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Prajnopaya designs Tsunami Safe Houses for Sri Lanka

In the wake of the Indian Ocean tsunami disaster of December 2004, most governments in the affected countries have announced policies to resettle the population away from the coastline.

For instance, on January 17, 2005, the Sri Lanka Public Security Ministry announced the relocation of its coastal communities, estimated at 800,000. Building restrictions have been proposed, prohibiting construction within 100m (in the Southwest) or 200m (in the Northeast) from the sea. Such policies, however, come at a high social, cultural, environmental and economic cost.

The aim of this project is to investigate the development of technological strategies that could guarantee future safety at lower cost. In particular, the focus is on digital and building technologies. Structural guidelines extracted from the analysis of surviving structures and the implementation of an early warning system using cell phones could provide a more effective solution to relocation - promoting a less hasty, more sensible recovery of the disaster-torn areas.

While the cell phone component of this project is still in the research phase, the housing part is currently being implemented by the
Prajnopaya Foundation
(they are involved in the construction of over 1000 houses in Sri Lanka). Prototypes of a 400 sq. ft. house and a 1000 sq. ft. civic center have been developed. According to a simulation by Buro Happold engineers (London), the final low-tech-construction, high-tech-design structures should be over five times more resistant than the existing ones in the case of an incoming tsunami (see pdf report for additional details).

This project is coordinated by the SENSEable City Laboratory, a new research initiative between the Department of Urban Studies and Planning and the Media Lab at the

Massachusetts Institute of Technology in Boston, in collaboration with the Harvard Design School Tsunami Design Initiative group, which presented their proposal at USAID in Washington, DC in April 2005.

It is a collective effort that involves experts from many countries and uses innovative design to improve the socio-economic recovery of affected communities.

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