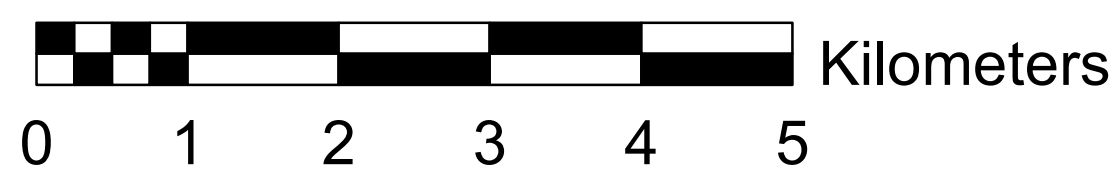
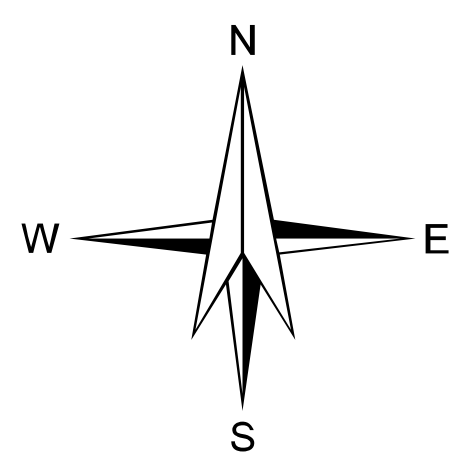



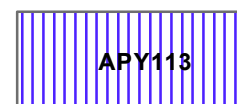
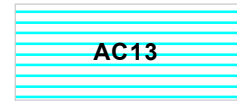
(PREPARED FROM SATELLITE IMAGE INTERPRETATION WITH LIMITED FIELD CHECKS)



