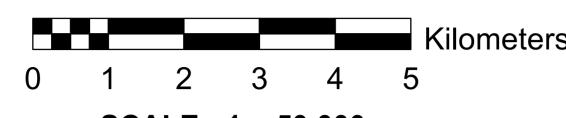
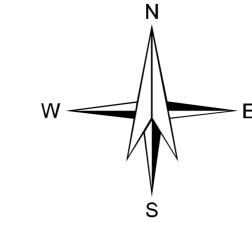
## GROUND WATER PROSPECTS MAP

(PREPARED FROM SATELLITE IMAGE INTERPRETATION WITH LIMITED FIELD CHECKS)



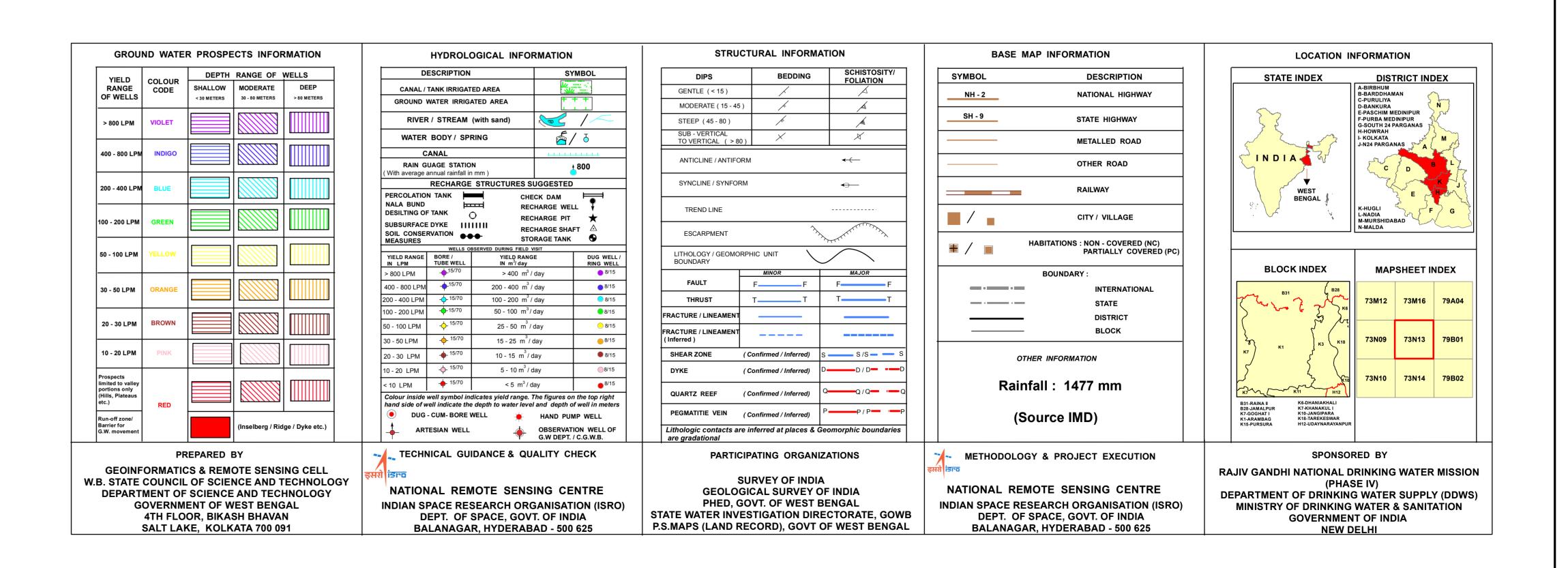


SCALE - 1: 50,000 MAP SHEET NO. 73N/13 \_ Basantabati \_ ⊣Madanbati Gujrat + + 

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

L E G E N D

MAP UNIT	GEOLOGICAL SEQUENCE	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 &	
UNIT )  REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE  ( COLOUR INDICATES YIELD RANGE AND HATCHING INDICATE DEPTH RANGE)	( REPRESENTED IN THE MAP WITH NUMERIC 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	REMARKS (PROBLEMS / LIMITATIONS)
CB111	Hugli/Bhagirathi Formation/Present day Deposits (Present Day) SS (111) Hugli/Bhagirathi Formation/Present day Deposits (Present Day) (Hugli/Bhagirathi Formation/Present day Deposits (Present Day)	Channel Bar (CB)	No well observed	Excellant	LS	RW TW	5-10 m	400-500 LPM	Very High	Р	Nil	Not Required	Groundwater prospects very hig with high recharge potential. Recharge structures not required
PB111		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 hig with high recharge potential. Recharge structures not require
FP111		Flood Plain (FP)	<u>15 / 9</u> 1	Very Good	LS	TW	<30 m	200-250 LPM	Very High	P	4.3	Not Required	Groundwater prospects very hig with high recharge potential. Recharge structures not require
APY113	bagh Formation Holocene) Mully Mully (Sand and Silt)	Alluvial Plain Younger (APY)	13 / 7 10	Good	LS	TW	100-120 m	450-500 LPM	High	NP (As&Fe) [At shallow depth]	30	RW Low	Areas with high Arsenic and Iro concentration.Potable water available at depth range above 100 m. Recharge of shallow aquifer recomended.
APY113	Panskura/Aram (Early to Lat (Early to Lat	Alluvial Plain Younger (APY)	No well observed	Good	LS	TW	25-30 m	200-250 LPM	High	Р	30	Not Required	Potable water available at dept range below 30m.
AC13	/ Bethuadah to Early H mnivully	Abandoned Channel (AC)	No well observed	Very Good	LS	RW TW	10-15 m	250-300 LPM	Very High	P	Nil	Not Required	Areas of very high groundwater potential at shallow depth.Mos suitable for extraction of ground
	Sijua/ Rampurhat/ Jamui (Late Pleistocene ( (Late Pleistocene ( (Kel) (Still)	Alluvial Plain Older (APO)	<u>13 / 9</u> 13	Moderate to Good	LS	TW	40-60 m	150-200 LPM	Moderate to High	Р	56.7	RW Moderate to Low	Moderate groundwater potentia at intermediate depths.



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.