

State Profile

Ground Water Scenario of Chhattisgarh

Area (Sq.km)	1,35,191
Physiography	<ul style="list-style-type: none"> ▪ The Northern Hill Ranges ▪ The Chhattisgarh Plain ▪ The Bastar Plateau
Drainage	The major rivers that drain the State are Mahanadi, Indravati, Son and Narmada.
Rainfall (mm)	<ul style="list-style-type: none"> ▪ Higher normal annual rainfall, more than 1 mm is restricted to plateau regions of north-eastern and southern parts. ▪ Plains of central and northern-most parts of the region receive less than 1500 mm
Total Districts	18 Districts

Hydrogeology

Major water bearing formations are weathered, jointed & fractured rocks of Proterozoic age where ground water occurs under water table conditions. Water bearing fractures generally occur within 100 m depth. The semi-consolidated formations (Gondwanas) are another water bearing formations with weathered sandstone and lime stone forming good aquifers. The unconsolidated sediments including alluvium and laterite are also water-yielding medium.

Dynamic Ground Water Resources (2011)	
Annual Replenishable Ground water Resource	12.42 BCM
Net Annual Ground Water Availability	11.63 BCM
Annual Ground Water Draft	4.05 BCM
Stage of Ground Water Development	35 %
Ground Water Development & Management	
Over Exploited	1
Critical	2
Semi- critical	18 Blocks
Artificial Recharge to Ground Water (AR)	<ul style="list-style-type: none"> ▪ Area identified for AR: 22401 sq. km. ▪ Volume of water to be harnessed: 2902.72 MCM ▪ Volume of water to be harnessed through RTRWH: 52.07 MCM ▪ Feasible AR structures: <ul style="list-style-type: none"> ❖ Percolation tanks-4729 ❖ Nala Bunds/Check dams-15862 ❖ Recharge Shafts-28549 ❖ Gabion Structure-38062 ❖ RTRWH(H)- 190000 ❖ RTRWH(G&I)- 10000

Ground Water Quality Problems

Contaminants	Districts affected (in part)
Fluoride (> 1.5 mg/l)	Bastar, Bilaspur, Dantewada, Dhamtari, Janjgir-Champa, Jashpur, Kanker, Korba,

	Koriya, Mahasamund, Raipur, Rajnandgaon, Surguja
Iron (>1.0 mg/l)	Bastar, Dantewada, Kanker, Koriya,
Nitrate (>45 mg/l)	Bastar, Bilaspur, Dantewada, Dhamtari, Jashpur, Kanker, Kawardha, Korba, Mahasamund, Raigarh, Raipur, Rajnandgaon
Arsenic (>0.05 mg/l)	Rajnandgaon