

## Estimation of Earthquake Damages and Loses in Pakistan: A Statistical Approach

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Abstract—Seismic shock waves have completely been impromptu occasions and cannot be totally anticipated ahead of time. All things considered, by contemplating verifiable educated information and building of models will offer examiners and researchers with additional genuine future misfortunes assessments. The seismic tremors have been the most wrecking catastrophes on the planet. This investigation deliberately is to approximate harms expenses and losses which will result from plausible seismic stuns later in Pakistan. Based on examinations novel numerical models are built utilizing various liner relapses and frameworks with relationships coefficients  $\alpha$ =0.01 percent. The investigation has considered 22 most destructive quakes that have occasionally hit different pieces of Pakistan from 1909 to 2018. The examination's free factors were quakes' size, their forces and profundities of center, focal points region and quakes' stretches while, the numerical models were straight relapses clarifying seismic tremors' absolute expenses of harms and causalities in the previously mentioned years.

*Keywords*—Historical Earthquakes, Mathematical Models, Linear Regression, Earthquake Epicenter, Focus, Depth, Pakistan