TSUNAMI EARLY WARNING SYSTEMS (TEWS)

The Tsunami Early Warning Systems (TEWS) is a set of common protocols and procedures used to ensure that tsunami advisories or warning messages are sent from a national focal point to all relevant government officials and the public quickly and accurately. The first part of the TEWS framework consists of an overall design outlining the respective roles and responsibilities of government agencies, the media, and other organizations. It also describes the communication pathways for warning and standard operating procedures that are updated annually. The second part is the appropriate technology to facilitate the rapid movement of warning information. The final part is to establish the testing and evaluation procedures of all aspects of the system on a routine basis.

US IOTWS Contribution

Under the US IOTWS Program, the U.S. Department of Agriculture’s Forest Service (USDA/FS) worked with Thailand’s National Disaster Warning Center (NDWC) to develop the Tsunami Alert Rapid Notification System (TARNS) as a quick-response system for tsunami alerts, and it has expanded to include alerts for other disasters as well. The Andaman Wave exercise, a large-scale tsunami simulation, was conducted in six provinces along the Andaman coast in July 2007 to test and evaluate the warning system procedures. All 79 siren towers in the six provinces were activated and tested, while local evacuations tested disaster preparedness and response plans. Disaster management officials from Indonesia, Sri Lanka, and the Maldives participated in the evacuation as observers to gain insights for similar activities in their countries.

In Indonesia, the TEWS program strengthened capacity for local level warning systems in Banten province. Through TEWS activities, the US IOTWS Program helped promote links between provincial and local government officials, NGOs, and other relevant stakeholders to communicate warning messages effectively to the public at risk.

Next Steps

USDA/FS will seek to continue to provide technical guidance and support for tsunami early warning systems from the national to local levels. The governments of Thailand and Indonesia are implementing TEWS, while regional organizations such as the Asian Disaster Preparedness Center (ADPC) have incorporated the technical tools into their ongoing activities to support robust warning systems.

For Further Information

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