

State Profile

Ground Water Scenario of Meghalaya

Area (Sq.km)	22,429
Physiography	Mainly four physiographic units <ul style="list-style-type: none"> ▪ Uplifted Plateau ▪ Denudational high hills ▪ Denudational low hills ▪ Intermontane valleys
Drainage	State is drained by mainly rivers and tributaries of Brahmaputra, Meghna basins
Rainfall (mm)	3290(Average annual)
Total Districts / Blocks	7 Districts

Hydrogeology

The northern part of the State is covered by consolidated formations comprising granites, gneisses, schists, quartzites, phyllites and Conglomerates with basic and acid intrusives. The zone of weathering is the main repository of ground water, however, the weak planes, fissure, joints and fractures also hold substantial quantity of ground water. Semi-consolidated sandstones with other sedimentary formations cover the entire south western and south eastern part of the State in Khasi and Jaintia hills District. The tubewells in the sedimentary formations in valleys yield 25-50 m³/hr. Unconsolidated formations are restricted to a narrow belt in the extreme north western fringe where hills rolls down to Assam and Bangladesh plains. The deep tube wells in these alluvial formations can yield between 54 to 110 m³/hr. Shallow Tube wells in river fills in Garo hills District yield between 25 & 40 m³/hr. Ground water in the State is characterized by low salinity.

Dynamic Ground Water Resources (2011)	
Annual Replenishable Ground water Resource	1.78 BCM
Net Annual Ground Water Availability	1.60 BCM
Annual Ground Water Draft	0.0017 BCM
Stage of Ground Water Development	0.1
Ground Water Development & Management	
Over Exploited	NIL
Critical	NIL
Semi- critical	NIL
Artificial Recharge to Ground Water (AR)	<ul style="list-style-type: none"> ▪ Feasible AR structures <ul style="list-style-type: none"> ❖ Check dam-300 ❖ Weirs-600 ❖ Gabian structure-600 ❖ RTRWH-300 ❖ Development of springs-200
Ground Water Quality Problems	
Contaminants	Districts affected (in part)
Iron (>1.0 mg/l)	East Garo Hills, East Khasi Hills, Jaintia Hills, West Khasi hills, Ri Bhoi

Central Ground Water Authority

Areas Notified for Regulation of ground water development	NIL
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