

## LEGEND

MAP UNIT	GEOLOGICAL SEQUENCE / ROCK TYPE	GEOMORPHIC UNIT / LANDFORM	DEPTH TO WATER LEVEL  PRE / POST- MONSOON (AVERAGE IN METERS)  NO. OF WELLS OBSERVED	RECHARGE CONDITIONS  BASED ON AVAILABILITY OF WATER  (RAINFALL & OTHER SOURCES)			DUND WATER P					RECHARGE STRUCTURES SUITABLE &	REMARKS
UNIT ) REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE  ( COLOUR INDICATES YIELD RANGE AND HATCHING INDICATE DEPTH RANGE)	( REPRESENTED IN THE MAP WITH NUMERIC CODE )	( REPRESENTED IN THE MAP WITH ALPHABETIC CODE )			AQUIFER MATERIAL  LS = LOOSE SEDIMENTS PR = PERMEABLE ROCK FIR = FISSURED ROCK FR = FRACTURED ROCK WR  = WEATHERED ROCK / WM WEATHERED MATERIAL IR = IMPERIVIOUS ROCK	TYPE OF WELLS SUITABLE  DW = DUG WELL RW = RING WELL BW = BORE WELL TW = TUBE WELL DBW / = DUG CUM-BORE WELL / DTW DUG CUM-TUBE WELL	DEPTH RANGE OF WELLS (SUGGESTED) MIN - MAX (IN METERS)	YIELD RANGE OF WELLS (EXPECTED) (in LPM or m <sup>3</sup> / day)	HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS (PROBABILITY)  VERY HIGH HIGH MODERATE LOW	QUALITY OF WATER  POTABLE (P) NON - POTABLE (NP)  (INDICATE REASONS IF NON POTABLE)	GROUND WATER IRRIGATED AREA (APPROX. RANGE IN PERCENTAGE)	PRIORITY  PT = PERCOLATION TANK CD = CHECK DAM NB = NALA BUND RW = RECHARGE WELL DT = DESILTING OF TANK RP = RECHARGE PIT SD = SUBSURFACE DYKE RS = RECHARGE SHAFT ST = STORAGE TANK SCM = SOIL CONSERVATION MEASURES	(PROBLEMS / LIMITATIONS)
CB111		Channel Bar (CB)	No Well Observed	Excellent	LS	TW	5-10 m	400-500 LPM	Very High	Р	Nil	Not Required	Groundwater prospects very hi with high recharge potential. Recharge structures not require
BB111	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Braid Bar (BB)	No Well Observed	Excellent	LS	TW	5-10 m	400-500 LPM	Very High	Р	Nil	Not Required	Groundwater prospects very I with high recharge potential. Recharge structures not requi
PB111	ay)	Point Bar (PB)	No Well Observed	Very Good	LS	RW TW	5-10 m	300-400 LPM	Very High	Р	Nil	Not Required	Groundwater prospects very h with high recharge potential. Recharge structures not requi
Ri111	κο Φ Δ Alluvium (Sand Dominant) (111)	River Island (RI)	No Well Observed	Very Good	LS	TW	5-10 m	400-500 LPM	High	Р	Nil	Not Required	Highly productive aquifer in shallow depth. Good recharge
CM111	(Pres	Cut-off Meander (CM)	No Well Observed	Good	LS	RW TW	10-20 m	300-400 LPM	High	Р	Nil	Not Required	Highly productive shallow aques with good recharge from the rebase flow.
FP111	а С П	Flood Plain (FP)	No Well Observed	Very Good	LS	TW	<30 m	250-350 LPM	Very High	Р	Nil	Not Required	It receives good recharge and shallow aquifer.Overall quality the water is potable.
PAD111	လ မ မ ပ	Piedmont Alluvium Deep (PAD)	No Well Observed	Good	LS	TW	60-80 m	100-300 LPM	Moderate	Р	Nil	Not Required	Good ground water prospect at greater depth as the princip aquifer occurs below PAM.
APY113	Holocene (Sand and Silt) (113)	Alluvial Plain Younger (APY)	No Well Observed	Good	LS	TW	25-30 m	200-250 LPM	High	Р	Nil	Not Required	Highly productive aquifer at sh depth with good recharge.
AC13	Malda/Jalpaigu (Early - Late (Sand,Silt & Clay) (13)	Abandoned Channel (AC)	No Well Observed	Excellent to Very Good	LS	TW	10-15 m	250-300 LPM	Very High	Р	Nil	Not Required	Highly productive shallow aqui
PAM18	Samsing Formation (Lt. Pleistocene. Er. Holocene.)  (All Mark (Lt. Pleistocene. Er. Holocene.)  (Banation (Lt. Pleistocene.)  (All Mark (Lt. Pleistocene.)  (Banation (Lt. Pleistocene.)  (All Mark (Lt. Pleistocene.)  (Banation (Lt. Pleistocene.)	Piedmont Alluvium Moderate (PAM)	4/2	Good	LS	TW	40-60 m	300-400 LPM	I Moderate	Р	Nil	Not Required	Good ground water prospect moderate depth along piedmo
PAS18		Piedmont Alluvium Shallow (PAS)	No Well Observed	Good	LS	TW	5 - 10m	50-100 LPM	Low to Moderate	Р	Nil	Not Required	Moderate ground water prospe at shallow depth along piedmo
\$HH511	Sandstone & Conglomerate (511)	Structural Hill Highly Dissected (SHH)											
SHH533	Gondwana S.Gr (Damuda Gr.) (Permo- Carboniferons) (S33)	Structural Hill Highly Dissected (SHH)											
\$HH93	Daling Gr (Reyang Fm.) (Proterozoic) (B.6) (Proterozoic)	Structural Hill Highly Dissected (SHH)	Essentially run-off zone. Drinking water sources primarily from springs and river/stream water. Limited prospects within Intermontane Valleys.										
SHH921	(GorubathanFm) (Proterozoic) (Broterozoic) (BC1)	Structural Hill Highly Dissected (SHM)											
SHM831	Granitoid Gneiss/ Granitoid Gneiss/ Gneissic Granitoid/ Granitoid Complex												

F\_\_\_\_F/\_\_\_\_\_/ —— 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.

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.

