

Rising Above the Fault: Managing Earthquake Risks in Quezon City

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I am the designated Officer-in-Charge of the Disaster Control Division (DCD) under the Department of Public Order and Safety, which now stands as the ad hoc group for the Quezon City Disaster Reduction and Risk Management Office (QC DRRMO).

Among the cities and municipalities in Metro Manila, Quezon City has been the most vocal about the 80-kilometre West Valley Fault transecting parts of eastern Metro Manila, including Quezon City. The fault line runs from the northeast through to the southeast sections of Quezon City. If a projected magnitude 7.2 earthquake hits the area, eight barangays—Bagong Silangan, Batasan Hills, Matandang Balara, Pansol, Blue Ridge B, Libis, Bagumbayan, White Plains, and Ugong Norte—will be affected.

To help the Greater Metro Manila Area (GMMA) become better prepared for this scenario, the GMMA- READY project brought together various Collective Strengthening on Community Awareness on Natural Disasters (CSCAND) agencies. PHIVOLCS, for instance, came up with hazard maps which are very useful particularly in identifying where to put our local government unit's resources for disaster risk reduction (DRR).

With the help of Earthquake Megacities Initiative (EMI) in processing the data from PHIVOLCS, QC DRRMC also came up with a compendium of plans and maps: the Disaster Risk Reduction and Management Plan 2014-2020; a hazard, vulnerability, and risk assessment report (2013); and a Quezon City Risk Atlas. PHIVOLCS research, which formed part of the collaborative and comprehensive Metro Manila Earthquake Impact Reduction Study (MMEIRS), also served as important input to these DRR plans, maps, and studies.

In short, the earthquake preparedness program of the City was done in close coordination with PHIVOLCS for the precise determination of fault lines and danger areas.

In 2011, the Quezon City government conducted the Walk the Fault project, which aimed to identify the actual course of the earthquake fault line and pinpoint the vulnerable areas. PHIVOLCS has since provided detailed maps of the fault line on both 1:10,000 and 1:5,000 scales. Working closely with them, we have since validated the marked areas and put up concrete markers and signage. In 2012, we undertook trenching in Barangay (village) Bagong Silangan, where new fault developments were discovered.

To maximise the technical knowledge and expertise of PHIVOLCS, we held a big event to publicise the findings about the West Valley Fault. 300 participants representing the different barangays transected by the fault attended our activity at the QC Sports Club.

We are now finalising our contingency plan for earthquake hazards in coordination with the Office of Civil Defence and PHIVOLCS. The QC Comprehensive Land Use Plan for 2010-2030 touches on DRR for the general public and includes the implementation of a six-metre buffer zone along the earthquake fault line. The city has identified and alerted 594 landowners living in or near this fault line for compliance. We also conduct year-round disaster preparedness trainings and other information campaigns in the communities.

Nowadays, PHIVOLCS' timely advisory can easily be accessed through the Internet. They also employ social media tools such as Facebook and Twitter now.

There is now increased awareness about the West Valley Fault. We receive so many requests for information and trainings not just from communities but also from malls, local government units, hospitals, markets, and private offices. Before, we were the ones who had to approach the people. Some of them refused to listen or let us in, especially those in the more posh subdivisions. Their reaction would boil down to "Who are you?" But then when we say, "According to PHIVOLCS...," they begin to pay attention.

We attribute this change to the combined efforts of the LGU and national government agencies (NGAs). We have nothing to share with them without data from PHIVOLCS and other NGAs. After we completed the trenching and the hazard maps as well as publicised the reality of the West Valley Fault, they now come of their own volition and are more receptive to disaster preparedness.