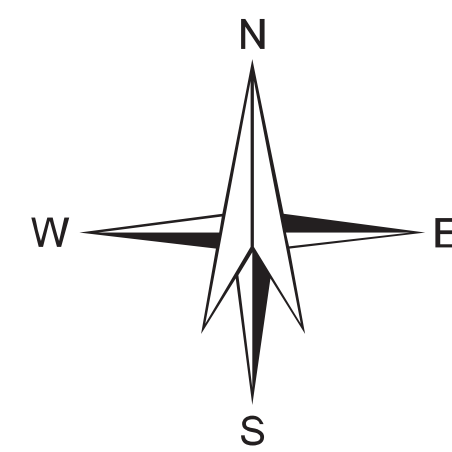
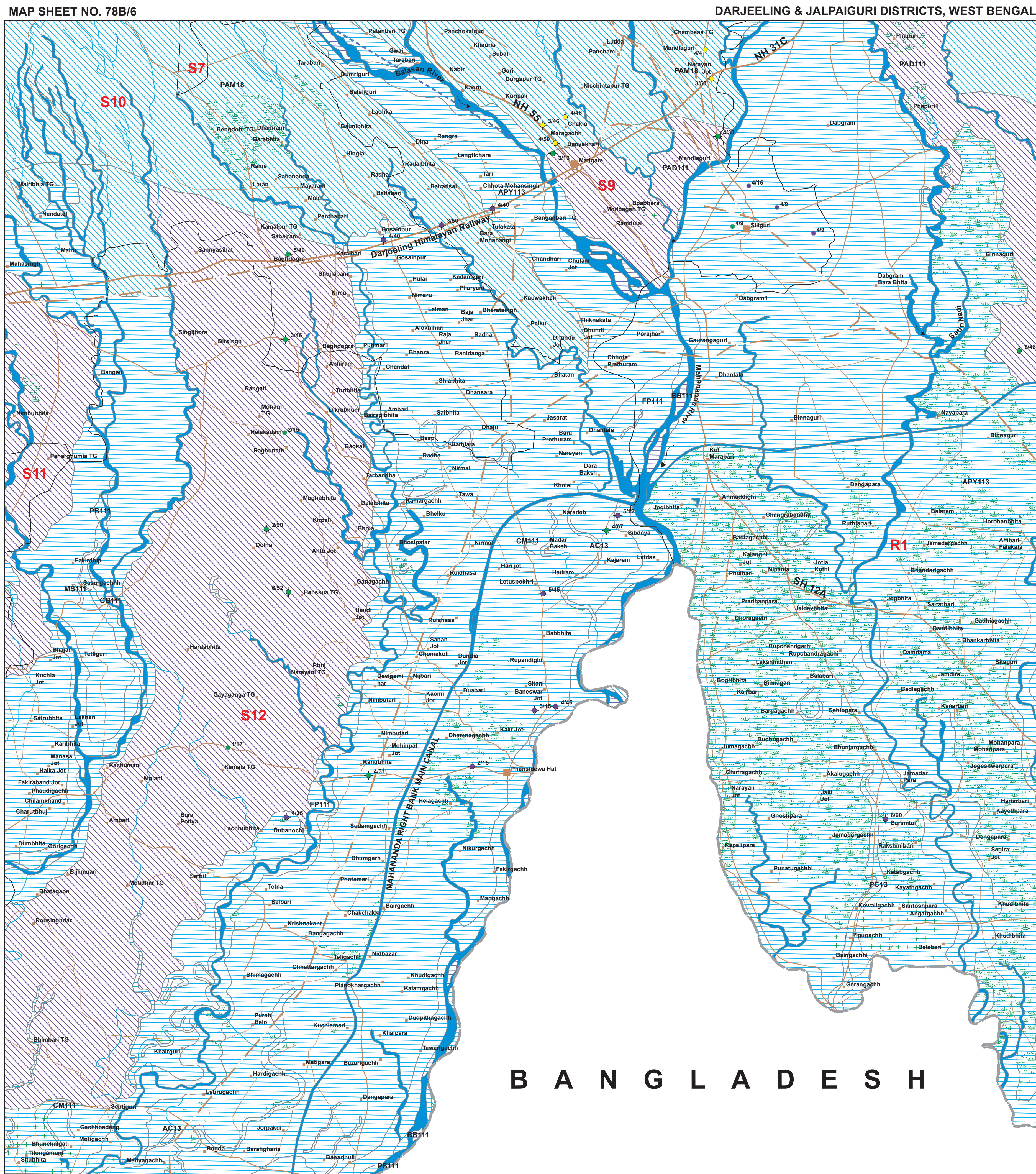


