bodies</li> <li>2. Public water supply areas from ground water</li> <li>3. Ground water recharge areas</li> <li>4. Scenic areas/tourism areas/hill resorts</li> <li>5. Religious places, pilgrim centers that attract over 10 lakhs pilgrims a year</li> <li>6. Protected tribal settlements (notified tribal areas where industrial activity is not permitted)</li> <li>7. Coastal Regulatory Zone (CRZ)</li> <li>8. Monuments of national significance</li> <li>9. World Heritage Sites</li> <li>10. Flood prone areas (based on flood in 1 in 25 years )</li> <li>11. Agricultural research stations</li> <li>12. Air port areas</li> <li>13. Any other feature as specified by the State or local government and other features as locally applicable (including prime agricultural lands, pastures, migratory corridors etc.)</li> </ol>
<b>Part V: Major Sources of Pollution</b>		
14.	<b>Location of existing industries/industrial estates</b>	<ul style="list-style-type: none"> <li>- Industrial estates, growth centers, industrial clusters, Special Economic Zone, industrial complexes, etc., isolated Industries – large and medium scale</li> <li>- Pollution load (District wise by using load factors)</li> </ul>
15.	<b>Location of mines</b>	<ul style="list-style-type: none"> <li>- Active and proposed mines, under ground/open cast mines, abandoned mines</li> </ul>
16.	<b>Solid/hazardous waste generation</b>	<ul style="list-style-type: none"> <li>- MSW, bio-medical, hazardous wastes generated, plastics</li> <li>- Location of disposal sites</li> </ul>
17.	<b>Vehicular pollution</b>	<ul style="list-style-type: none"> <li>- Number and type of vehicles and distribution, vehicular pollution (parameter-wise graph)</li> <li>- Fuel consumption (district-wise)</li> </ul>

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		- Type of fuel used – vehicular, industrial, agricultural
18.	<b>Domestic Sewage Load</b>	- Waste water generated, treatment status, disposal – class I and Class II cities - Organic load – urban & rural
19.	<b>Consumption of fertilizer &amp; pesticide map</b>	- Fertilizer/pesticide consumption
<b>Part VI: Environmental Quality</b>		
20.	<b>Air quality map</b>	- location of monitoring stations - Air quality (low, medium, high, critical zones)
21.	<b>Surface water quality map</b>	- location of monitoring stations - surface water quality
22.	<b>Ground water quality map</b>	- location of monitoring stations - ground water quality (contours of chloride, conductivity, pollutants etc.)
23.	<b>Contaminated sites</b>	- Polluted/contaminated areas