

Two Decades after the 2004 Tsunami: Lessons in Disaster Management and Community Resilience in Thailand

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Abstract

Marking two decades since the 2004 Indian Ocean tsunami, this qualitative study explores critical lessons learned from Thailand's disaster management experience. Data were collected from 20 key informants, including field practitioners, individuals with tsunami-related experience, disaster management experts, and government officials responsible for disaster prevention and mitigation. Multiple sources of evidence, including group interviews, document reviews, seminars, and media analyses, were employed. Findings reveal that, prior to 2004, Thailand had no significant disaster preparedness measures in place. The absence of an early warning system, limited public awareness, and inadequate inter-agency coordination posed major challenges. However, the tsunami became a pivotal turning point, fostering learning and adaptation among frontline responders and local communities. Key lessons underscore the importance of clear command structures, experiential learning in real situations, and the prioritization of human resources, information, and physical infrastructure. Sustainable recovery and preparedness are found to require community-driven approaches, such as developing recovery plans, forming community-based organizations, establishing disaster funds, and promoting active community participation. In addition, the study highlights the critical role of innovation and technology in disaster warning systems, including warning towers, buoys, and mobile applications accessible to at-risk populations. The study recommends that government agencies and partners strengthen community resilience by supporting innovation and technology for disaster mitigation, while investing in training, budget allocation, integration of early warning systems, and continuous public awareness. Together, these measures are vital to advancing a sustainable, community-centered disaster management system.

Keywords: tsunami; disaster response; disaster recovery; disaster preparedness; community-based disaster management