

Water Resources Division

The Water Resources Division is one of the vital divisions of CEGIS comprising expert professionals with up-to-date knowledge and technology. This Division carries out water resources assessment, and water resources planning at macro and micro levels. It helps in planning for Integrated Water Resources Management (IWRM), and applies RS/GIS based planning tools and techniques for environmental management of natural resources for better livelihood.

Morphology Division

The Morphology Division is responsible for carrying out studies in the field of river morphology. The morphologists of CEGIS have developed a unique method of studying morphological processes using remote sensing and GIS technology. Prediction and monitoring of morphological changes and bank erosion, vulnerability assessment, morphological and planform analysis are the main activities carried out under this Division.

GIS Division

The GIS Division comprises a core team of experts and professionals having postgraduate education in GIS and long experience in applying GIS technology in diverse fields. This Division has achieved a reputation of being a center of excellence among users and professionals. It provides services in GIS data development, GIS based software development, Web GIS, GPS and Total Station survey, and training.

Remote Sensing Division

The Remote Sensing Division has strong expertise and extensive experience in the application of Remote Sensing (RS) technology in various sectors. This Division provides services in satellite image processing, georeferencing and map preparation as well as landuse and land cover classification. It also conducts disaster monitoring and damage assessment including flood and erosion mapping and monitoring, analysis of spatial and temporal data derived from satellite images and training on remote sensing and image processing.

Ecology Division

(Soil, Agriculture, Fisheries & Environment)

This Division works intensely towards an integrated approach to natural resources planning and management of soil, agriculture and ecosystem as habitat for wildlife and fisheries resources. A multidisciplinary team of experts carries out specialised studies and provides support to EIA and SIA studies.



Database/IT Division

This Division has expertise in developing GIS and Web based application software and database management. It is updated with the latest developments in database and ICT including .Net, map server, Oracle 10g, and open source technology. The Division strives to promote standardisation of metadata, data quality, data format, etc in Bangladesh.

Social and Economic Division

The Social and Economic Division is responsible for socio-economic studies and research, involving economic resource planning and management, poverty, gender and livelihood studies, economic analyses, water pricing, socio-economic impact of interventions, etc. This Division conducts all its activities in close conformity with the national and international perspectives.

R&D and Training Division

Research, development and training are integral part of the activities of CEGIS which expects to serve as a center of excellence in its various fields of activities. In order to perform its activities in an effective manner, the capacity of the professionals at CEGIS needs to be enhanced in its specialised areas. Capacity enhancement of CEGIS ensures that its professionals are among the foremost in their fields of expertise in terms of concepts, methods and technology.

Climate Change Study Division

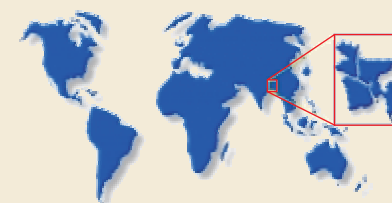
Since its establishment, the primary focus of CEGIS in the field of climate change research has been identification of physical phenomena of climate change and assessment of its impacts on environment, communities and livelihoods. As a pragmatic step of this continuing research initiative, CEGIS has recently established a "Climate Change Study Division (CCSD)". A "Climate Change Information Center (CCIC)" will be set up next under the CCSD as a hub of national and international climate information sources. Currently, CCSD is extending its activities in the field of climate change modeling and downscaling of climate change parameters.

Business Development & Administration and HRD Division

The Business Development Division works to guide the managers and senior professionals of the other Divisions in order to build client network and bring new projects to the CEGIS portfolio. It explores CEGIS' business opportunities in the public, private and development-partner agencies. It also explores business in association with leading local and foreign consultancy firms.

Quality Management Division

This Division is responsible for quality management of the various activities of CEGIS. It develops standard quality control procedures and guidelines for data extraction, processing and database management. It also ensures that international quality control standards are maintained in the EIA and SIA studies carried out by the Center.



