

GSB in Nation Building Activities

The Geological Survey of Bangladesh (GSB) has been incorporated with investigation and exploration of mineral kingdom, coal and also other solid mineral resources for the potential development of the country. This national organization is entrusted with the responsibilities of geological mapping and other geo-scientific research works in the country. Last five decades GSB, continues discovering coal, hard rock peat, limestone white clay glass sand metallic ore and other economic mineral deposits throughout the country.

Discovery of Iron Ore in Bangladesh



Dr. Mohd. Sher Ali, then Director General, GSB & Joint Secretary, EMRD handed over the Geological Report of the first iron ore discovery to Mr. Anisur Rahman, the then Senior Secretary, EMRD.



GSB discovered first Iron ore deposit By four consecutive Geological Drilling holes at Alihat area of Dinajpur district. Iron ore bearing layers found from 406 m to 430 m below the surface which composed of more than 55% Iron Oxides. estimated probable reserve of Iron ore deposits is around 1250 mt where Iron ore contain is about 625 mt which is the ever first Iron ore discovery in Bangladesh.

Overview of Current Activities Under Annual Performance Agreement (2020-21)

Geological and geomorphological mapping of 2097 sq. km. area, geophysical investigation of 327 sq. km. area geochemical investigation of 45 sq. km. area and 30 line km. and 2 logging completed. 13 research works including one drilling activity under different geo-scientific programme also have been completed.

Geological Investigations in Hill Tracts Areas of Bangladesh

Geological Mapping of Rangamati District Rangamati Sadar Upazilahas been completed covering 548 sq. km area. The fieldwork was scheduled for two months from 06 February to 06 April, 2022.



Geological mapping field visited by the Director General of GSB, Mohammad Elius Hossain (left most)



Rock Sample Collection from outcrops for geological information

Mineralogical analysis of sedimentary rocks of the Tertiary Hills outcrops of Ruma Upazila of Cox's Bazar District has been done to understand the lithology and mineralogical analysis of sediments and sedimentary rocks.



Landslide Hazard zoning map and Susceptibility mapping of Kawkhali Upazila, Rangamati District has been completed. The aim is to analysis the characteristics of landslides and their relationship with different landslide causative factors. The survey work has been completed in the area of 339 sq. km from 11/11/2021 to 10/12/2021.



Geological Investigations in Coastal Areas of Bangladesh

Mapping: Coastal geological mapping of Debhata and Kaliganj upazila, Satkhira district was carried out from 08/11/2021 to 03/02/2022. A total area of 510 sq. km has been surveyed. Coastal geological and geomorphological mapping of Asasuni and Shyamnagarupazila (902.4 sq. km) has been completed. Objectives are to characterize landform and hydrology, identification of related coastal hazard and produce derivative maps at 1: 50000 scale.



Micropaleontology Study



GSB carried out a field programme, aimed to research on the occurrence and distribution of microfossils along the coast of the Bay of Bengal and impact of global warming on them



Study on Jamuna River and Its Adjoining Areas



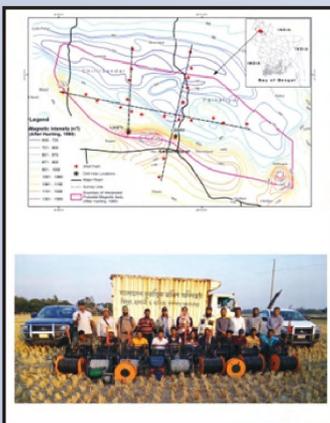
GSB completed field works in Belkuchi Upazila, Sirajgonj and in Sonatala Upazila of Bogra district. The main objectives are focusing on morphodynamic changes and vulnerability of river bank erosion of Jamuna River, determination of erosion tendency and geological and geomorphological mapping of the investigated areas.

Geochemical Investigation in Dhamrai Upazila

GSB carried out this program from 18/02/2022 upto 02/04/2022, covering 306 sq. km area of Dhamrai Upazila, Dhaka. Main objective is to determine water quality, environmental assessment and geochemical mapping of the area.



Geophysical Investigations in the Northern Parts of Bangladesh



Gravity and Magnetic survey have been conducted at Chirirbandar, Parbatipur, Dinajpur to find significant local anomaly perspective for economic mineral resources. From 8/11/2021 to 5/12/2021, 325 sq. km regional and 119 line km profiling survey has been completed.



The Soil and Water Pollution in the Industrial Areas of Khalispur, Khulna District

The chemical analysis of soil and water samples from local industries, khalishpur industrial area has been done by the chemical branch of GSB. Through the program, survey work has been completed in the area of 40 sq. km from 08/10/2021 to 25/10/2021. GSB started a new geological programme on 25/03/2022 at Mostafapur area of Kutubpur magnetic body, Parbatipur, Dinajpur. The objective of the programme is geological exploration of magnetic mineral.



Drilling

GSB is going to start a new drill hole GDH-77/22 in Kutubpur, Dinajpur district on March 22. The objective is geological exploration of the magnetic body.



