GROUND WATER PROSPECTS MAP (PREPARED FROM SATELLITE IMAGE INTERPRETATION WITH LIMITED FIELD CHECKS) SCALE - 1: 50,000 DAKSHIN DINAJPUR DISTRICT, WEST BENGAL MAP SHEET NO. 78C/14 Rughoonathgunj Hat 1/4//4//4// NRSC (ISRO), DEPT. OF SPACE, GOVT. OF INDIA DATA USED: IRS - P6 LISS III FCC dated February 2009, March 2009 & Nov 2011, GROUND TRUTH & WELL OBSERVATION during February-March 2011, Published Geological maps & Literatures. Designed & Developed by Hydrogeology Division, NRSC, ISRO

				L E	G	E N	I D					
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) (REPRESENTED IN THE MA ALPHABET	NDFORM WATER LEVEL PRE / POST- MONSOON (AVERAGE IN METERS) NO. OF WELLS OBSERVED	OF WATER (RAINFALL & OTHER	AQUIFER MATERIAL S = LOOSE SEDIMENTS PR = PERMEABLE ROCK FIR = FISSURED ROCK FR = FRACTURED ROCK FR = FRACTURED ROCK FR = WEATHERED ROCK FR = WEATHERED MATERIAL FR = 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	UNDW 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 HIGH MODERATE LOW	QUALITY OF WATER POTABLE (P) NON - POTABLE (NP) (INDICATE REASONS IF NON POTABLE)	GROUND WATER IRRIGATED AREA (APPROX. RANGE IN PERCENTAGE)	RECHARGE STRUCTURES SUITABLE & 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)
APY113	(Sand and Silt) You	al Plain nger PY)	Good	LS	TW	25-30 m	200-250 LPM	High	P	Nil	Not Required	Highly productive aquifer in moderate depth with good recharge.
APO19		Plain Older No Well Observed	Moderate	LS	TW	50-60 m	75 - 100 LPM	Moderate	P	10	Not Required	Shallow aquitards form due to clayey sediments. Aquifers occur at more depth. Unit partly contaminated by high concentration of Flouride.
F// — D /Q Q Q D /Q Q Q	These are fault / fracture zo PPP These are dykes, quan N.BThe depth range and yield range of well	tz reefs and pegmatite veins, which g	enerally act as barriers for	ground water movemo	ent. hich are clearly observed	/ inferred from the s	satellite image are	indicated on the m	ap. There could be s	some obscured fractu	res which also influence the gro	ound water prospects.
GROUND WAT YIELD COLOUR CODE OF WELLS > 800 LPM VIOLET 400 - 800 LPM INDIGO 200 - 400 LPM BLUE 100 - 200 LPM GREEN 50 - 100 LPM YELLOW 30 - 50 LPM ORANGE	SHALLOW MODERATE DEEP > 80 METERS > 80 METERS	IN LPM TUBE WELL IN	SYMBOL ###################################	STEEP (SUB - VE TO VERT ANTICLI SYNCLIN TRENE ESCAF LITHOLOG BOUNDAR	ATE (15 - 45) ATE (15 - 45) (45 - 80) ERTICAL FICAL (>80) NE / ANTIFORM D LINE RPMENT GY / GEOMORPHIC UNIT RY MINOR	2011070	N	BASE SYMBOL NH - 2 SH - 9	NATIONS : NON PARE	SCRIPTION DNAL HIGHWAY E HIGHWAY LLED ROAD R ROAD VAY VILLAGE	STATE IN INDIA	WEST S-DARJEELING R-JALPAIGURI Q-KOCH BIHAR P-UTTAR DINAJPUR O-DAKSHIN DINAJPUR N-MALDA M-MURSHIDABAD

