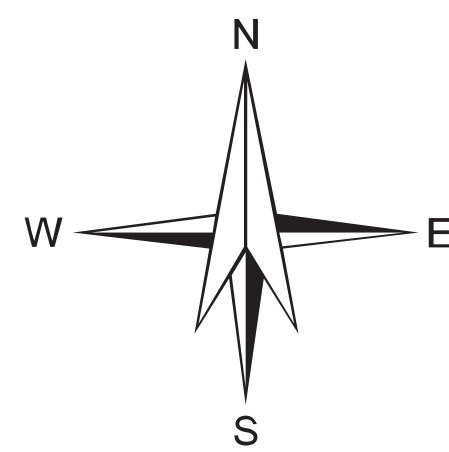
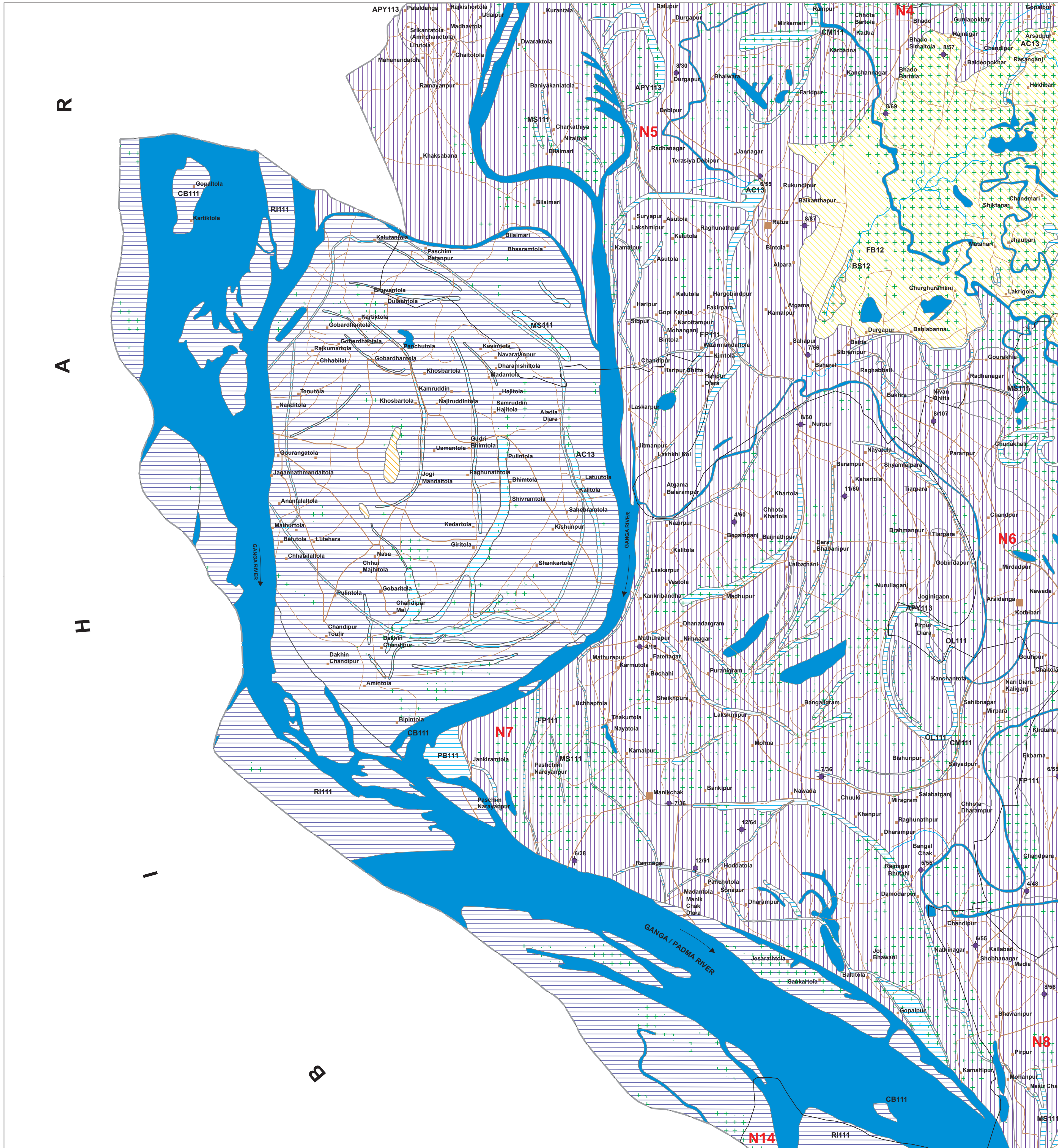


