U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

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This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the International Stratigraphic Code.
Any use of trade names is for descriptive purposes only and does not imply endorsement by the U.S. government.

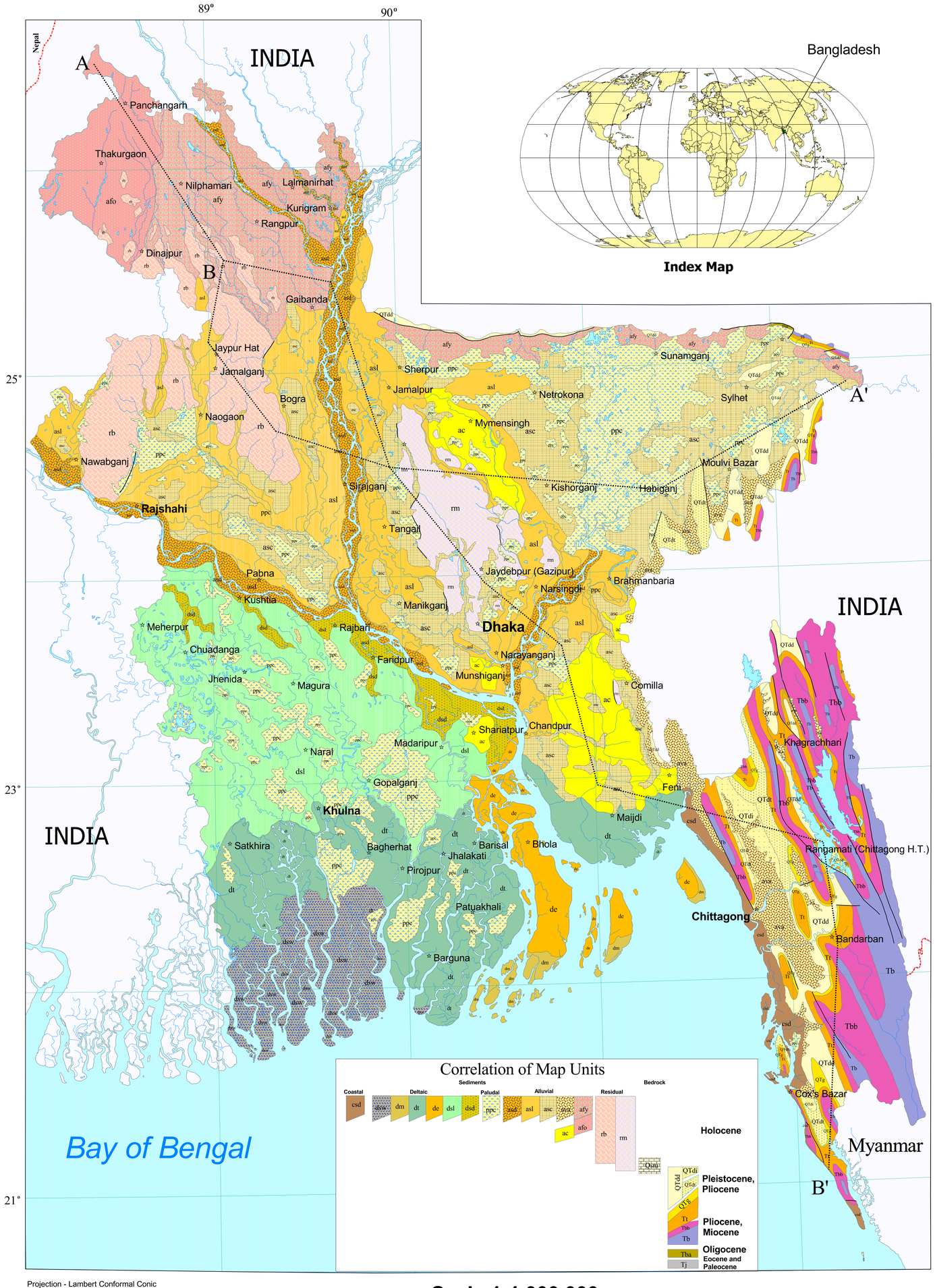
ABOUT THIS MAP

This map was compiled as part of the Bangladesh gas resources assessment conducted under the Participating Agency Service Agreement (PASA) signed between U.S. Agency of International Development (USAID) and the U.S. Department of Energy (DOE) - PASA No: 388-P-00-99-00026. The PASA provides for assistance to the natural gas sector pursuant to which the resources assessment was jointly carried out. PASA also encourages transfer of new technology, modelling practices and geoscience theory from existing and established programs in the United States to the Government of Bangladesh, Petrobangla, and Bangladesh academia.

