

১৯৮০-২০২১ সাল পর্যন্ত বাংলাদেশ ভূতাত্ত্বিক জরিপ অধিদপ্তর (জিএসবি) কর্তৃক
বাস্তবায়িত সমাপ্ত প্রকল্প/কর্মসূচির তালিকা:

(Taka in Lac)

<p>1. Identification and Economic Assessment of the Valuable Minerals in the River Sands of Bangladesh. (December 2015 - June 2019)</p>	<p>3562.70</p>	<p>Sediments of the Ganges-Brahmapurtra-Meghna (GBM) river systems are found to enrich with valuable and precious economic minerals and elements. From this perspective the present project has been proposed. The main objectives of the project is to assess the extension, reserves, mode of occurrence and economic viability of the mineral sand.</p> <ol style="list-style-type: none"> 1. Preparation of a basic database on the mineralogical and elemental compositions of the river sands (of the project area) to identify the presence of the precious, valuable and strategic elements or minerals. 2. Estimation of extension, mode of occurrences, reserves, economic potentiality, and source and origin of the identified minerals sands. 3. Enhancement of GSB laboratory capabilities and human resources development to identify certain critical elements like rare Earths Transition Metals, Metals Lanthanide – Actinide series etc independently and 4. Development of an additional database on geo-scientific information regarding origin and transportation of the minerals, sedimentation subsidence, erosion, etc.
<p>2. Geo-information for Urban Development, Bangladesh.(GUD) (July 2013 - June, 2016)</p>	<p>2500.00</p>	<p>The overall objective for the project is “Strengthening the Urban planning and development process incorporating the geo-information for the safety and resilience of urban areas”. The specific objective for the project are as follows:</p> <ol style="list-style-type: none"> 1. Generate geo-information for upgradation of DAP of RAJUK in regional scale (1:50000) 2. Provide Building Ground Suitability Information / Data to planners and developers in selected areas (

			<p>preferably detailed scale (1:50000) in the “type section areas”)</p> <ol style="list-style-type: none"> Outline the general Handbook on Geo-information for urban planning and development in cooperation of the stakeholders (UDD, City Development Authorities, Universites , Decision makers,etc.) Enhancing the GSB role as a service provider by strengthening its technical and management capabilities through on-the –job training, Equipment etc. Become an active partner in the urban planning and development processes. Support planners/ engineers/ architects and others by outsourcing the service etc.
3.	<p>Strengthening the Research and Exploration Capabilities of the Geological Survey of Bangladesh.</p> <p>(January 2010- June, 2015)</p>	3823.00	<p>Strengthening the exploration capabilities of GSB by upgrading the existing analytical and research facilities to international level.</p> <ol style="list-style-type: none"> Enhancing the level of detection of valuable/ crucial minerals and elements. Human resources development (HRD) to support the advance level of research and exploration works through home and abroad training of eighty one personnel. Creating congenial atmosphere foe advance level research.
4.	<p>Enhance Institutional Support and Capacity Building of Geological Survey of Bangladesh for Mitigation of Geo-hazards in Bangladesh (phase-II) (July 2013-June, 2016)</p>	540.00	
5.	<p>Geoscientific Activities for Mineral Investigation – 2nd Phase (July 2011-June, 2014)</p>	596.50	<p>Geological Survey of Bangladesh (GSB) is a research based national geoscientific organization. The main objectives of GSb are to conduct systematic geological mapping all over the country, to find out mineral resources and to carry out extensive research work on all aspects of geosciences. GSB since its inception to present date has a proud record of achievements. So far it has discover valuable mineral resources like coal, peat, hard rock , limestone , white clay , glass sand. Among these coal fields of Barapukuria , Khalaspir, Dighapara and hard rock of Madhyapara are worth</p>

