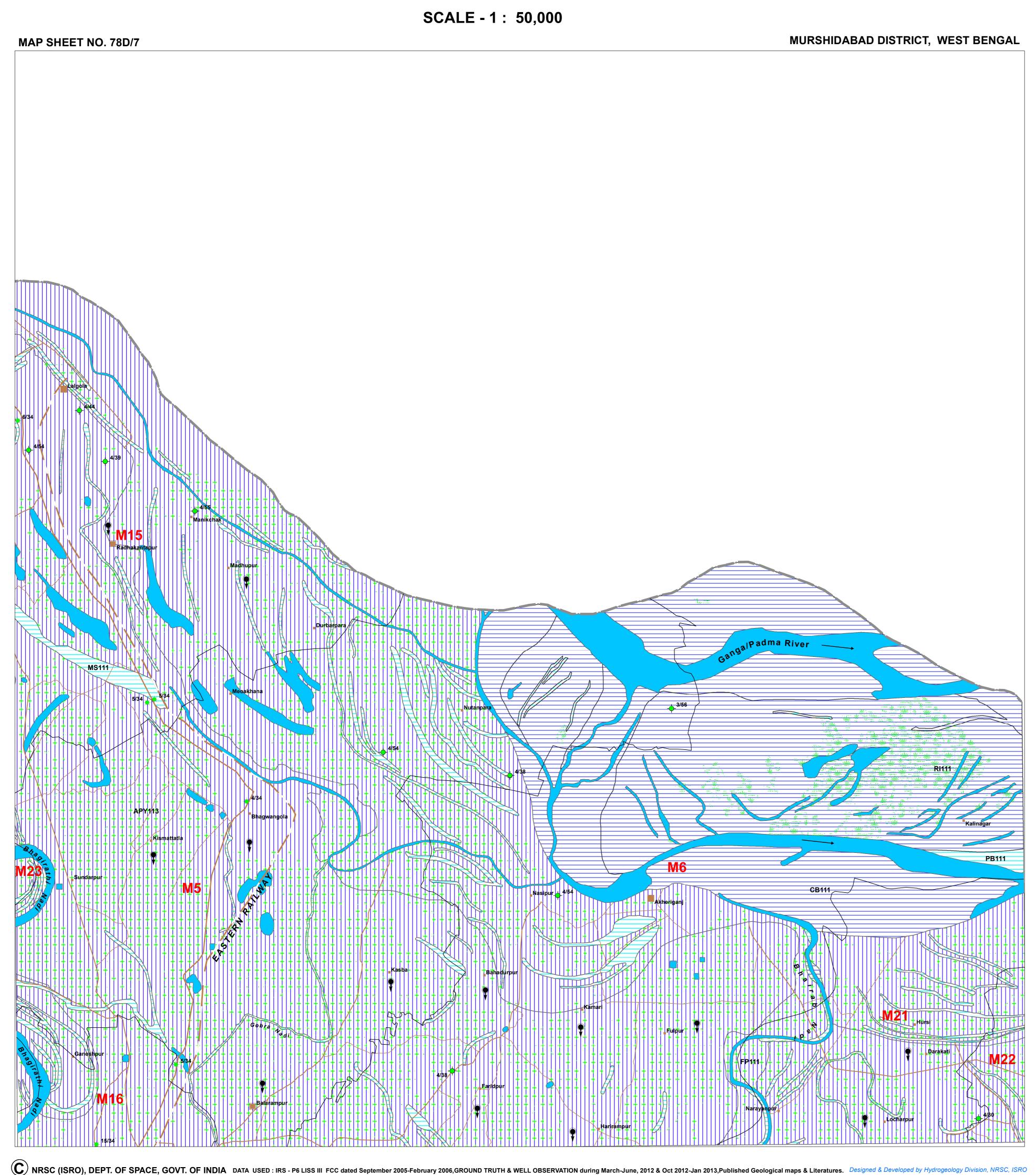
GROUND WATER PROSPECTS MAP

(PREPARED FROM SATELLITE IMAGE INTERPRETATION WITH LIMITED FIELD CHECKS)







LEGEND

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MAP UNIT (HYDROGEOMORPHIC UNIT) REPRESENTED IN	GEOLOGICAL SEQUENCE / ROCK TYPE	GEOMORPHIC UNIT / LANDFORM	DEPTH TO WATER LEVEL PRE / POST- MONSOON (AVERAGE IN METERS)	RECHARGE CONDITIONS BASED ON AVAILABILITY OF WATER	AQUIFER MATERIAL	G R O	U N D W DEPTH RANGE OF WELLS	A T E R P YIELD RANGE OF WELLS	HOMOGENEITY IN THE UNIT	C T S QUALITY OF WATER	GROUND WATER	RECHARGE STRUCTURES SUITABLE & PRIORITY	REMARKS
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)	NO. OF WELLS OBSERVED	(RAINFALL & OTHER SOURCES)	LS = LOOSE SEDIMENTS PR = PERMEABLE ROCK FIR = FISSURED ROCK FR = FRACTURED ROCK WR /= WEATHERED ROCK / WM WEATHERED MATERIAL IR = IMPERIVIOUS ROCK	DW = DUG WELL RW = RING WELL BW = BORE WELL TW = TUBE WELL DBW /= DUG CUM-BORE WELL / DTW DUG CUM-TUBE WELL	(SUGGESTED) MIN - MAX (IN METERS)	(EXPECTED) (in LPM or m ³ / day)	& SUCCESS RATE OF WELLS (PROBABILITY) VERY HIGH HIGH MODERATE LOW	POTABLE (P) NON - POTABLE (NP) (INDICATE REASONS IF NON POTABLE)	IRRIGATED AREA (APPROX . RANGE IN PERCENTAGE)	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	Excellant	LS	TW	5-10 m	400-500 LPM	Very High	P	Nil	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.
