Use of GIS and remote sensing for forest management in Sarawak

Josephine WONG[1]

[1]Forest Department Sarawak

Computer-assisted Remote Sensing (RS) and Geographical Information System (GIS) were first introduced in 1990 to enable more efficient and accurate gathering and processing of forest related spatial data to support and improve forest management in the State. The Government of Sarawak putting emphasis on using information systems within its long-term development plan to support and enhance public services. GIS and Remote Sensing in the Forest Department Sarawak has played a vital role, replacing manual mapping with enhanced capability for fast updating of information.

The increased concern for sustainability and the environment requires a greater degree of complexity in the planning process with improved forest monitoring capabilities and tools to observe changes for both forest operators and the regulatory authorities. GIS and remote sensing has the capability to strengthen the planning, management and monitoring of harvesting, forest logging road networks, reforestation and rehabilitation programs; and planning of protected areas, national parks and buffer zones. The Forest Department envisages establishing an overall integrated information management system to consolidate information systems and databases for more efficient and effective management. A central information pools supported by modern technology helps to communicate up-to-date data and information to various end users, where forestry related information could be retrieved easily.