About the training

World's growing population places increasing pressure on managers and policymakers as they face extremely complex problems in the quest for sustainable development, utilization, and conservation of natural resources. They need rapid, inexpensive, and powerful technologies to provide the data, maps, and integrated information needed for making sound decisions across a range of scales, local to global. Fortunately, geospatial technologies have evolved to the point where georeferenced remotely sensed data are available more than ever before and computing power and geospatial information management tools are in place to allow users to effectively make these informed decisions.

At a time when growing populations are taxing the earth's resources as never before, natural resource managers and users are discovering the power of geospatial technologies. These evolving technologies, once expensive and exclusive to domains of researchers and scientists, are now the choice of local, state, and national resource managers around the globe. The sustainable management of natural resources is a key issue for sustainable development in the region such as North East part of the country. In order to strengthen its agricultural and infrastructural development efforts and alleviate poverty in rural areas, spatial information and analysis are of crucial importance to improve priority setting and decision making efficiency. However, poor access to geospatial data and tools, and limited capacity in their use has greatly constrained the ability of governmental institutions to effectively assess, plan, and monitor natural resources management. The current training has thus been mandated by the ICAR RC for NEH Region to provide capacity development in use of geospatial tools for natural resource management in north east region. The program aimed to help improving natural resource management by fostering the use of geospatial tools among governmental institutions in NE. The two major objectives are:

- To enhance the capacity and skill development of state officers in managing Natural resources by using geospatial tools.
- To expose to improved land and water resource management models in hill ecosystem

Course Content

- NRM in Hill Agriculture: Technological Interventions
- Recent Advances in Space Science: India and North East Perspective
- Introduction to Geo-spatial tools: Remote sensing, GIS, GPS, Integration
- Potential Applications of Geo-spatial tools in NRM
- Exposure to Arc Info and Q GIS
- Image processing softwares: ERDAS, Imagine and TNTmips
- Geospatial tools in climate studies, water resource management, soil management
- Geospatial tools in land use, cropping system and crop area diversification
- Potential use of Google Earth in NRM
- Image Interpretation
- Open source GIS softwares
- Geospatial Data sources
- Legal Issues in the Use of Geospatial Data and Tools for Agriculture and Natural Resource Management
- Socio Economic approach in natural resource management
- Field Visit

Note: All the contents are practical oriented.