PB111	nt day Deposits	Point Bar (PB)	No Well Observed	Very Good	LS	RW TW	5-10 m	300-500 LPM	Very High	P	Nil	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.
RI111	Prormation/Presser	River Island (RI)	<u>4/2</u> 1	Excellant	LS	TW	5-10 m	400-500 LPM	Very High	P	Nil	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.
MS111	Hugli/Bhagirathi	Meander Scar (MS)	<u>6/4</u> 4	Good	LS	TW	10-15 m	200-250 LPM	High	Р	Nil	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.
FP111		Flood Plain (FP)	6/3 4	Very Good	LS	TW	>150 m	500-600 LPM	Very High	NP (As & Fe) [At shallow depth]	49	Not Required	Areas with high Arsenic and Iron concentration.Potable water available at depth range above150 m.
	Bura/Katwa Holocana Holocana (Sand and Silt) Allusium (Sand and Silt) Allusium (Sand and Silt)	Alluvial Plain Younger (APY)	<u>7 / 4</u> 8	Good	LS	TW	100-120 m	400-500 LPM	High	NP (As & Fe) [At shallow depth]	55	RW Low	Areas with high Arsenic and Iron concentration.Potable water available at depth range above 100m.
AC13	a a la pagh / Chi la to Lat to Lat	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.Most suitable for extraction of groundwater.
FF// —		llt / fracture zones, which ge	enerally act as conduits for m	ovement of ground water in	hard rocks. Along these zone	s, the yields are significantl	y higher and wells are	e likely to be sustainal	ble for longer duratio	on. However, the inferred	fractures need to be c	onfirmed by detailed ground survey	5.
D /Q Q Q	PPP These are	dykes, quartz reefs and	d pegmatite veins, which g	generally act as barriers	for ground water moveme	ent.							
	N.BThe depth range and yield Locations of the	range of wells may vary recharge structures sho	within the unit because of wn in the map are tentative	certain inhomogeneities e. This map is useful for	Fractures/Lineaments wh narrowing down the target	ich are clearly observed zones,and exact location	/inferred from the n on the ground for	satellite image are i wells and recharge	indicated on the m	ap. There could be so I be identified based o	ome obscured fractu on follow-up ground	res which also influence the gro hydrogeological/geophysical su	und water prospects. rveys.