Training / Seminars / Workshops Organized by GATC



29 local training, 34 in house training and 23 seminar held in 2021. 1226 trainee participated in the training and seminar. Technical training, awareness meetings, seminars and workshops on the use of geological knowledge in urban development were conducted in the presence of geologists, university teachers, students, mayors, councilors, other officials and some citizens.

Grievance Redress System (GRS)

A Deputy Director (Geology) of GSB is acting as Grievance Redressal Officer (Anik) and Joint Secretary (Operations) of Energy and Mineral Resources division is working as Appellate Officer. The number of total 04 complaints have been received on the GSB online platform since January 2021 and have been successfully disposed.

National Integrity Strategy of Bangladesh (NIS)

GSB have prepared a Telephone directory & quote; for all organizations/agencies of Energy and Mineral Resources Division to enhance quick communication. GSB published its purchase plan 2020-21, update citizen charter etc. GSB performed awareness campaigns regarding integrity and corruption prevent by preparing poster, banner and Festoon. Inspections of branch laboratories and ongoing project office have been done. GSB arranged some stock holder's meeting with their connate organizations to robust bilateral relationship.

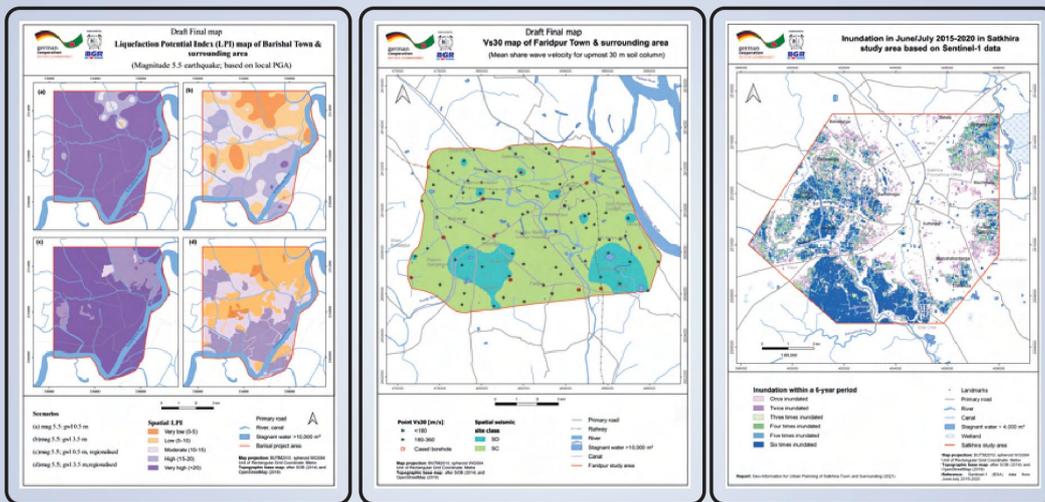


Innovation

- Service Simplification in Working Place: Geo-scientific information exchange is easygoing due to palynology and paleontological index map and Database app etc. Innovative initiatives are- GSB blood club and Telephone Directory.
- GSB is working on free flow of information, right to freedom of thought, conscience and expression. Work is on progress to provide published report on digital format for government/non-government organization/public. News-letter and booklets are published time to time.
- Update quarterly reports and Zoom meetings arranged with other organizations such as BMD, Hydrocarbon Petrobangla and BPI

On Going Project

“Geoinformation for Urban Planning and Adaptation to Climate Change (GeoUPAC)” (2018-2022) is being implemented by GSB and Federal Institute for Geosciences and Natural Resources (BGR), Government of the Federal Republic of Germany.



Under this project, a geo-information database, generation of geomorphological, engineering geological maps, 3-D geological models and various types of other maps will be done for 4 project areas of Bangladesh (Barishal Metropolitan, Khulna City Corporation and Faridpur and Satkhira Town and adjoining areas).

Result could be used by the local town planning and development authorities for future detailed urban planning updates.

Proposed Project

- Enhancement and strengthening of drilling capability of GSB (ESDC-GSB).
- Geological investigation and setting up of early warning system for land slide hazard assessment and management.

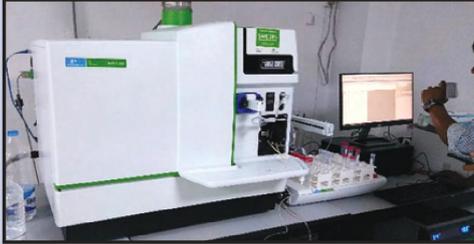
Publications

A geo-scientific report has been published this year and eleven more are on the process in BG press. A memoir enrich in geological writings and a magazine have been published on the occasion of the Golden Jubilee and Mujib year.



Laboratory Facilities

Different branches are now well equipped with scanning Electron Microscope (FESEM) with WDS, EDS, BSE and CL detector OSL TL age dating machine, XRF, X-RD, high quality polarizing microscope, hydrometer etc. This year a good number of sample processed and analyzed at different laboratory.