0 1 2 3 4 5 Kilometers

SCALE - 1 : 50,000



MAP UNIT (HYDROGEOLOGIC UNIT) REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE	GEOLOGICAL SEQUENCE / ROCK TYPE	GEOMORPHIC UNIT / LANDFORM	DEPTH TO WATER LEVEL	RECHARGE CONDITIONS	GROUND WATER PROSPECTS							RECHARGE STRUCTURES SUITABLE & PRIORITY	REMARKS (PROBLEMS / LIMITATIONS)	
	(REPRESENTED IN THE MAP WITH NUMERIC CODE)	(REPRESENTED IN THE MAP WITH ALPHABETIC CODE)	PRE / POST MONSOON (AVERAGE IN METERS)	BASED ON AVAILABILITY OF WATER (RAINFALL & OTHER SOURCES)	AQUIFER MATERIAL	TYPE OF WELLS SUITABLE	DEPTH RANGE OF WELLS (SUGGESTED)	YIELD RANGE OF WELLS (EXPECTED)	HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS (PROBABILITY)	QUALITY OF WATER (POTABLE (P) NON - POTABLE (NP))	GROUND WATER IRRIGATED AREA (APPROX. RANGE IN PERCENTAGE)	PT = RECOGNITION TANK CD = CHECK DAM SB = SANDSTONE WELL ET = OBTAINING OF TANK RW = RECHARGE DTP RQ = SUBSIDENCE RYSSE RS = RECHARGE DAMPT ST = STORAGE TANK PCM = SOL CONSERVATION MEASURES		
		Channel Bar (CB)	No Well Observed	Excellent	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.	
		Braid Bar (BB)	No Well Observed	Excellent	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.	
		Point Bar (PB)	No Well Observed	Very Good	LS	RW 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.	
		Alluvium (Sand Dominant) (111)	Meander Scar (MS)	No Well Observed	Very Good	LS	RW TW	10-15 m	300- 400 LPM	High	P	Nil	Not Required	Highly productive shallow aquifers with good recharge.
		Cut-off Meander (CM)	No Well Observed	Good	LS	RW TW	10-20 m	200-400 LPM	High	P	Nil	Not Required	Highly productive shallow aquifers with good recharge from the river base flow.	
		Flood Plain (FP)	$\frac{6}{4}$ 1	Very Good	LS	TW	<30 m	250-350 LPM	Very High	P	Nil	Not Required	Receives good recharge and forms shallow aquifer.Overall quality of the water is potable.	
		Piedmont Alluvium Deep (PAD)	$\frac{5}{3}$ 9	Good	LS	TW	30-80 m	100-300 LPM	Moderate	p	Nil	Not Required	Good ground water prospect at greater depth as the principal aquifer occurs below PAM.	
		Alluvium (Sand and Silt) (113)	Alluvial Plain Younger (APY)	$\frac{5}{3}$ 13	Good	LS	TW	25-30 m	200-250 LPM	High	P	15	Not Required	Highly productive aquifer at shallow depth with good recharge.
		Abandoned Channel (AC)	No Well Observed	Excellent to Very Good	LS	RW TW	10-30 m	300-400 LPM	Very High	P	Nil	Not Required	Highly productive shallow aquifers with good recharge from base flow.	
		Alluvium (Sand,Silt & Clay) (13)	Palaeo-channel (PC)	No Well Observed	Very Good	LS	RW TW	15-20m	150 - 200 LPM	Very High	P	Nil	Not Required	Highly productive shallow aquifers with good recharge.
		Alluvium (Gravel Dominant) (18)	Piedmont Alluvium Moderate (PAM)	$\frac{5}{3}$ 7	Good	LS	TW DTW	60-80 m	50-100 LPM	Moderate	P	Nil	Not Required	Moderate ground water prospect at more depth due to piedmont slope.
<p>F --- F / ---- / --- 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.</p> <p>D --- D / Q --- Q / P --- P These are dykes, quartz reefs and pegmatite veins, which generally act as barriers for ground water movement.</p> <p>N.B.-The depth range and yield range of wells may vary within the unit because of certain inhomogeneities. Fractures/Linesaments 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.</p>														