This map has been compiled from the Geological Map of Bangladesh, by Md. Khurshid Alam, A.K.M.Shahidul Hasan, and Mujibur Rahman Khan (Geological Survey of Bangladesh), and John W. Whitney (United States Geological Survey), scale 1:1,000,000, published by Geological Survey of Bangladesh in 1990.

1. Original map was scanned on large format Ideal scanner in color mode with resolution 200 dpi.
2. The scanned image was transformed to Lambert Conformal projection by ArcInfo REGISTER and RECTIFY utilities.
3. Reference points for transformation were latitude-longitude crosses taken from paper map compared with the same crosses projected to Lambert in ArcInfo PROJECT utility. Overall RMS error of transformation was 250 m (0.25 mm on original paper map).
4. On-screen digitization was performed using a rectified image as a backdrop in ArcInfo ARCEDIT.
5. Geologic attributes were assigned to GLG item of Feature Attribute Table (FAT) of geology coverage.
6. Base map data layers - rivers, lakes, cities - were digitized as separate coverages.
7. All the ArcInfo coverages were converted into .E00 files, then imported to ArcView by IMPORT 71 utility and saved as shape files.

Administrative and country boundary coverages used on the map are the property of Environmental System Research Institute, Inc. (ESRI) and are used with permission.



Projection - Lambert Conformal Conic
Spheroid - Everest 1969
Central Meridian - 87 E
1-st standard parallel - 22 N
2-nd standard parallel - 25 N

Scale 1:1,000,000

30 0 30 60 Miles
40 0 40 80 Kilometers

Description of Map Units

Surface Geology

Holocene Sediments:

Coastal Deposits:
- csd — Beach and dune sand

Deltaic Deposits:
- dsw — Mangrove swamp deposit
- dm — Tidal mud
- dt — Tidal deltaic deposits
- de — Estuarine deposits
- dsl — Deltaic silt
- dsd — Deltaic sand

Paludal Deposits:
- ppc — Marsh clay and peat

Alluvial Deposits:
- asd — Alluvial sand
- asl — Alluvial silt
- asc — Alluvial silt and clay
- ac — Chandina alluvium
- avva — Valley alluvium and colluvium

Alluvial Fan Deposits:
- afy — Young gravelly sand
- afo — Old gravelly sand

Residual Deposits:
- rb — Barind clay residuum
- rm — Madhupur clay residuum

Bedrocks:
- Qsm — St. Marin limestone (Pleistocene)
- QTdd — Dihing and Dupi Tila Formation Undivided
- QTdi — Dihing Formation (Pleistocene and Pliocene)
- QTdt — Dupi Tila Formation (Pleistocene and Pliocene)

Tipam Group:
- QTg — Girujan Clay (Pleistocene and Neogene)
- Tt — Tipam Sandstone (Neogene)

Surma Group:
- Tbb — Boka Bil Formation (Neogene)
- Tb — Bhuban Formation (Miocene)
- Tba — Barail Formation (Oligocene)

Jaintia Group:
- Tj — Jaintia Group includes:
  Kopili Formation (Late Eocene)
  Sylhet Limestone (Middle to Early? Eocene)
  Tura Formation (Eocene and Paleocene)

- Lake
- Ocean and wide river
- Areas outside of Bangladesh
- Major City
- Faults - Approximately located
- River
- Contact
- Political Boundary
- Section Line

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GEOLOGICAL MAP OF BANGLADESH

Original Geological Map by Md. Khurshid Alam, A.K.M.Shahidul Hasan, and Mujibur Rahman Khan, (Geological Survey of Bangladesh), and John W. Whitney, (United States Geological Survey)
1990
Digitally compiled by F.M.Persits, C.J.Wandrey, R.C. Milici, (USGS), and Abdullah Manwar, (Director General, Geological Survey of Bangladesh)
2001