		<p>mentioning . In this connection , the Objectives were considered-</p> <ol style="list-style-type: none"> 1. Exploration of mineral deposits in the country 2. To find out the extension, depth , thickness, reserves, quality and environmental contex of the discovered minerals in Bangladesh. 3. To survey peat/coal as an alternate energy. 4. To survey white clay , construction sand and stone and drilling for economic mineral investigation. 5. To collect the stratigraphic information and conjecture about the deposition of economic minerals. 6. To prepare geo-scientific reports on the acquired data.
<p>6. Integrated Geological Mapping of the Chalanbil Areas to Unveil the Quaternary Records and Climatic Changes (July 2010- June, 2013)</p>	<p>335.80</p>	<p>Quaternary Period is specially , important for Bangladesh as major portion of this countryis covered with Quaternary Sediments Deposited by 'Ganges-Meghna-Brahmapurtra Delta or GMB delta'. It is known that the delta experienced the past climate changes , sea level rise and neo-tectonics of the Quaternary Period. There might have a possibility to preserve the hidden marks of these events in the low-lying areas of Bangladesh like Chalanbil. The programme was designed to investigate the Chalanbil and Surrounding Areas with a view to nunveil the Quaternary Geological records. In this condition , the following objectives were considered-</p> <ol style="list-style-type: none"> 1. Collection of Geo-scientific information related to origin and evolutionary history of the Chalanbil Area. 2. Collection of Paleo-Climatic data inthis region. 3. Up-gradation of Quaternary Stratigraphy. 4. Identification of the environmental degrading agents and hazards of the area. 5. Collection of basic information on Ground water Resources. 6. Preparation of Land Classification Map for possible optimum uses of land. 7. Identification of Neotectonic evidences and

7.	<p>Geological exploration for identification of Mineral Resources and the areas vulnerable to Natural hazards in coastal Parts of Bangladesh.</p> <p>(July 2006 - June2011)</p>	1598.00	<p>8. Identification of Economic Mineral Deposits.</p> <p>In order to undertake the extensive research works under the provision of the project objective Clause no c and d , the revised project objectives have been considered as to</p> <ol style="list-style-type: none"> 1. Identify and monitor the geo-environmental issues related to global warming in the coastal zone of Bangladesh. 2. Carry out geological investigation to assess the effect and vulnerability of the coastal belt of Bangladesh in relation to sea level rise due to climatic change. 3. Gather information on proper land use planning with special emphasis to infrastructure development and settlement in changing condition.
8.	<p>Enhance intuitional support and capacity building for mitigation of geohazards in Bangladesh.</p> <p>(July 2009 - June2012)</p>	440.00	<ol style="list-style-type: none"> 1. Facilitate natural hazard reduction initiatives with emphasis on slope instabilities and seismic hazards. 2. Introduce state-of-the-art methodologies for instabilities and seismic hazards investigation and mitigation. 3. On-the-job training and capacity building of GSB personel. 4. Provide GSB personnel with training material to reduce the risks from natural hazards. 5. Promote a participatory approach to facilitate collaboration and co-ordination between different government organizations (such as Disaster Management Bureau(DMB), different universities in Bangladesh) and international agencies (such as the Asian Disaster Preparedness Centre(ADPC) in Bangkok, Thailand).
9.	<p>High Resolution Terrain Modeling of North-Eastern Part of Greater Dhaka City, Bangladesh.</p> <p>(July 2008 - March 2010)</p>	210.00	<p>The overall objectives of this project is to “collect very high-resolution landform elevation and slop gradient data using the most modern LiDAR technology” The Specific Objectives of this project are as follows:</p> <ol style="list-style-type: none"> 1. Creation of Digital Elevation Model(DEM) and Digital Terrain Model(DTM) data base of the study area

10. Building Ground Information System of Dhaka City, Bangladesh.
(July, 2007- June, 2009)

218.9035

for landscape modification , drainage system planning and creation of 3-dimensional geological model

2. The local professionals will be trained to use the LiDAR technology and data application.
3. Assessing the flood and water logging related hazard impact due to landform modification.
4. Recommendations in the form of mps, digital demo and guidelines for policy makers, planners and related professionals for sustainable development activities.

i. Overall Objectives:

The overall objectives of this project is to enable the GSB in its authorization duties in land and urban development, by providing instantly the user-friendly geological data to the users.

ii. Specific Objectives:

The specific objective of this project is to create a user friendly digital geological database for the users regarding the building ground information of Dhaka City, Bangladesh incorporating all the geological information and recommendations. The policy makers, planners and related professionals can take proper policy/technical decisions effectively for sustainable development activities using this model and database.

iii. Development Objective:

Through this project the local experts can share their experiences and expertise to develop a community of GIS based 3-dimentional geo-scientific modeling which could be transferred to their professional groups. Thus , the same approach can be applied to different parts of the country in various purposes.

