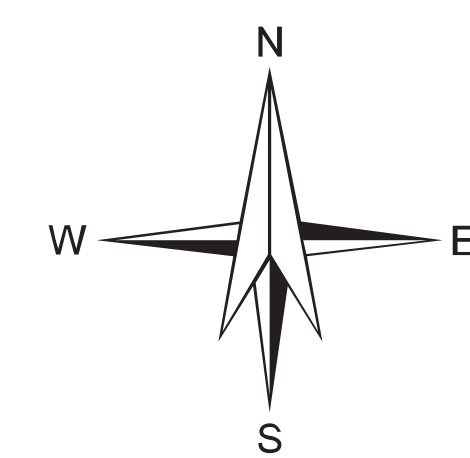
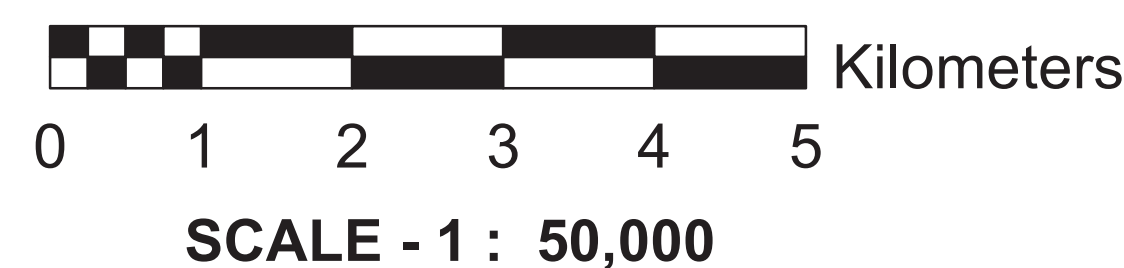


GROUND WATER PROSPECTS MAP

(PREPARED FROM SATELLITE IMAGE INTERPRETATION WITH LIMITED FIELD CHECKS)



MAP SHEET NO. 78G/9

KOCH BIHAR DISTRICT, WEST BENGAL



B A N G L A D E S H

LEGEND

MAP UNIT (HYDROGEOLOGIC UNIT) REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE (COLOUR INDICATES YIELD RANGES AND HATCHING INDICATE DEPTH RANGES)	GEOLOGICAL SEQUENCE / ROCK TYPE (REPRESENTED IN THE MAP WITH NUMERIC CODE)	GEOMORPHIC UNIT / LANDFORM (REPRESENTED IN THE MAP WITH ALPHABETIC CODE)	DEPTH TO WATER LEVEL PRE / POST MONSOON (AVERAGE IN METERS) NO. OF WELLS OBSERVED	RECHARGE CONDITIONS BASED ON AVAILABILITY OF WATER (RAINFALL & OTHER SOURCES)	GROUND WATER PROSPECTS						RECHARGE STRUCTURES SUITABLE & PRIORITY	REMARKS (PROBLEMS / LIMITATIONS)	
					AQUIFER MATERIAL	TYPE OF WELLS SUITABLE	DEPTH RANGE OF WELLS (SOUGHTERS)	YIELD RANGE OF WELLS (LPM)	HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS (PROBABILITY)	QUALITY OF WATER (POTABLE / NON-POTABLE)			GROUND WATER BRIGATED AREA (APPROX. RANGE IN PERCENTAGE)
CM111	Alluvium (Sand Dominant) (11)	Cut-off Meander (CM)	No Well Observed	Very Good	LS	RW TW	10-20 m	300-400 LPM	Very High	P	95	Not Required	Highly productive aquifer at shallow depth with good recharge.
APY113	Alluvium (Sand and Silt) (113)	Alluvial Plain Younger (APY)	No Well Observed	Good	LS	TW	25-30 m	200-250 LPM	High	P	98	Not Required	Highly productive aquifer at shallow depth with good recharge.
AC13	Alluvium (Sand, Silt & Clay) (13)	Abandoned Channel (AC)	No Well Observed	Excellent to Very Good	LS	RW TW	10-15 m	250-300 LPM	Very High	P	Nil	Not Required	Highly productive shallow aquifer with good recharge from base flow.

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.

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