

The Effect of Proximity to Fault Line as a Land Value Determinant in Metro Manila

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Key words: Land management; Remote sensing; Valuation; Fault Line; Earthquake Risk; Market Value

SUMMARY

The geographic and geologic settings of the Philippines make it prone to earthquake-related and other hazards. Experts have studied numerous earthquake sources in and around Metro Manila, and among these faults, the West Valley Fault System is predicted to have the largest impact. The 90-kilometer fault runs from the Angat reservoir in the north through populated Metro Manila cities and ends in Calamba, Laguna. The implication of breaking this news is the possible decline in property values particularly those directly on top or very near the fault. The determination of the effect of proximity to fault line on the land values will provide an actual figure for real estate professionals. It gives also the opportunity to inform or educate stakeholders of the existence of faults and its potential risk while doing the fieldworks and interviews. The coordinate locations of market samples and the fault line are loaded in GoogleEarth for visual appreciation and analysis. The collected market data are subjected to “Grid Analysis” using a patterned array showing adjustments of differences in attributes and coming up with an opinion of value. The output is the land market value differences as a result of the varying distances to fault line. The validation fieldworks conducted in the middle of year 2014 generated some interesting but at the same time disturbing findings. Lot or property owners and other real estate participants have limited or no knowledge of the existence of the fault and the risk of the coming big earthquake. As a result, the proximity of the lands to the fault apparently has no effect on the land values in Metro Manila. The intensified efforts and awareness campaign of the government about the coming of a high magnitude earthquake nicknamed “Big One” has increased public perception about safety and hazard adaptation. Recent market data gathered shows the effect of earthquake risk indicating drop in land values as much as 10 percent for every kilometer closer the lot is to the fault line.