# SOLID WASTES GENERATION AND SOLID WASTES DISPUSAL PRACTICES OF SELECTED COMMUNITIES IN LABACRIVER WATERSTED

### THESIS

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## SOLID WASTES GENERATION AND SOLID WASTES DISPOSAL PRACTICES OF SELECTED COMMUNITIES IN LABAC RIVER WATERSHED

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#### **ABSTRACT**

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A study was conducted to assess the solid wastes generation and disposal practices in two selected barangays within Labac River Watershed from November to December 2013. Specifically, it aimed to: 1. identify the communities directly dumping solid wastes in Labac River Watershed; 2. determine the socio- economic characteristics of these communities directly dumping solid wastes in Labac River Watershed; 3. characterize the solid wastes and identify the solid wastes disposal practices in these communities; 4. determine the waste stream of these selected communities; 5. determine the level of awareness of the people on proper solid waste management; and 6. identify measures on how to properly manage solid wastes in the area.

Of the 63 barangays located within Labac River Watershed, Poblacion Dos in Indang, Cavite and Barangay Balsahan in Naic, Cavite were selected as study sites. Out of 313 households, 72 participants were selected using Slovin's formula. A survey questionnaire was used to determine demographic characteristics, awareness on proper solid wastes management, and disposal practices. Wastes generated per household were measured for 30 days, characterized, segregated, and weighed Correlation analysis was made between demographic and socio- economic characteristics and wastes generation,. The waste stream in the area was determined. Averages, means, frequencies, and percentages were used for the statistical treatment of data.

More than half (53%) of the participants were 40-49 years old, majority (65%) of the participants were females and mostly (75%) married. Half (50%) were Roman Catholics. Thirty-three percent of the participants reached college but only 24 percent finished college. Average household size was 4-5 members. Most (44%) of the participants were professional workers with a monthly income of P16,501 and above (32%). Most (69%) had no income from other sources. Seventy-two percent of the participants did not attend any seminar on proper solid waste management and only 28 percent were attended a seminar. The wastes disposal practices of the participants were burning (3%), dumping in the sidewalk (11%), throwing in the river (4%), and collected by garbage truck (81%).

The average amount of wastes generated by Poblacion Dos, Indang, Cavite, participants was 1.41kg/day with a compostables (88%), recyclables (10%) and residuals (2%). The average amount of waste generated by households in Barangay Balsahan, Naic, Cavite was 1.14 kg/day with compostable (89%), recyclables (4%), and residuals (7%). Correlation analysis between demographic and socio- economic characteristics of participants and the amount of wastes generated showed significant relationships between household size, educational attainment, income from other sources, occupation, and the average amount of wastes generated.

With compostables amounting to 88-89 percent of the total wastes generated in the area, and recyclables at 4-10 percent, disposal of wastes should be through composting and recycling. Residuals at only 4-7 percent and mostly plastics can find its way into the dumpsite or landfill. Cavite's "No Plastic Policy" can further reduce the residuals to almost one percent.

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## SOLID WASTES GENERATION AND SOLID WASTES DISPOSAL PRACTICES OF SELECTED COMMUNITIES IN LABAC RIVER WATERSHED

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#### INTRODUCTION

Labac River Watershed is one of the major watersheds in Cavite. It traverses the City of Tagaytay and the Municipalities of Mendez, Indang, and Naic. Sixty-three barangay communities are located within the boundaries of the watershed (Arganda and Mesina, 2013). Labac River Watershed is host to numerous socio- economic activities of the people living in the area as well as the many adverse effects of these activities such as waste generation, dumping, and pollution.

Labac river with its numerous springs, wells, and relatively pristine streams and river tributaries is source of domestic water to these communities. The river is source of potable drinking water in the area and is the venue for washing, bathing and recreational activities like swimming, and fishing. Labac river is reported to sustain numerous aquatic life such as crustaceans, arthropods, shrimps and crabs (Dimero, 2009) as well as 16 fish