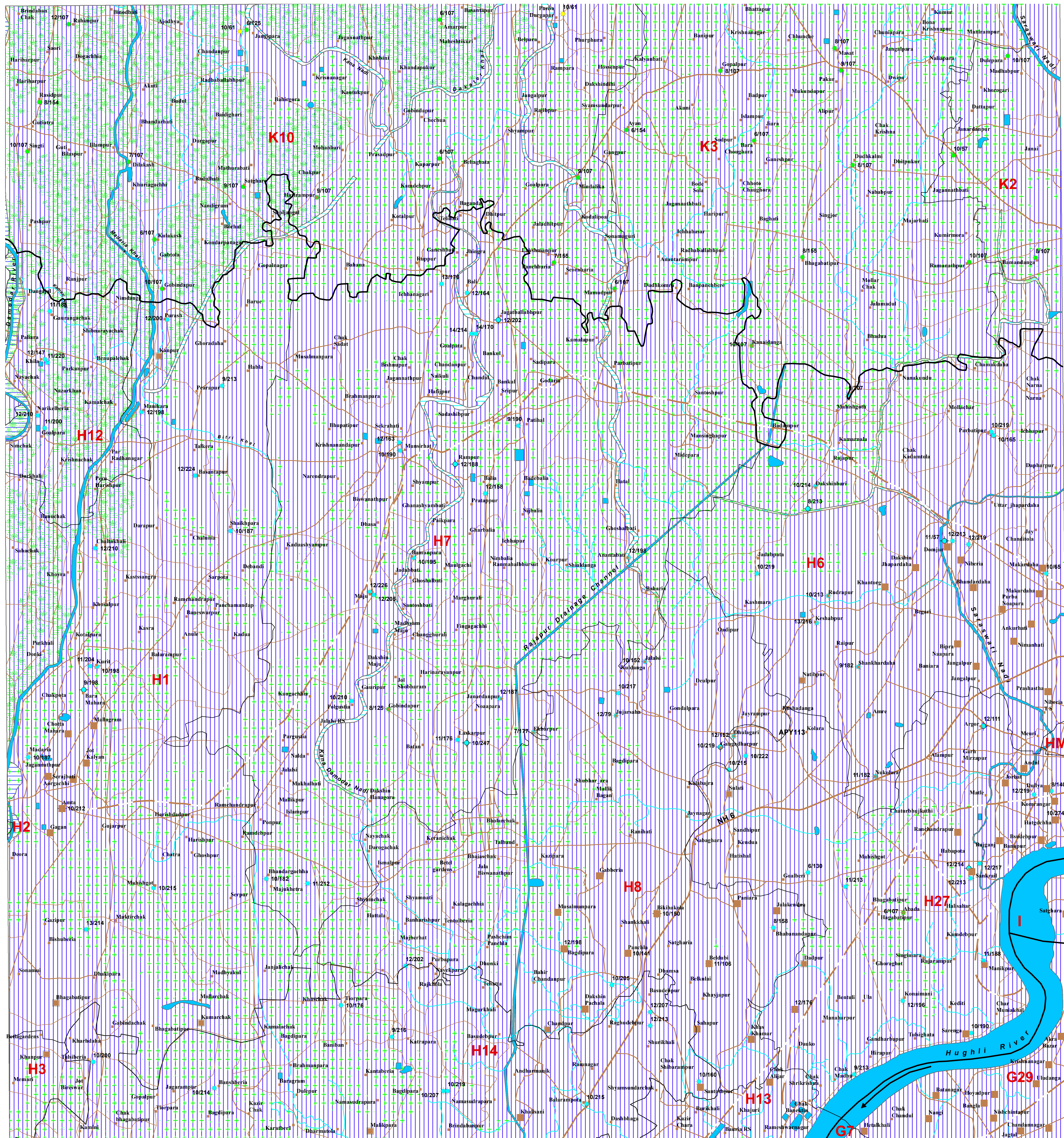
SCALE - 1 : 50,000



LEGEND

MAP UNIT (HYDROGEOMORPHIC UNIT) REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE (COLOUR INDICATES YIELD RANGE AND HATCHING INDICATE DEPTH RANGE)	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 LS = LOOSE SEDIMENTS PM = PERMEABLE ROCK PE = FISSURED ROCK PS = PALEOSOL ROCK WR = WEATHERED ROCK/ NW = WEATHERED MATERIAL RI = IMPERVIOUS ROCK	TYPE OF WELLS SUITABLE SW = SHALLOW WELL DW = DEEP WELL BW = BORE WELL TW = TUBE WELL WW = COLD CORROSION WELL/ DTW = DUG CUL-TURE WELL	DEPTH RANGE OF WELLS (SUGGESTED) MIN - 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 MODERATE LOW	QUALITY OF WATER POTABLE PT NON-POTABLE NP (INCLUDE READERS # WHEN POTABLE)	GROUND WATER IRRIGATED AREA (APPROX. RANGE IN PERCENTAGE)			
	Hugli/Bhagrahi Formation/Present day Deposits (Present Day)	Alluvium (Sand Dominant) (T11)	Flood Plain (FP)	No well observed	Very Good	LS	TW	80-100 m	400-500 LPM	Very High	NP (As & Fe) [At shallow depth]	0.11	Not Required	Areas with high Arsenic and Iron concentration.Potable water available at depth range above100 m.
		Alluvium (Sand and Silt) (I13)	Alluvial Plain (APV)	12 / 8 121	Good	LS	TW	100-120 m	400-500 LPM	High	NP (As & Fe) [At shallow depth]	59.7	RW Low	Areas with high Arsenic and Iron concentration.Potable water available at depth ranges above100 m.
		Alluvium (Sand,Silt & Clay) (I3)	Abandoned Channel (AC)	No well observed	Very Good	LS	RW TW	10-15 m	250-300 LPM	Very High	P	0.16	Not Required	Areas of very high groundwater potential at shallow depth.Most suitable for extraction of groundwater.
<div><div><div><div><div>F</div><div>D</div><div>D</div><div>D</div></div><div><div>F</div><div>O</div><div>O</div><div>O</div></div><div><div>-</div><div>-</div><div>-</div><div>-</div></div><div><div>-</div><div>-</div><div>-</div><div>-</div></div></div><div><div>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.</div></div></div><div><div><div><div><div>D</div><div>D</div><div>D</div><div>D</div></div><div><div>O</div><div>O</div><div>O</div><div>O</div></div><div><div>-</div><div>-</div><div>-</div><div>-</div></div><div><div>-</div><div>-</div><div>-</div><div>-</div></div></div><div><div>These are dykes, quartz reefs and pegmatite veins, which generally act as barriers for ground water movement.</div></div></div></div><div>N.B.-The depth range and yield range of wells may vary within the unit because of certain inhomogeneities. Fractures/insaments 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.</div></div>														

MAP SHEET NO. 79B/2



© NRSC (ISRO), DEPT. OF SPACE, GOVT. OF INDIA DATA USED : IRS - P6 LISS III FCC dated September 2005-February 2006, GROUND TRUTH & WELL OBSERVATION during March-June, 2012 & Oct 2012-Jan 2013, Published Geological maps & Literatures. *Designed & Developed by Hydrogeology Division, NRSC, ISRO*