B A N G L A D E S H

GROUND WATER PROSPECTS INFORMATION

WELLS RANGE OF YIELDS	COLOR CODE	DEPTH RANGE OF WELLS	DESCRIPTION	SYMBOL
> 800 LPM	VIOLET	SHALLOW < 10 METERS	CANAL / BANK IRRIGATED AREA	DEEP GROUND WATER IRRIGATED AREA
400 - 800 LPM	INDIGO	MEDIAN 10 - 20 METERS	RIVER / STREAM (with sand)	WATER BODY / SPRING
200 - 400 LPM	BLUE	DEEP > 20 METERS	CANAL	RAIN GAUGE STATION (With average annual rainfall in mm)
100 - 200 LPM	GREEN		RECHARGE STRUCTURES SUGGESTED	
50 - 100 LPM	YELLOW		PERCOLATION TANK	CHECK DAM
30 - 50 LPM	ORANGE		DESILTING TANK	RECHARGE WELL
20 - 30 LPM	BROWN		SUBSURFACE DYE	RECHARGE INT
10 - 20 LPM	PINK		SOIL CONSERVATION MEASURES	RECHARGE SHAFT
Prospects with very poor yield only (Dry, Barren etc.)	RED			STORAGE TANK

HYDROLOGICAL INFORMATION

YIELD RANGE IN LPM	SOIL TYPE	RECHARGE RATE IN M/day	YIELD RANGE IN M³/day	DUG WELLS IN NO. OF WELLS
> 800 LPM	10/10	> 400 m³/day	8/10	8/10
400 - 800 LPM	10/10	200 - 400 m³/day	6/10	6/10
200 - 400 LPM	10/10	100 - 200 m³/day	4/10	4/10
100 - 200 LPM	10/10	50 - 100 m³/day	2/10	2/10
50 - 100 LPM	10/10	25 - 50 m³/day	1/10	1/10
30 - 50 LPM	10/10	15 - 25 m³/day	0/10	0/10
20 - 30 LPM	10/10	10 - 15 m³/day	0/10	0/10
10 - 20 LPM	10/10	5 - 10 m³/day	0/10	0/10
< 10 LPM	10/10	< 5 m³/day	0/10	0/10

STRUCTURAL INFORMATION

DIPS	BEDDING	ACHISTOSITY / FOLIATION
GENTLE (< 15°)	MODERATE (15-45°)	STEEP (> 45°)
STEEP (> 45°)	SUB-VERTICAL TO VERTICAL (> 80°)	ANTICLINE / SYNFORM
SYNCLINE / SYNFORM	TREND LINE	ESCAPMENT
LITHOLOGICAL / GEOMORPHIC UNIT BOUNDARY	FAULT	THRUST
FRACATURE / LINEAMENT (Inferred)	SHEAR ZONE (Confirmed / Inferred)	DYKE (Confirmed / Inferred)
QUARTZ REEF (Confirmed / Inferred)	PEGMATITE VENE (Confirmed / Inferred)	

BASE MAP INFORMATION

SYMBOL	DESCRIPTION
NH - 24	NATIONAL HIGHWAY
SH - 12	STATE HIGHWAY
	METALLAD ROAD
	OTHER ROAD
	RAILWAY
	CITY / VILLAGE
	HABITATIONS - NON - COVERED (NC) PARTIALLY COVERED (PC)
	BOUNDARY: INTERNATIONAL, STATE, DISTRICT, BLOCK

LOCATION INFORMATION

STATE INDEX

DISTRICT INDEX

BLOCK INDEX

MAPSHEET INDEX

OTHER INFORMATION

Rainfall : 2628 mm
Nearest Rain gauge Station : Darjeeling (Source IMD)

TECHNICAL GUIDANCE & QUALITY CHECK

PARTICIPATING ORGANIZATIONS

METHODOLOGY & PROJECT EXECUTION

SPONSORED BY

RAJIV GANDHI NATIONAL DRINKING WATER MISSION (PHASE IV)

DEPARTMENT OF DRINKING WATER SUPPLY (DDWS)

MINISTRY OF DRINKING WATER AND SANITATION (MWDWS)

GOVERNMENT OF INDIA

NEW DELHI