

century, the corporate-planning and academic circles with data input for market definition, research targets and training rationalization and the manufacturing sector with achievable goals in specific product offerings measured against market trends and fine tuning of the industrial masterplan.

Geomatics and Instrumentation

Remote sensing for resource monitoring was introduced into Malaysia during the 1950s. The Malaysian Agricultural Research and Development Institute (MARDI) was the agency that first utilized aerial imagery. Interest is now widespread throughout Government (particularly in the agricultural and resource based industries) and in the oil and gas sector. The development of geographical information systems (GIS) in Malaysia is still in its early stages and many government departments and public institutions have initiated data-based programs that could be used as part of a GIS.

With the assistance of a \$3 million dollar grant from CIDA, a Remote Sensing Centre was established within the Ministry of Science, Technology and the Environment. The prime contractor for the centre was MacDonald Dettwiler and Associates of Vancouver. The general objectives of the Malaysian National Remote Sensing Program are: 1) upgrade Malaysian remote sensing facilities, 2) strengthen and co-ordinate remote sensing and related technologies; and 3) promote greater utilization of these technologies for resource management, environmental protection and strategic planning of the country. Facilities available at the Malaysian Centre for Remote Sensing include: 1) an image processing system capable of analyzing satellite and airborne data from a variety of sources including Landsat, SPOT, MOS, SAR, and AP; 2) a geographic information system for the analysis of spatially referenced data; and 3) a dedicated photographic laboratory for high resolution hard copy outputs.

Many Government organizations with resource jurisdictions follow developments in remote sensing applications closely and the National Remote Sensing Committee has been established for government units with an interest in the field. Within the private sector, oil, gas and mineral exploration firms, major plantations and engineering consultants have all shown an interest in remote sensing and GIS applications. The ASEAN Institute for Forest Management (AIFM) was set up with CIDA support to offer resource monitoring assistance on a regional basis. The mission of the AIFM is to upgrade capabilities through technology transfer thereby enhancing the prospects for sustainable conservation and management of tropical rain forests. The AIFM is equipped with state-of-the-art systems for assessing and monitoring tropical forest resources. The Institute is also equipped with computer-aided management systems to optimize conservation of the forests.

The Department of Surveys and Mapping is the only organization in Malaysia licensed to conduct aerial surveys. This department must be approached for approval of all