NEW STRAITS TIMES ONLINE

19 September 2012

Correction

YESTERDAY's *column, "Are we prepared for the tsunami threat", was wrongly attributed. It was by ISIS Malaysia senior fellow* ***Wan Portia Hamzah****. The error is regretted.*

18 September 2012

Are we prepared for the tsunami threat?

CHANGED PERCEPTION: Since Dec 26, 2004, the govt has tackled aspects of disaster mitigation, but are people complacent?

By Steven Wong

MALAYSIA'S "End-to-End Early Warning System" empowers individuals and communities threatened by hazards to respond appropriately, in a timely manner, to reduce the possibility of personal injury, loss of lives and livelihoods, as well as damage to property and the environment.

Geophysics and tsunami division staff on duty at the Malaysian Meteorological Department. The government has instituted numerous programmes and research activities to monitor and improve preparedness in facing disasters.

The early warning system has all the necessary elements -- risk knowledge; monitoring and warning service; dissemination and communication; and response capability -- to raise awareness and convince all concerned stakeholders to make cities and areas of concern resilient from disasters.

For a country that was once considered relatively safe and sheltered against major natural disasters, the Boxing Day Tsunami of 2004 demonstrated how such a phenomenon could impact our lives and security.

It certainly changed the perception of policymakers, the scientific community, aid workers and private donors about patterns of catastrophes, changes in societal vulnerability and imbalances in development.

The government has instituted numerous programmes and research activities much earlier, to monitor disaster prevention and improve preparedness in facing disasters. But, the 2004 tsunami raised questions regarding the nature and "globalisation" of disasters.

Growth of information and communication technology and greater ownership of receiving devices have enabled descriptions and images of human suffering in disasters to be disseminated without delay. This has created a greater sense of participating and coupled with this, rapid travel has also enabled the international community to respond almost immediately -- barring any political or sovereign "sensitivities".

Despite constraints in funding, research interest and monitoring activities relating to earthquakes and/or tsunamis within the country especially since 2004, are well appreciated. The sharing of findings through various discussion groups nationally and regionally is commendable. Drawing from a review of tsunami-related research literature, more often than not only tsunamis of seismic origin have been investigated. Tsunamis generated by landslides or volcanoes have so far escaped the radar.

Special interest on tsunamis generated by earthquake(s) in the Manila Trench, which is currently considered a major hazard to South China Sea including parts of Sabah (but Sabah also faces potential tsunami threats such as from the Sulu Trench or submarine landslides), has captured the interest of many.

Within the country, while focus is concentrated on tsunami generation and propagation in the South China Sea and Sulu-Sulawesi Sea, attention is also given to the Straits of Malacca (potential tsunamis originating from the Andaman Sea/Indian Ocean).

Tsunami simulation studies and conducting risk assessments are already underway. Attention is given to tsunami characteristics -- including arrival time, wave height, wave force, inundation distances -- in shallow/confined waters as well as impacts on coastal structures.

But equally important, variations in magnitude and orientation due to uncertainty in predicting earthquake characteristics that generate tsunami must be taken into account in the evaluation of risk and developing risk maps/evacuation routes.

Aspects of disaster mitigation, emergency relief and safety provision are already being tackled by the relevant Malaysian authorities but are they better understood? Will Malaysians cooperate and be more prepared?
Tsunami sciences and their significance will need to be translated and understood by all, including relevant stakeholders involved in the planning and development processes, and by the vulnerable community to recognise the threat and to respond accordingly. The role of the media is therefore invaluable.

To pursue economic and social well-being is important. Unfortunately, populations tend to concentrate in and around economic centres, also areas dotting the coastline (including hazard-prone areas) generally faster than protection measures can be devised or put in place. Subsequently, if re-enforcement of structures is required, they may be costly.

Next, many Malaysians who tend to be complacent and cooperating in or responding to tsunami drills conducted may be an issue. At a time of real disaster, chaos may arise. Even in a trained and experienced community as shown by the Japanese, priority to fetch loved ones and to escape by road has hampered the evacuation process leading to loss of lives.

A worldwide relief system exists, but response to catastrophe problems requires a strong local and national preparedness, with effort on the part of many players. Again, one of the challenges is to involve the general public in managing its own safety and security.

While increase in knowledge of hazard phenomena is essential, equally important is a better organisation and a more concerted effort with respect to awareness, education, training and planning.

Malaysia is an active partner to the Hyogo Protocol and the Asean Agreement on Disaster Management and Emergency Response, but should not greater priority be given to risk reduction?