

Workshop on “Geo-Spatial Applications for Natural Resource Management (NRM) in Meghalaya and Land Use Land Cover (LULC) Analysis”

Date: 13th March, 2024

Venue: Don Bosco Youth Centre, Shillong.

Background Note

Environment is the interplay of diverse biotic and abiotic constituents which are intricately linked to each other through various natural cycles and therefore it is a multidisciplinary subject. Its understanding requires information on many themes like land use land cover, forests, geology, soil, terrain, weather, quality of air and water and many others. Environment at any place to a great extent depends on how the natural resources have been managed and treated in that region in the past.

Geographic information system (GIS) is based on the concept of arranging information in many geo-referenced spatial layers along with all textual and tabular data tagged to different features. It also provides powerful tools of analysis and map creation taking into account inter-linkages of data on various themes stored in the database. Remote sensing data allows us to map and assess bio-physical features on the earth in a cost and time efficient manner. Remote sensing and GIS, thus is the most optimum tool for natural resource management wherein one has to essentially deal with a data set of many bio-physical layers.

Over a period of time GIS Lab of MBDA has created a vast spatial database on natural resource of the State, considering the needs of natural resource management for different missions, climate change actions and implementation of various projects including externally aided projects. This has led to creation of a spatial database comprising more than 30 spatial layers relevant to the natural resource management. Creation of spatial database is an ongoing exercise wherein spatial layers from different sources which are in public domain (mostly from government agencies), primary data generated by the GIS team of MBDA and its functionaries and regular update and analysis of the existing layers have been undertaken. The database continues to grow.

It is intended that the above workshop would create wide awareness in the Departments and individuals associated with the natural resource management, environment, conservation and developmental activities about the use of spatial data in the State. It is proposed that the data from the database would be shared with others in soft and hard copies with a sharing framework in place.

The main objective of this workshop organised by the GIS Lab, MBDA are to create awareness about different geo-spatial applications for NRM being done by different departments and how we all as a community of the stake holders can complement and supplement each other for the larger benefits to the State. The workshop also aims to provide a platform for interaction between the GIS analysts within the MBDA family particularly at the District units and also with experts from other departments and institutions.