GROUND WATER PROSPECTS INFORMATION	HYDROLOGICAL INFORMATION	STRUCTURAL INFORMATION	BASE MAP INFORMATION	LOCATION INFORMATION		
YIELD COLOUR DEPTH RANGE OF WELLS	DESCRIPTION SYMBOL	DIPS BEDDING SCHISTOSITY/ FOLIATION	SYMBOL DESCRIPTION	STATE INDEX DISTRICT INDEX		
RANGE CODE SHALLOW MODERATE DEEP	CANAL / TANK IRRIGATED AREA	GENTLE (<15)	NH - 2 NATIONAL HIGHWAY	A-BIRBHUM B-BARDDHAMAN		
OF WELLS <30 METERS 30 - 80 METERS >80 METERS	GROUND WATER IRRIGATED AREA	MODERATE (15 - 45)	NATIONAL HIGHWAT	C-PURULIYA D-BANKURA N		
> 800 LPM VIOLET	RIVER / STREAM (with sand)	STEEP (45 - 80)	SH - 9 STATE HIGHWAY	E-PASCHIM MEDINIPUR F-PURBA MEDINIPUR G-S24 PARGANAS		
	WATER BODY / SPRING	SUB - VERTICAL TO VERTICAL (> 80)	METALLED ROAD	H-HOWRAH I- KOLKATA J-N24 PARGANAS		
400 - 800 LPM INDIGO	CANAL RAIN GUAGE STATION (With average annual rainfall in mm)	ANTICLINE / ANTIFORM ←←	———— OTHER ROAD	INDIA		
200 - 400 LPM BLUE	RECHARGE STRUCTURES SUGGESTED PERCOLATION TANK CHECK DAM	SYNCLINE / SYNFORM ←	RAILWAY	WEST E H		
100 - 200 LPM GREEN	NALA BUND RECHARGE WELL DESILTING OF TANK RECHARGE PIT	TREND LINE	CITY / VILLAGE	BENGAL K-HUGLI L-NADIA M-MURSHIDABAD N-MALDAH		
50 - 100 LPM YELLOW	SOIL CONSERVATION RECHARGE SHAFT MEASURES WELLS OBSERVED DURING FIELD VISIT YIELD RANGE BORE / YIELD RANGE DUG WELL /	ESCARPMENT LITHOLOGY / GEOMORPHIC UNIT	HABITATIONS : NON - COVERED (NC) PARTIALLY COVERED (PC)	IN-MALDAH		
	N LPM TUBE WELL N m³/ day BUG WELL	BOUNDARY MINOR MAJOR	BOUNDARY:	BLOCK INDEX MAPSHEET INDEX		
30 - 50 LPM ORANGE	400 - 800 LPM - 15/70 200 - 400 m³ / day	FAULT F F F F	INTERNATIONAL			
	200 - 400 LPM - 15/70 100 - 200 m ³ / day 8/15	THRUST TT TT	—·——·— STATE	78D02 78D06 78I		
20 - 30 LPM BROWN	100 - 200 LPM	FRACTURE / LINEAMENT	DISTRICT	M15		
	30 - 50 LPM	FRACTURE / LINEAMENT	— ВЬОСК	78D03 78D07 78I		
10 - 20 LPM PINK	20 - 30 LPM	SHEAR ZONE (Confirmed / Inferred) S S/S S/S S	OTHER INFORMATION	M23 M5		
Prospects	10 - 20 LPM	DYKE (Confirmed / Inferred)		78D04 78D08 78I		
limited to valley portions only (Hills, Plateaus etc.)	Colour inside well symbol indicates yield range. The figures on the top right	QUARTZ REEF (Confirmed / Inferred) Q Q Q Q Q Q	Rainfall : 1377 mm	M16 M32 M32		
RED Run-off zone/	hand side of well indicate the depth to water level and depth of well in meters DUG - CUM- BORE WELL HAND PUMP WELL	PEGMATITIE VEIN (Confirmed / Inferred)	(Source IMD)	M6-BHAGAWANGOLA II M15-LALGOLA M16-MURSHIDABAD_JIAGANJ M21-RANINAGAR I		
Barrier for G.W. movement (Inselberg / Ridge / Dyke etc.)	ARTESIAN WELL OF G.W DEPT. / C.G.W.B.	Lithologic contacts are inferred at places & Geomorphic boundaries are gradational	, , , ,	M22-RANINAGAR II M23-SAGARDIGHI		
PREPARED BY	TECHNICAL GUIDANCE & QUALITY CHECK	PARTICIPATING ORGANIZATIONS	METHODOLOGY & PROJECT EXECUTION	SPONSORED BY		
GEOINFORMATICS & REMOTE SENSING CELL	इसरो ंडान्व	SUDVEY OF INDIA	इसरो डिन्च	RAJIV GANDHI NATIONAL DRINKING WATER MIS		
B. STATE COUNCIL OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY	NATIONAL REMOTE SENSING CENTRE	SURVEY OF INDIA GEOLOGICAL SURVEY OF INDIA	NATIONAL REMOTE SENSING CENTRE	(PHASE IV) DEPARTMENT OF DRINKING WATER SUPPLY (DD) MINISTRY OF DRINKING WATER & SANITATION GOVERNMENT OF INDIA NEW DELHI		
GOVERNMENT OF WEST BENGAL	INDIAN SPACE RESEARCH ORGANISATION (ISRO)	PHED, GOVT. OF WEST BENGAL	INDIAN SPACE RESEARCH ORGANISATION (ISRO)			
4TH FLOOR, BIKASH BHAVAN SALT LAKE, KOLKATA 700 091	DEPT. OF SPACE, GOVT. OF INDIA BALANAGAR, HYDERABAD - 500 625	STATE WATER INVESTIGATION DIRECTORATE, GOWB P.S.MAPS (LAND RECORD), GOVT OF WEST BENGAL	DEPT. OF SPACE, GOVT. OF INDIA BALANAGAR, HYDERABAD - 500 625			