0 1 2 3 4 5 Kilometers

SCALE - 1 : 50,000



MAP SHEET NO. 720/16



| MAP UNIT (HYDROGEOMORPHIC UNIT) REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE (COLOUR INDICATES YIELD RANGE AND HYDROGEN 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 | 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) (INDICATE DEGREE OF NON-POTABLE) | GROUND WATER IRRIGATED AREA (APPROX. RANGE IN PERCENTAGE) | | |
| | | | | | | | | | | | | | |
| LS - LOOSE SEDIMENTS PS - PERMEABLE ROCK CR - CRACKED ROCK PR - FRACTURED ROCK WR - WEATHERED ROCK / WEATHERED MATERIAL R - IMPERVIOUS ROCK | DN - DUG WELL RW - RIVER WELL TW - TUBE WELL DOW - DUG CUM DOWE WELL BTW - DUG CUM TUBE WELL | MM - MAX (IN METERS) | (\pm LPM or m ³ / day) | (PROBABILITY %) | VERY HIGH / HIGH / MODERATE / LOW | | | | | | | | |
| CB111 | Alluvium (Sand Dominant) (111) | 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. |
| PB111 | | Point Bar (PB) | No Well Observed | Very Good | LS | RW TW | 5-10 m | 300-400 LPM | Very High | P | Nil | Not Required | Groundwater prospects very high with high recharge potential. Recharge structures not required. |
| RI111 | | River Island (RI) | No Well Observed | Very Good | LS | TW | 5-10 m | 400-500 LPM | High | P | 10 | Not Required | Highly productive aquifer in shallow depth. Good recharge |
| OL111 | | Oxbow Lake (OL) | No Well Observed | Good | LS | TW | 20-30 m | 200-300 LPM | Moderate | P | Nil | Not Required | Though occur as water bodies, but highly productive aquifer occurs at depth. |
| CM111 | | Cut-off Meander (CM) | No Well Observed | Good | LS | RW TW | 10-20 m | 300-400 LPM | High | P | 15 | Not Required | Highly productive shallow aquifers with good recharge from the river base flow. |
| MS111 | | Meander Scar (MS) | No Well Observed | Very Good | LS | RW TW | 10-15 m | 200-250 LPM | High | P | 10 | Not Required | Highly productive shallow aquifers with good recharge. |
| FP111 | | Flood Plain (FP) | No Well Observed | 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. |
| FP111 | | Flood Plain (FP) | $\frac{13 / 7}{3}$ | Very Good | LS | TW | 80-100 m | 600-800 LPM | Very High | NP (As & Fe) (at shallow depth) | 92 | Not Required | Areas with high concentration of Arsenic & Iron. Potable water available at deeper depth. |
| FB12 | Alluvium (Clay Dominant) (12) | Flood Basin (FB) | $\frac{9 / 7}{2}$ | Very Low | LS | TW | 50-60 m | 50-100 LPM | Low to Moderate | P | 70 | Not Required | Flood basins are occupied by water on the surface. Form aquifers due to the clayey sediments. However, sometime due to channel migration in the earlier fluvial regime, aquifers at depth may occur. |
| BS12 | | Back Swamp (BS) | No Well Observed | Poor | LS | TW | 60-70 m | 40-50 LPM | Low to Moderate | P | 100 | Not Required | Areas of low groundwater potential. Better potential at greater depths. |
| APY113 | Alluvium (Sand and Silt) (113) | Alluvial Plain Younger (APY) | $\frac{8 / 5}{16}$ | Good | LS | TW | 100-120 m | 400-500 LPM | High | NP (As & Fe) (at shallow depth) | 40 | Not Required | Areas with high Arsenic & Iron content. Potable water available at deeper depth. |
| AC13 | Alluvium (Sand,Silt & Clay) (13) | Abandoned Channel (AC) | No Well Observed | Very Good | LS | RW TW | 10-15 m | 250-300 LPM | Very High | P | 5 | Not Required | Highly productive shallow aquifers with good recharge from base flow. |
| 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. | | | | | | | | | | | | | |
| D --- D / Q --- Q / 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. | | | | | | | | | | | | | |
| 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. | | | | | | | | | | | | | |

[illegible]