

## Satellite remote sensing at UMS to detect disasters soon

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**Kota Kinabalu:** A satellite remote sensing laboratory will soon be set up at Universiti Malaysia Sabah (UMS) in a joint effort with the Malaysian Centre for Remote Sensing (Macres).

It can be useful in many observation applications by satellite, not least being its ability to give early warning against disasters like floods and landslides.

Macres' Director Datuk Nik Nasruddin Mahmood said the centre had outlined a national programme for disaster management.

According to him, it addresses five types of disaster: floods, forest fires, oil spills, hot installations such as refineries and complexes with high-risk areas as well as landslides.

"We are developing remote sensing for early warning to landslides and for studying disaster areas to come up with mitigation plans. That's part of our agenda that we incorporate into our programme," he said.

Nasruddin said this before a seminar on marine and coastal applications using optical and radar data at UMS here on Monday.

The setting up of the lab in UMS' Borneo Marine Research Institute is also a prelude to making it the regional Macres centre.

Besides detecting disaster-prone areas, remote-sensing technology is also used to map marine, coastal and land areas.

Mineral compositions, urban planning and agriculture plots can also be identified and planned more accurately and quickly, using the technology.

Remote sensing mainly uses satellites and aircraft to map specific areas.

Nasruddin said however, while both the Federal and State Governments are keen to support the project, Macres and UMS still need to concentrate on building the human resources to use the technology.

He said two specialisations must be trained to use the technology.

One is the hardware and software engineers needed to use remote sensing for general purposes. On the other hand, scientists in their specific fields of studies must also be taught how to use remote sensing in their work.

"If you want to use remote sensing for marine mapping, you should be a marine biologist, then you will train in remote sensing technologies," he said.

At the moment, there is only one ground-based remote sensing station in Malaysia, located at Temerloh, Pahang, which covers a 2,500-kilometre radius that surrounds the Asean region and South China.

Nasruddin said while there were now 200 people in Macres, they need the Federal government to approve another 200.

In September last year, a memorandum of understanding (MoU) was signed between UMS and Macres to set up the lab that will be used by UMS, government agencies as well as the private sector.

The signing at that time was witnessed by Chief Minister Datuk Seri Musa Aman.

He added another MoU between Macres and Sabah Foundation would be signed in the next two or three months to further expand the use of remote sensing in the State.