

GLOBAL TRENDS IN EARTHQUAKE DISASTERS

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The four earthquake disasters in 1999 in Colombia, Turkey, Greece and Taiwan have demonstrated in a nutshell the deficiencies in earthquake preparedness encountered in countries at various stages of economic development. Whereas none of the lessons taught by these earthquakes was new, each of the events had its own specifics which highlighted a particular issue relating to earthquake preparedness or to seismological aspects. Particularly intriguing were the losses to the Hsinchu Industrial Park in Taiwan caused by lack of anchoring of highly sensitive equipment and by lack of redundancy in the power supply, thus demonstrating in exemplary fashion the vulnerability of a highly technologized, modern society. A common factor in all these events was the inadequate implementation of seismic building regulations. Furthermore, these disasters lent proof to the observation that the pure growth of urban regions on the one hand and the introduction of highly sensitive technologies on the other have created risks which did not exist before. This results in a global trend towards dramatically increasing earthquake losses, which is further analysed on the basis of statistics on economical and insured earthquake losses for the time period since 1950.