

EFFECTS OF THE DECEMBER 2004 TSUNAMI AND DISASTER MANAGEMENT IN SOUTHERN THAILAND

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ABSTRACT

A quake-triggered tsunami lashed the Andaman coast of southern Thailand on December 26, 2004 at around 9.30 am local time. It was the first to strike the shorelines of southern Thailand in living memory. Coastal provinces along the Andaman coast suffered a total of 5,395 deaths – more than half of whom were foreign tourists, with another 2,822 reported missing. Of the 6 affected coastal provinces, Phang Nga was the worst-hit province with some 4,224 lives lost and 7,003 ha of land area devastated. Takua Pa District, which was a prime tourist area with numerous beach resorts, was the most severely affected area in Phang Nga Province.

Through the use of the aerial photographs and Ikonos images, it was found that 4,738 ha of Takua Pa District's coastal area were affected by the tsunami. The tsunami run-up heights of 7-8, 5-7 and 10-12 metres, were observed at, respectively, Ban Namkhem, Pakarang Cape and Ban Bangnieng in Takua Pa District. The tsunami caused heavy damage to houses, tourist resorts, fishing boats and gear, culture ponds and crops, and consequently affected the livelihood of large numbers of the coastal communities. The destructive wave impacted not only soil and water resources, but also damaged healthy coral reefs, sea grass beds and beach forests. The surviving victims faced psychosocial stresses resulting from the loss of their loved ones, being rendered homeless and fears of another tsunami. The tsunami effects on human settlements, livelihoods, coastal resources, natural environment together with the psychosocial well being of the coastal communities have contributed to the degradation of the coastal ecosystems.

Following the 2004 event, it has become apparent that the country's disaster management strategies need to be strengthened through the implementation of mitigation and preparedness options to enhance the community's resilience to natural events such as tsunami. The improved strategies are discussed in this paper.