Mission

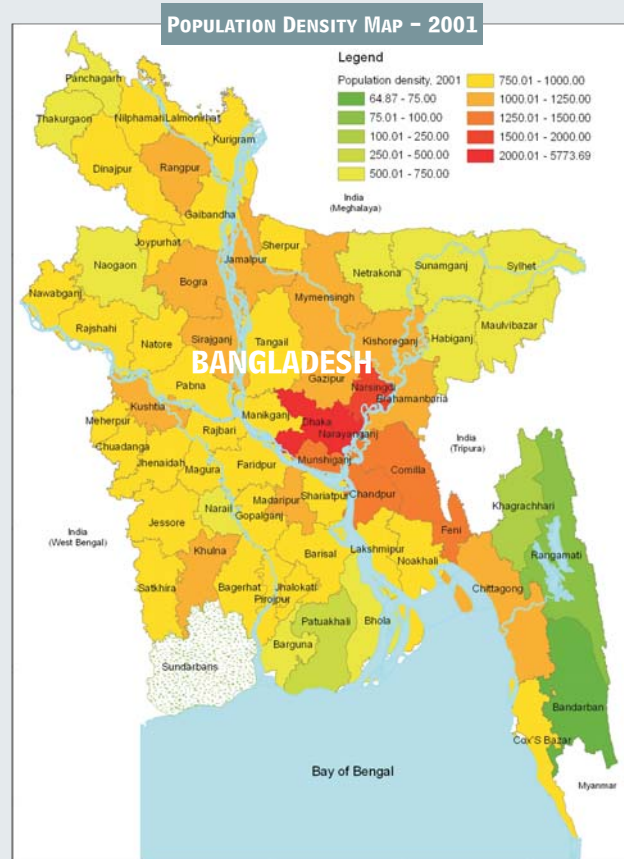
CEGIS' mission as a scientifically independent center of excellence is to support the management of natural resources for sustainable socio-economic development using integrated environmental analysis, geographic information systems, remote sensing, database and information technology.



CEGIS

The Government of the People's Republic of Bangladesh established the Center for Environmental and Geographic Information Services (CEGIS) as a Public Trust in 2002 under the Trusts Act of 1882. The center has been functioning under the aegis of the Ministry of Water Resources and a Board of Trustees. The Government of Bangladesh, USAID and the Government of The Netherlands have invested much resources over twelve years from 1991 to 2002 to develop CEGIS' capacity. As a result, the organisation has grown from a traditional project 'EGIS' into a national institute for further developing the country's capability for effective and efficient management of natural resources. CEGIS has been established to make services available for sustainable developments in general and in EIA-SIA in particular in a scientifically independent manner.

From its inception, CEGIS has been carrying out integrated environmental analysis by using modern technologies such as geographic information system (GIS), remote sensing (RS), databases and information technology (IT) and others. It provides solutions to issues and problems in various sectors like water, land, agriculture, fisheries, environment, engineering, power, energy, transportation, climate change, etc., and recommends technical options based on local realities that are feasible from the socio-economic and institutional points of view.



To find out more about CEGIS
visit the web site at
www.cegis@cegisbd.com/

Photographs: Sourav Mahmud



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A trust under the
Ministry of Water Resources



Hon'ble Planning Minister Air Vice Marshal A K Khandaker (Retired), Bir Uttam and Hon'ble Minister for Water Resources Mr Ramesh Chandra Sen seen gracing the Stakeholder Consultation Workshop on Preparation of Bangladesh Delta Plan 2100 organised by CEGIS and others in Planning Commission on 27 October 2011



Hon'ble Minister for Water Resources Mr Ramesh Chandra Sen, Hon'ble Minister of State for Water Resources Al-Hajj Mahbubur Rahman, MP and Secretary of the Ministry of Water Resources Shaikh Md Wahid-uz-Zaman seen in a workshop held in the Ministry of Water Resources on 27 January 2011 organised by CEGIS.



Shaikh Altaf Ali, Secretary, Ministry of Water Resources and Chairperson of CEGIS is apprised the activities of CEGIS during his visit to CEGIS on 29 November 2011 by Mr Giasuddin Ahmed Choudhury, Executive Director of CEGIS.



CEGIS signs MoUs and contract with Deltares, The Netherlands; ICIMOD, Nepal; and Bangladesh National Museum.



The Story of CEGIS

CEGIS' predecessor Environment and GIS Support Project for Water Sector Planning (EGIS) was launched in 1996 through the integration of the Environmental Study (Flood Action Plan (FAP) 16) and the Geographic Information System Study (FAP 19), supported by the USAID during 1991-1995. Funded by the Government of Bangladesh and the Government of The Netherlands, Phase I of EGIS started from 1996 and came to an end in 1997. On recommendation of a Joint Mission of the two governments, Phase II of the project started in March 1997 and ended in June 2002.

