

**VULNERABILITY ASSESSMENT IN THE MUNICIPALITY
OF MASINLOC, ZAMBALES**

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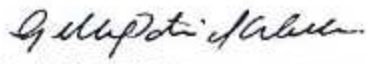
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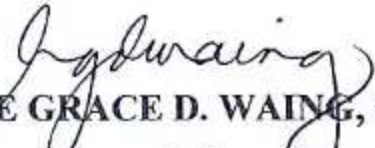
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ABSTRACT

LABUGUEN, ACE ANGELO A., Department of Environmental Science, College of Arts and Sciences, Central Luzon State University, Science City of Muñoz Nueva Ecija Philippines, February 2020, **VULNERABILITY ASSESSMENT IN THE MUNICIPALITY OF MASINLOC, ZAMBALES**

Adviser: GELLA PATRIA L. ABELLA, Ph. D.

Natural hazard is very common in the Philippines. Flooding, typhoon, storm surge, tsunami and earthquake occur in the country. It can adversely affect a city or municipality, its residential properties, agricultural land, forest, marine ecosystem, commercial and industrial buildings, and most of all are human lives. This study aims to conduct the vulnerability assessment in the Municipality of Masinloc, Zambales. Specifically, to compute the sensitivity, exposure, and adaptive capacity index scores of the municipality, to compute the vulnerability index scores of the municipality, to generate sensitivity, exposure, adaptive capacity and vulnerability maps and to identify the priority areas in the municipality of Masinloc, Zambales. The study adopted the methodology of Espaldon et al. (2016) looking into three sectors that has been affected by the hazard, coastal to flood, storm surge and tsunami, agricultural sector to flood and forest sector to landslide. Maps were done using ArcGIS. The coastal sector of Barangay Bani obtained a high vulnerability index score of 0.76 to storm surge because of high sensitivity and exposure. Agricultural sector of Brgy. Collat also obtained a high vulnerability index score of 0.75 to flood due to high exposure, here were the top two areas that need to be prioritized in appropriate disaster risk reduction and management program.

Keywords: vulnerability assessment; sensitivity; exposure; adaptive capacity

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