

THE CURRENT SERIOUS PROBLEMS OF COASTAL DISASTERS IN THAILAND

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Abstract

Coastal area is also prone to various types of natural hazards. For Thailand, past records suggest that Thai coastal area could experience tidal floods, landslides, Typhoon, earthquake/Tsunami, and coastal erosion. Given the government action to prohibit logging and control of landuse to a certain extent, floods and landslides in coastal area have been less often and less severe. Hazard due to tropical cyclones/Typhoon still exist, but the severity will depend on the nature and strength of the storms. Chomporn, Surathani, Nakornsithammarat, and Songkla are the high risk areas because most of the Typhoon will be created in the South China Seas and blow westward and then eastward from low latitude to high latitude. October is the month that Thailand has a number of Typhoons. Geological information and tectonics activities suggested that although volcanic activities are not evidence in Thailand compared to its neighboring countries (i.e. Indonesia, Philippines, and Mynmar), but the risk due to the earthquake effect exists. There are several active faults in the North and the Western and Southern parts, but most of the earthquake effects came from the neighboring countries. Devastation due to Tsunami on 26 December 2004, however, demonstrated that serious impact could occur even when earthquakes occur in other places. The 26 December earthquake was one of the largest earthquakes in the world and occurred at the tip of Sumatra Island, Indonesia. Damages along the 6 provinces of the Andaman coast had been significant. There have been a number of after chocks and occurrence of Tsunami has been monitored closely. The most recent earthquake occurred around midnight on 24 July 2005 at Nikobar Island (7.4 Ricters) causing a Tsunami warning. Tectonic activities in this area, including the Andaman Islands, are being watched closely for possible eearthquake and Tsunami. Thai government has also been strengthen capacity of local agencies to prepare and implement emergency response along the Andaman coast as well as installation of an effective monitoring and warning system for Tsunami and this will be completed in 2006. It is anticipated that this monitoring and warning system will later be connected to other monitoring and warning system in the region.

Thailand's coastlines of about 2,700 Kilometers long are characterized by sandy beaches, mudflats, rocky shore, dekta, estuaries, salt marsh, and mangrove swamp. Survey results demonstrated that most of the coastal area in the Gulf of Thailand and Andaman has been

experiencing erosion rather than deposition. About 10.6% of the total coastline experience critical erosion, 18.4% experience moderate erosion, and 7.5% experience deposition. Recently, some part of the current serious problems of coastal disaster in Thailand subject to severe erosion and loss of the coastal lowland is in consequenc. The shorelines at the head of the upper Gulf of Thailand in the vicinity of the Chao Phraya river mouth has suffered from the attack by waves from the South with the maximum eroded distance of 1 kilometer from 1969 to 1997. Human intervention affecting coastal erosion in the upper Gulf of Thailand has taken place to a significant level over the past 30 years. The wide-scale land subsidence and upstream damming has been to increase the severity of coastal erosion along the upper Gulf of Thailand. The most restrictive assumptions from subsidence rat in 1993 were linked together to generate a baseline scenario of future erosion, which projects a coastal erosion of 1.3 kilometers more inland by the next 20 years.