GIS APPLICATION IN ENVIRONMENT AND REGIONAL DEVELOPMENT

A GIS is not simply a computer system for creating maps. In fact, a map is simply the most common way of reporting information from a GIS database. A GIS is an “information system”. These systems are not just the software and hardware, but also, and most importantly, the collection of information (the database) about where geographic features (roads, buildings, fire hydrants, pipes, crime incidents, ponds, streams, etc.) are located in a region.

Nowadays, GIS technologies have been applied to diverse fields to assist experts and professionals in analyzing various types of geospatial data and dealing with complex situations. No matter in business, education, natural resources, tourism, or transportations, GIS plays an essential role to help people collect, analyze the related spatial data and display data in different formats.

The GIS can play a central role as an integration tool and as an issue-based Information System to deliver basic information and strategic concepts for the decision makers in a country, as well as those in the state governments.

The ability of GIS to connect data from various sources of a country to gain relevant planning data is of great help to develop evaluation possibilities. It helps to produce thematic maps such as development potentials of functional spatial units, the status of nature conservation including ecologically sensitive areas, socio-economic data of the residential population and tourists as well as data on land use, land use potential and environmentally relevant data of traffic, transportation, emissions, water quality and species diversity.

The fact that application of GIS brings various benefits for which now-a-days GIS is becoming increasingly more and more popular and its use has vastly increased in environment and regional development. Following are the main benefits of GIS application.

* improves/enhances the effects of physical/environmental growth
* better management of resources
* adding new value-added services
* perform analysis on spatial and non spatial components
* fast recall of data
* ability for complex analysis
* recalling of non spatial data through object location
* display of information in a different light/view
* multiple scenario in planning can be performed easily