The Earthquake Research Cell

The Earthquake Research Cell conducts research on earthquakes in Assam-Tripura Mizoram-Burma considering the low number of earthquakes in Bangladesh and the potential for earthquake damage in the surrounding areas of Bangladesh. In order to expedite the work of this cell, 04 Seismogram, 07 GPS stations and accelerometers have been set up in different parts of the country under the supervision of GSB.

Organizations visit GSB

Twenty eight students from Geological sciences department, Jahangir Nagar University and Six students of Oceanography department, University of Dhaka visited GSB as part of their academic internship. Thirteen Officials from Bangladesh NAVY also visited GSB as a part of their academic programme. Nineteen trainees along with five resource person from NOAMI visited GSB.



Promotion & Retirement

09 officers and 08 staffs have been promoted to higher ranks in different category. 03 officers and 06 staff have been retired this year.



Special Day Programme

Golden Jubilee of Independence and the Celebration of Mujib Year

GSB organized blood donation camp, scientific discussions, seminars, in-house training, and freedom fighter honor on the occasion from March 17 to March 26, 2021. Various competitions and cultural programs were organized on Independence Day. A memorandum was published comprising of geo-scientific essays of teachers from different universities of the country, officials of the ministry and officials of the department.



Hon'ble State Minister Md Nasrul Hamid MP, unveiling the souvenir



Hon'ble State Minister Md Nasrul Hamid MP, with the honorable heroic freedom fighters



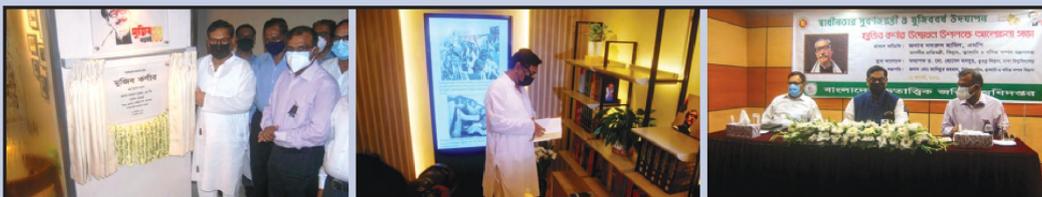
GSB has given posthumous reception to the families of heroic freedom fighters and late freedom fighters on March 25, 2021.



Blood Donation Programme inaugurated by Md. Anisur Rahman, then Senior Secretary, EMRD

Mujib Corner Inauguration in GSB Premises

The inauguration of newly constructed Mujib Corner in GSB was held on Wednesday, August 11, 2021, on the occasion of Golden Jubilee of Great Independence and Mujib Centenary. Accordingly, a discussion meeting was organized. Hon'ble Minister of State for Power, Energy and Mineral Resources Mr. Nasrul Hamid, M.P. graced the chief guest seat on the occasion. Md. Anisur Rahman, Senior Secretary, Energy and Mineral Resources division presided over the meeting. Professor Dr. Md. Hossain Mansur, Department of Geology, University of Dhaka was the keynote speaker.



The inauguration of newly constructed Mujib Corner and a discussion meeting in GSB





50 Years of GSB & Golden Jubilee of Victory Day

GSB celebrated its 50 years anniversary from 13 to 15 December. Mr. S M Zakir Hossain, Additional Secretary, energy and mineral resource division inaugurated the programme. A daylong National Seminar on “Geoscience for Sustainable Development of Bangladesh” was held on 15 December where 15 papers were presented. Dr Tawfiq-e-Elahi Chowdhury, BB, Adviser to the Honorable Prime Minister for Power, Energy & Mineral Resources Affairs enjoyed the seminar. On 16 December 2021, GSB celebrated the golden jubilee of victory day. Sports, drawing competitions, enchanting cultural events, raffle draws were held all day long in office premises.



Panel Discussion

Dr. Tawfiq-e-Elahi Chowdhury, BB, Adviser to the Prime Minister for Power, Energy & Mineral Resources Affairs enjoyed the seminar.

Enhanced Cultural Programme

Bangabandhu’s Birthday & National Children's Day

Mujib Borsho Celebration Committee of GSB organized Essay Competition on ‘Bangabandhu’ in Segun Bagicha High School and Begum Rahima Adarsha Balika Uchha Bidyalaya situated in Segun Bagicha area. The prize giving ceremony was held on 13th and 14th March, 2022 respectively. On 17th march, GSB celebrated the 103rd birthday of Father of the Nation Bangabandhu Sheikh Mujibur Rahman in a befitting manner. The programmes included hoisting of national flag a top of the office and placing of wreaths at the portrait of Bangabandhu at GTCL, Dhaka. At GSB, the programmes organised on this occasion were recitation from the Quran, discussion meeting on Sheikh Mujibur Rahman’s struggling life and politics and Doamahfil seeking eternal peace of the departed souls of Bangabandhu and his family members.



GSB celebrated the 103rd birthday of Father of the Nation Bangabandhu Sheikh Mujibur Rahman in a befitting manner



Essay Competition on ‘Bangabandhu’ in school level

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