SOLID WASTE MANAGEMENT AND SOLID WASTE DISPOSAL IN IKLOY RIVER IN IMADANG, CAVITE

THESIS

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June 2019

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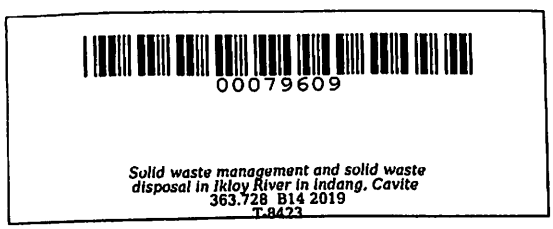
Undergraduate Thesis
Submitted to the Faculty of the
College of Agriculture, Food, Environment and Natural Resources
Cavite State University
Indang, Cavite

In partial fulfillment
of the requirements for the degree
Bachelor of Science in Environmental Science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363.728 B14 2019
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June 2019

ABSTRACT

BAG-AO, ALMERA L. and PERDIGONES, RICK BENJIE, F. Solid Waste Management and Solid Waste Disposal in Ikloy River in Indang, Cavite. Undergraduate Thesis. Bachelor of Science in Environmental Science. Cavite State University, Indang, Cavite. June 2019. Adviser: Prof. Noel A. Sedigo.

The study was conducted from February 2019 to March 2019 in Ikloy River in Indang, Cavite to assess the solid waste management and waste disposal among communities located within the river system. Specifically, the study aimed to: 1. determine the solid waste management of communities located in Ikloy River sub-watershed; 2. determine the knowledge, attitude and practices on solid waste management and disposal; 3. identify possible pollution risks due to solid waste present in the Ikloy River sub-watershed; and 4. determine mitigating measures to possible pollution due to solid wastes. Weekly collection of waste using trash traps was done in the upstream, midstream, and downstream of the river for one month to determine the types and amount of wastes present in the Ikloy River. Collected waste were segregated according to types and weighed. Survey interview of 108 respondents was also done to determine the knowledge, attitude, and practices of community on solid waste management.

Results revealed a total of 15.72 kg of solid wastes disposed in the Ikloy River sub-watershed within a month. The average amount of solid wastes collected was 3.93 kg/week. Among the solid wastes collected were compostables (69%), recyclables (11%), residuals (11%), and special wastes (9%). Compostable wastes contributed the highest amount with 10.82 kg and the least was special wastes with 1.37 kg.

Furthermore, the study showed that communities within Ikloy River sub-watershed were highly knowledgeable about proper solid wastes management, showed positive attitude in terms of waste management, and practiced correct techniques in managing their solid wastes. However, 80 percent of the respondents were not aware that their barangay is part of Ikloy River sub-watershed.

Risk of pollution due to different types of solid wastes present in the river may result to degradation of water quality. Strict implementation of RA 9003 and reducing solid waste generation are the possible mitigating measures to avoid pollution risks to occur.

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SOLID WASTE MANAGEMENT AND SOLID WASTE DISPOSAL IN IKLOY RIVER IN INDANG, CAVITE

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A thesis manuscript submitted to the faculty of the Department of Forestry and Environmental Science, College of Agriculture, Food, Environment and Natural Resources, Cavite State University, Indang, Cavite in partial fulfillment of the requirements for the degree of Bachelor of Science in Environmental Science with Contribution No. ES 2019-12. Prepared under the supervision of Prof. Noel A. Sedigo.

INTRODUCTION

Ikloy River is a water system or sub-watershed of the Maragondon River Watershed which is the largest river watershed in Cavite. A watershed is a land area that channels rainfall into rivers, creeks and other smaller water bodies that eventually flow and drain into larger water bodies. In the case of Cavite, all river systems drain into Manila Bay. Ikloy river is a very important river system to the upland Municipality of Indang and the lowland Municipalities of Naic and Maragondon. The water from this sub-watershed provides the domestic water needs of these municipalities and other goods and services to the barangay communities located within its boundaries ("Maragondon River", 2013). It flows from Barangay Carasuchi passing through other barangays that include Banaba Cerca. It is the source of irrigation water for the century old irrigation system of the Municipality of Naic that provide water for rice production and fishing activities. The Ikloy River water system is also home to various indigenous flora and fauna which contributes to the rich biodiversity of the area most notably the endangered Slender-tailed giant cloud rat *(Phloeomys cumingi)* located in Banaba Cerca and Kayquit III (Mojica & Veluz, 2016).