



The German Indonesian Tsunami Early Warning System (GITEWS) – Experiences, Results & Visions

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The German initiative to design and construct a Tsunami Early Warning System for the Indian Ocean got underway immediately after the 26 December 2004 tsunami in the region. First seismic instruments as well as GPS buoys and ocean monitoring sensors were already deployed a few months later between spring and autumn 2005.

The system incorporates different monitoring devices such as seismological and GPS sensors, tide gauges, ocean surface and bottom monitoring tools, as well as a tsunami simulation system and a decision support system. Its relevance was proven during the 12 September 2007 Bengkulu earthquake sequence off the coast of Southern Sumatra. On this occasion BMKG – the Indonesian Agency for Meteorology, Climate and Geophysics launched, for the first time ever, its own tsunami alarm within less than 5 minutes.

The complete phase of installation was accompanied by a number of joint German-Indonesian academic and training workshops including courses for maintenance proficiency. Capacity building and capacity development measures were carried out at different stages, starting with a PhD programme in Germany. Institutional consulting at national, regional and local levels and intensive discussion and knowledge exchange was realized with local communities and administrations in three pilot regions, in Sumatra, Java and Bali.

About six years after commencement of this pioneering initiative which included a number of official acts, meeting presentations and peer-reviewed publications, a number of measures still remain to be undertaken. One important step integrates the handing over of the technical system to the Indonesian government. This phase will be accompanied by a subsidiary Indonesian-German company, established through the Indonesian and German partner institutions, which will be responsible for sustainable maintenance and support during the process. In March 2011, after the initial and major German project-funding has ended, the actual natural hazard posed by tsunamis will remain unchanged. Nevertheless, through the GITEWS initiative and add-on funding, the warning capability should reduce injury and fatalities in the case of future events.

For further information please visit: <http://www.gitews.org>