Disaster Impact and Mitigating Measures at the Household and Community Levels: The Case of the Earthquake-affected Areas in Northern Luzon, Philippines

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INTRODUCTION

The Philippines is in an area highly vulnerable to natural disasters. Among the 53 countries surveyed between 1960 and 1981, the country ranked second as having the most number of natural disasters.[1] Furthermore, while these countries had an average of only one disaster per year, the Philippines had four. But it was the twin earthquakes which occurred in the Luzon Island in the Philippines on 16 July 1990 which made the entire country realized its high vulnerability to natural disasters.[2] The earthquake which registered at magnitude 7.8 in the Richter Scale dramatized such vulnerability by producing various forms of physical hazards (such as liquefaction, landslides and parallel and subparallel ruptures). These hazards claimed 1,283 deaths (plus 2,786 injured and 321 missing) and 15 billion pesos worth of destroyed infrastructure.[3] The resulting long-term dislocation partially cost the country 2.5 billion pesos in terms of unrealized production.[4] For a country which recovery from a 20-year systematic plunder of a dictatorial regime had just started, the earthquake was indeed a sobering event.

The gross indicators (such as the number of deaths, amount of damaged properties and cost to the economy) measuring the impact of the earthquake may jolt the entire country from complacency but these do not suffice to serve as basis for a disaster preparedness and mitigation plan. Such a plan needs information sets on the impact of the disaster at the household and the community levels as well as on their capability and constraints to handle such impact. A workable plan has to be anchored on these information sets to ensure not only the optimum use of limited government resources but also to generate an assistance effort which is appropriate to the needs of those affected by a disaster. To provide said information sets, a study was conducted among households and communities most-heavily hit by the earthquake. These households and communities are in the cities and municipalities in three provinces (Benguet, La Union and Pangasinan) where the earthquake registered at intensity of 8.0 in the Modified Rossi-Forel Scale. The study presents the impact of the earthquake on the households and their communities and the mitigating measures they employed. From such impact and mitigating measures, the study culled the lessons to serve as guide in formulating a plan to prepare for and mitigate the impact of in-coming natural disasters.