Before disaster strikes

New radar technology helps predict flash floods

Wrath of nature: A villager guarding his flooded house near Kuantan recently. — Bernama

PETALING JAYA: The evacuation time during flash floods can be increased by 20 minutes by using a new weather radar technology, said a Japanese expert.

Prof Dr Eiichi Nakakita said this would significantly reduce the number of casualties, especially among children, who are often victims during flash floods as adults do not recognise the risks.

"You may think this is a very short time, but 20 minutes is quite enough for children to be evacuated. The Japanese government has also installed more ladders along riverbanks to allow people to climb to safety," he said.

Prof Nakakita, who works in the Hydrometeorological Disasters Research Section of Kyoto University's Disaster Prevention Institute, said its weather radars employed polarimetric technology.

He said this would help them detect the size and shape of raindrops, adding that thunderstorms could have raindrops around 8mm in size, compared to the usual 2mm.

"Smaller raindrops are more spherical in shape, and become oval-shaped when they are heavier. The bigger the raindrops, the heavier the rainfall will be," he said.

The Doppler weather radar, also used in Malaysia, employs electromagnetic waves to measure the intensity of rainfall and determine its potential to cause severe weather conditions.

Prof Nakakita said Japan was in the midst of updating its Doppler weather radar with polarimetric technology and installing more X-band Doppler weather radars which would increase the observation accuracy.

"This gives us a more accurate weather prediction model and helps reduce the transmission time from our observations to the public," he said, adding that the X-band weather radars were being installed in major cities in Japan.

Prof Nakakita, who spoke at the Malaysia-Japan Collaboration Seminar on Flood Disaster Prevention, stressed the importance of educating the public on self-protection and the danger of heavy rainfall.

He said floodwaters could rise rapidly, pointing to a 2008 case in Japan where river levels rose by 1.34m in an hour, resulting in five casualties, including four children.

"Teachers in schools should also constantly remind children to be careful, while governments should provide the infrastructure to assist the public when floods occur," he said.

In Malaysia, east coast states like Terengganu, Kelantan and Pahang recently experienced floods due to the monsoon season, which forced schools to close and people to evacuate their homes.

Ministry may include non-bumis in MDAB scheme

PASIR GUDANG: The Higher Education Ministry is considering an expansion to Universiti Teknologi Mara's (UiTM) Mengubah Destini Anak Bangsa (MDAB) programme, which is aimed at offering poor and under-performing bumiputra students a chance to enrol for pre-university courses.

Minister Datuk Seri Mohamed Khaled Nordin said suggestions had also been made to include the participation of non-bumiputra students.

"There has been an overwhelming response to MDAB, which was initiated two years ago, and we hope to expand the programme soon," he said after visiting the site of UiTM's new campus here.

Mohamed Khaled said expanding the programme to non-bumiputra students would be a timely move, especially with the country aiming to be a knowledge-based economy.

The MDAB programme is a corporate social responsibility effort by UiTM which allows underprivileged students and under-performing students to enrol for pre-university courses.

After a six-month course, MDAB students would be offered opportunities to continue their education in UiTM or enrol for other skills courses depending on their results.