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UTTARADIT

ADPC experts developing system to warn of landslides

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Experts on disaster prevention at the Asian Disaster Preparedness Centre (ADPC) are developing a computer model which provides early warnings for landslide-prone areas in the country.

The ADPC — a regional aid agency — has begun its research and data collection on land use, water resources and weather patterns in the landslide-ravaged district of Lap Lae in Uttaradit province.

Lap Lae is one of nine disaster-prone villages in Southeast Asia and South Asia selected for the agency's so-called "Hydro Meteorological Hazards Project" or "Hydro Met".

The other eight sites are in Bangladesh, Cambodia, China, the Maldives, Burma, the Philippines, Sri Lanka and Vietnam, according to Lolita Bildan, one of the ADPC experts on the team.

Collected data will be processed in a "Super Computer," a one-million-dollar IBM p 575 high-performance processor.

The system is 50 times more efficient than a normal computer and can deliver better and faster data analysis.

"Let's just say it took one day to process data that a general computer needs 50 days [to do],"said Ms Bildan.

As with the popular Google Earth computer program which features a zoomin imaging apparatus, the "Hydro Met" will offer close-up analysis of the weather impact and provide a precise weather forecast over areas as small as three square kilometres.

Existing weather forecasts are usually made at regional or provincial levels over about 300 sq km.

Bhichit Rattakul, the former Bangkok governor and executive director of ADPC, said the model will enhance, not overlap, with the current weather forecast service.

"We often hear weather forecasts saying a low pressure system from the South China Sea is moving across the northeastern region and will trigger flash floods. But local people do not know what will happen to them.

"We hope 'Hydro Met' will help explain what will happen to villages and small communities," said Mr Bhichit.

The section of the project for the Uttaradit area will be completed next July and the agency will offer data to collaborating agencies, including the Department of Meteorology and Department of Mineral Resources.

Somchai Baimoung, director of the Weather Forecast Bureau at the Department of Meteorology, said the project signifies progress for weather forecast capability as it can provide "tailor-made forecasts" for local communities.

Although the department currently has the capacity to provide weather forecasts within an area as specific as 17 sq km, the department rarely delivers such detailed forecasts as it is overloaded with daily weather reports.

The department attaining full capacity would improve disaster warning. Last year, 103 villagers in Lap Lae district died in a landslide and flash floods.

According to local authorities, 51 areas in the country are locations at severe risk of landslides during heavy rains.