EGIS performed a number of Shaikh Altaf Ali, Secretary, Ministry of Water Resources and Chairperson of CEGIS is apprised the activities of CEGIS during his visit to CEGIS on 29 November 2011 by Mr Giasuddin Ahmed Choudhury, Executive Director of CEGIS environmental, GIS and RS studies and developed and acquired valuable assets that included very useful analytical tools and models along with hardware and peripherals, and most importantly, a group of trained professionals of different disciplines. The Government of Bangladesh felt that such unique expertise needed to be retained through continued functioning of EGIS as a center of excellence for advisory services, research, databases and training in the fields of integrated environmental analysis and GIS and RS to assist in improving the quality of planning, implementation and monitoring of projects/ programmes in both public and private sectors. The EGIS staffs had acquired the necessary administrative and technical expertise/capability to efficiently run, operate and manage the ongoing programmes, projects and operations of EGIS as well as to undertake similar projects and research work in the future. When the Government of Bangladesh established CEGIS as a national institution and Public Trust in 2002, the aim was to foster a national capacity that would be scientifically and truly unique compared to other traditional organisations. Since then CEGIS has been working as a self-financed not-for-profit government owned organisation to fulfil its mission.



The 26th Board Meeting of CEGIS is in progress at CEGIS.

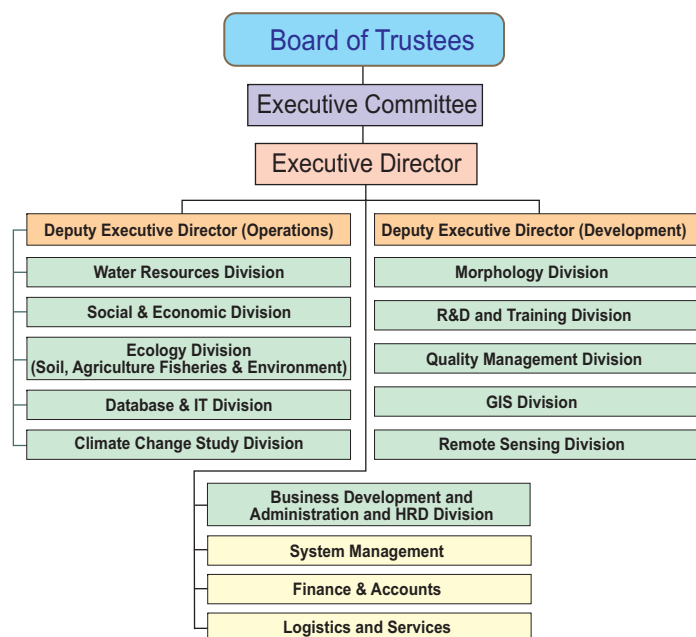
The Board of Trustees

As a Public Trust set up by the Government of Bangladesh CEGIS functions under the aegis of the Ministry of Water Resources and a Board of Trustees (BoT).

The Chairperson of the BoT is the Hon'ble Secretary, Ministry of Water Resources. Other members are:

- Bangladesh Water Development Board (BWDB), represented by its Director General
- Water Resources Planning Organization (WARPO), represented by its Director General
- Department of Environment (DoE), represented by its Director General
- Department of Fisheries (DoF), represented by its Director General
- Local Government Engineering Department (LGED), represented by its Chief Engineer
- Roads and Highways Department (RHD), represented by its Chief Engineer
- Department of Public Health Engineering (DPHE), represented by its Chief Engineer
- Space Research and Remote Sensing Organization (SPARRSO), represented by its Chairman
- Bangladesh Inland Water Transport Authority (BIWTA), represented by its Chairman
- Bangladesh University of Engineering and Technology (BUET), represented by an expert (professor) in the field of environment and water resources, nominated by the Vice Chancellor of BUET
- University of Dhaka (DU), represented by an expert (professor) from the Geography and Environment Department, nominated by the Vice Chancellor of DU
- A Non-Governmental Organization (NGO) nominated by the GoB, represented by an official of the NGO
- International Union for Conservation of Nature and Natural Resources (IUCN) represented by its Bangladesh Country Representative.

