

(PREPARED FROM SATELLITE IMAGE INTERPRETATION WITH LIMITED FIELD CHECKS)



LEGEND

MAP UNIT (HYDROGEOLOGIC UNIT REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE)	GEOLOGICAL SEQUENCE / ROCK TYPE	GEOMORPHIC UNIT / LANDFORM	DEPTH TO WATER LEVEL PVE / POST-MONSOON (AVERAGE IN METERS)	RECHARGE CONDITIONS BASED ON AVAILABILITY OF WATER (RAINFALL & OTHER SOURCES)	GROUNDWATER PROSPECTS							RECHARGE STRUCTURES SUITABLE & PRIORITY	REMARKS (PROBLEMS / LIMITATIONS)	
					AQUIFER MATERIAL LS = LOOSE SEDIMENTS PS = PERMEABLE ROCK FR = FRACTURED ROCK WM = WEATHERED ROCK / BM = WEATHERED MATERIAL IR = IMPERVIOUS ROCK	TYPE OF WELLS SUITABLE DW = DUG WELL BW = BORE WELL TW = TUBE WELL CDBW / DUG CUM BORE WELL / CTW = DUG CUM TUBE WELL	DEPTH RANGE OF WELLS (SUGGESTED) WM - MAX (IN METERS)	YIELD RANGE OF WELLS (EXPECTED) (in LPM or m ³ /day)	HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS (PROBABILITY) VERY HIGH HIGH MODERATE LOW	QUALITY OF WATER (POTABLE OR NON-POTABLE) (M) (INDICATE SEASON IF NOT POTABLE)	GROUND WATER IRRIGATED AREA (APPROX. RANGE IN PERCENTAGE)			PT = PERCOLATION TANK CS = CHECK DAM ND = NALA DAM RW = RECHARGE WELL DT = DESTLING OF TANK SD = RECHARGE PIT BS = SUBSURFACE SPRING RS = RECHARGE SHAFT ST = STORAGE TANK SCM = SOIL CONSERVATION MEASURES
		Alluvium (Sand,Silt and Clay) (13)	8.0 - 19.2 ----- DW - 1 HP - 1	Good	LS	DW TW	15 - 20 m 40 - 60 m	50 - 75 m ³ /day 150 - 200 LPM	High	P	30%	Not Required	Aquifer is formed of sandy part of alluvium Recharge structures are not required as good recharge condition prevails	
		Valley Fill Shallow (VFS)	No well observed	Moderate	LS Underlain by WM + FR	TW / BW	40 - 50 m	50 - 100 LPM	Moderate	P	Nil	DT Moderate	Recharge structure will increase the sustainability of ground water prospects	
		Laterite (Ferricrete hard crust, lateritic nodules and lithomarge clay) (211)	Lateritic Plain (LP) (Lithomarge Clay)	3.68 - 16.6 ----- DW - 21 HP - 14	Limited	WM + FR	DW TW / BW	15 - 20 m 50 - 60 m	15 - 25 m ³ /day 50 - 100 LPM	Moderate	P	75%	RW / DT High	Recharge wells have high priority as the lithomarge clay layer needs to be penetrated to recharge underlying aquifer formed of weathered material and fractured rock
			Dissected Lateritic Upland (DLU) (Hard Crust and Lateritic Nodules)	4.6 - 17.1 ----- DW - 23 HP - 2	Poor to limited	WM + IR (Impervious Material)	TW / BW	80 - 100 m	30 - 50 LPM	Low	P	Nil	Not Required	Essentially run-off zone where hard crust is present.Areas of lateritic nodules are recharge zones with deep water table conditions Primarily forest areas with sparse settlements Not suitable for large scale development of ground water.

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These are fault / fracture zones, which generally act as conduits for movement of ground water in hard rocks. Along these zones, the yields are significantly higher and wells are likely to be sustainable for longer duration. However, the inferred fractures need to be confirmed by detailed ground surveys.

D — D / Q — Q / P — P
D — D / Q — Q / P — P

These are dykes, quartz reefs and pegmatite veins, which generally act as barriers for ground water movement.

N.B.-The depth range and yield range of wells may vary within the unit because of certain inhomogeneities. Fractures/Lineaments which are clearly observed / inferred from the satellite image are indicated on the map. There could be some obscured fractures which also influence the ground water prospects. Locations of the recharge structures shown in the map are tentative. This map is useful for narrowing down the target zones, and exact location on the ground for wells and recharge structures should be identified based on follow-up ground hydrogeological/geophysical surveys.



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