

**URBANIZATION LEVEL AND SOLID WASTE MANAGEMENT IN
THE PROVINCE OF CAVITE**

THESIS

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ABSTRACT

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The study was conducted from January to March 2019 in the cities and first-class municipalities of the Province of Cavite to identify the urbanization level and the Solid Waste Management Program in the province. Specifically, it aimed to: determine the trend of urbanization level in the Province of Cavite from 2014 to 2018; determine the status of solid waste management in the Province of Cavite from 2014 to 2018 based on the following: a. trends of solid waste generation; b. solid waste management budget; c. solid waste management policies; d. solid waste management facilities; and e. solid waste management equipment; determine the compliance of Local Government Units (LGUs) in the Province of Cavite in the implementation of key legal provision of Republic Act No. 9003; identify the problems encountered and strategies to resolve the problem in the implementation of solid waste management in the Province of Cavite; and determine the relationship of urbanization level to solid waste management program in the Province of Cavite. Descriptive research design method was used and data gathered were analyzed using interview questionnaires and secondary data. Quantitative correlation was also applied using the panel data regression. Participants of the study consist of Municipal and City Environmental and Natural Resources Officers from 16 LGUs in the Province of Cavite.

The urbanization level in the municipalities and cities in the Province of Cavite showed significant changes from 2014 to 2018. The result of urbanization level was attributed to the distribution of population and the consistent increase of population resulting to shifting of rural into urban areas. Trece Martires City had the highest urbanization level due to in-migration brought by continuous development of low-cost housing and resettlement areas, while Cavite City had the lowest urbanization level

due to out-migration brought by the low economic opportunities and topography, which is lying below sea level.

Among the Local Government Units (LGUs) in Cavite, the City of Bacoor generated the highest wastes. Regardless of the situation, the city was compliant with the key legal provisions of R.A. No. 9003 and was ranked first in the result of Environmental Compliance Audit (ECA). The highest budget of most of the LGUs was allocated to maintenance and other operating expenditures where the budget for disposal and hauling services were incorporated because most LGUs disposed its waste to sanitary landfill outside the province.

Furthermore, the common problems in implementing the solid waste management program in the Province of Cavite were directly related to the weak points of LGUs shown in the result of ECA headed by the Department of Interior and Local Government (DILG).

The results of Panel Regression in Random Effect Method showed that solid waste management in terms of waste generation, waste management policy, solid waste management budget and equipment had positive and significant relationship to the urbanization level, while solid waste management facilities was not significant and had no relationship to the urbanization level. This was supported with the observation that highly urbanized LGUs have limited space to establish facilities for solid waste management, while LGUs with available space have insufficient funds to allocate in establishing facilities. However, strong political will and comprehensive implementation of the program were identified as factors that affect the solid waste management in the Province of Cavite.

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INTRODUCTION

The rapid urbanization in the Philippines creates different opportunities for growth. Together with urbanization is the increase of population and increase of waste produced by human activities. Also, the standard of living, human lifestyle, rapid economic growth and industrialization in urban areas result in issues of proper disposal and increasing waste generation (Senate Economic Planning Office, 2017).

Urban area can be defined as the amount of residents, the population density and proportion of people not relying on agriculture and have provision of public utilities and services (Hauser & Schnore, 1965 as cited in Ugwuanyi & Isife, 2012).

In 2015, Cavite with population of 3,678,301 remained as the most populated province of the country due to its rapid birthrate and migration spillover to the province from Metro Manila residents. In-migration in the province continually increased due to continuous development of settlement and industrial areas. Another contributor of increasing population of Cavite is the opening of resettlement housing for informal settlers from Metro Manila (Cavite Provincial Government, 2016).

Migration is the primary driver of urbanization and a continuous trend as of today (IOM, 2015). Development in the province also contributed to rapid growth in