Thematic organogram of CEGIS



Management

The Executive Director is the Chief Executive Officer of CEGIS and in that capacity manages the day to day affairs of the Center. He is also the Secretary of the BoT. As per the organogram, the management includes the Executive Director, Deputy Executive Director (Operations), Deputy Executive Director (Development) and eleven Directors. Each of the eleven Divisions of CEGIS, namely, Water Resources, Social & Economics, Morphology, Ecology (Soil, Agriculture, Fisheries, Environment), GIS, Remote Sensing, Database & IT, R & D, and Training, Climate Change Study, Quality Management, and Business Development and Administration and HRD is headed by a Director. A highly efficient administration and accounts that include Logistics & Services; System Management; Finance & Accounts; and Administration & HRD support the activities with fully computerized financial and project management system.

Expertise

The major strength of CEGIS is its multidisciplinary group of highly qualified scientists and technical professionals who bring a wide range of skills to the organisation. There are over 60 professionals in the organisation with expertise in hydrology, water resources management, fisheries, economics, agriculture, sociology, ecology, biology, river morphology, engineering, ground water, soil science, GIS, remote sensing, database and programming. The senior level professionals who have more than ten years of experience in their respective fields of expertise are supported by a group of young professionals with postgraduate degrees.

ICT Infrastructure

CEGIS maintains a sophisticated and up-to-date network system equipped with the latest technology. The servers and workstations of CEGIS operate on Windows 2000 Advanced Server and Windows 2000 Pro/XP operating system respectively. There are more than 100 workstations, a number of high-end printers, high-resolution plotters, scanners, digitisers and laptop computers. The CEGIS survey team is equipped with state of the art survey equipment including GPS, DGPS and Total Stations.

ORACLE Database Server, MS-IIS Server, MS SQL Server 2000, MS-Exchange Server 2000, MS-SMS Server, ArcServer 9.0 Backup, ArcGIS, ArcView, ERDAS Imagine, MapInfo, ArcIMS, McAfee Enterprise and many more specialised software used by the center running on the servers. CEGIS has its own domain (www.cegisbd.com) connected with broadband Internet service.

CEGIS receives National Digital Innovation Award 2011

The National Digital Innovation Award 2011 has been awarded to CEGIS for two of its projects. Selected through a competitive process from 180 nominations, CEGIS received the awards at a ceremony during the Digital Innovation Fair 2011 organised by the Prime Minister's Office and managed by Development Research Network (D.Net) in Dhaka on 7 July, 2011. Hon'ble Finance Minister, Mr AMA Muhith and renowned educationalist Professor Jamilur Reza Chowdhury handed over the awards.

The awards, for which individuals, and private and social enterprises were eligible, were presented to



The CEGIS team responsible for the development of the Community Flood Information System and the SMS Gateway System for Monitoring Bird Flu

CEGIS Products and Services

The services and products of CEGIS relate to advice and consultancy, research and development and training to assist in enhancing the quality of planning, implementation and monitoring of projects/programmes in both public and private sectors.

CEGIS offers its services in the following areas:

- Environmental Impact Assessment (EIA)
- Social Impact Assessment (SIA)
- Feasibility Studies
- Master plan preparation
- Environmental and social monitoring
- Integrated planning and management of water resources
- Socio-economic and institutional analysis
- Remote sensing and image processing
- Natural resources assessment and land use monitoring
- Disaster monitoring and damage assessment
- Land information management
- Climate change and adaptation
- GIS-based databases, software and Web GIS
- Spatial modeling
- Spatial Decision Support Systems
- Maps and GPS/DGPS/Total Station survey
- Setting up GIS and RS labs
- Databases, MIS and IT solutions, WEB portal
- Data quality standards and guidelines
- Development of GIS databases, GIS based software and Web GIS
- Design and development of Spatial Decision Support Systems
- Assistance for setting up GIS and RS labs
- Design and development of databases, MIS and IT solutions
- Development of WEB portals

Specialized services in

- River morphology (river erosion prediction)
- Agriculture
- Fisheries
- Forestry
- Ecology
- Geology

Training on

- EIA
- River morphology
- IWRM
- GIS and RS
- Development of GIS databases, GIS based software and Web GIS
- Spatial modeling
- Design and development of Spatial Decision Support Systems, databases, MIS and IT solutions
- Development of WEB portals