		<p>This project will establish necessary linkage with most of the government and non-government organizations involved in environment and urban development activities including the city cooperation. City development authorities, municipalities, various engineering departments like PWD, LGED, public health engineering as well as planning Commission, concern ministries departments, Universities and consultants etc.</p> <p>These measures should be coordinated with national activities on planning and risk assessment in Bangladesh. The information and database generated by the project will be disseminated to the planning and development authorities working in urban infrastructure development as well as to the individual and private companies. It will be major source of geo-informatics database and the advisory service.</p>
<p>11. 3-dimensional Geological Modeling for Industrial sitting and waste Management and Health Hazard Assessment of Dhaka City, Bangladesh. (July, 2005 - June, 2006)</p>	<p>159.65</p>	<p>The main objective of the project is to generate the geological data and information for the city dwellers, urban planners and the policy makers for the sake of planning and development of safe or less hazardous urbanization activities. Computer technology as well as the 3D Geographic Information System (GIS) has been given top priority in analyzing, creating data base and presenting data. The major objective of this project in the 3 selected pilot areas (±15 sq. km.) with different geological setting and hazard potentials in Dhaka City are:</p> <ol style="list-style-type: none"> 1. Creating a computerized Database for geological and environmental model study. 2. Provide recommendations about selection of waste disposal site for the protection of basic health of city dwellers and environmental balance. 3. Identifying and assessing the environmental hazardous impact effects of industrialization and urbanization based available data on human health and environment. 4. Identifying the hazardous zones with especial emphasis to earthquake risk. <p>The policy makers and urban planners will get user-friendly three-dimensional geological map, advices and further information for the planning and development of urban and industrial areas with low hazard risk.</p>

12.	Modernization of Drilling equipment and accessories of Geological Survey of Bangladesh for investigation of mineral resources. (July 2005- June 2009)	950.44	The main objective of this project is to procure modern drilling equipment and accessories for smooth drilling activities of the organization for understanding and investigating the subsurface structure, stratigraphy and exploration of mineral deposit in the different prospective areas of Bangladesh.
13.	Geoscientific Activities for Mineral Investigation. (July 2004 - June, 2009)	350.00	
14.	Detailed geological exploration in selected areas of Bangladesh and other Geo-scientific activities Phase-II (July 1998 - June 2003)	700.00	
15.	Detailed geological exploration in selected areas of Bangladesh and other Geo-scientific activities (July 1994- June1998)	369.00	<ol style="list-style-type: none"> 1. To carry on Geological investigations for mineral resources specially for coal at least 3 basins out of 10 pre-identified basins. 2. To carry on investigation for metallic and non-metallic mineral deposits like peat, limestone, white clay, glass sand etc. 3. To prepare Geological maps to met the growing demands for development activities. 4. To improve the working facilities and to promote socio-economic development of the country by utilizing domestic resources.
16.	Accelerated exploration for mineral resources and modernization of the Geological Survey of Bangladesh (July 1980 - June, 1991)	5503.00	<p>The objective of the development scheme is to develop the facilities needed in a national Geological Survey and to undertake geological exploration for promoting the mineral and fuel resources of Bangladesh.</p> <p>To achieve the above objectives GSB needed the procurement of equipment from abroad, setting up of geological laboratory (Petrology-Mineralogy, Paleontology, and Engineering Geology including soil mechanics, recruitment, overseas training of GSB's staff , engagement of foreign consultants/experts in the required field, development of Data Centre, and Map and</p>

Photo library and physical facilities of the organization.

The primary objective of the GSB is to conduct systematic survey (research and mapping) and compile basic data on the geo of the country. Geological data are essential for mineral and fuel resources development. Optimum development of water resources development of communication arteries, construction projects, urbanization plan, protective measures against natural hazards and environmental protection. The geological work is also of practical utility bearing on agriculture. Mineral indication encountered or extrapolated in conducting such survey is subject to further exploration for determining quality and quantity to establish their economic prospect.

The Geological Survey Project when completed will enhance the capability of GSB for promoting the mineral and fuel resources development of Bangladesh. On completion of the project, the personnel will be absorbed in the revenue set up of GSB and the combined strength will perform long-range basic functions that are of vital importance for the economic growth of the nation.