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ASSESSMENT OF SOLID WASTE STREAM AND RECOVERY IN REGINA VILLE 2000, TRECE MARTIRES CITY

Thesis

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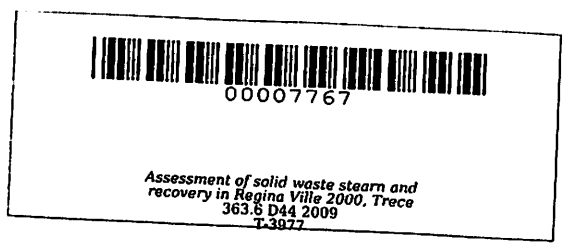
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ABSTRACT

DEQUIÑA, LEO JR., P. & JAVIER, VONN ERNEST F. Assessment of Solid Waste Stream and Recovery in Regina Ville 2000, Trece Martires City. Undergraduate Thesis. Bachelor of Science in Environmental Science. Cavite State University, Indang, Cavite. March 2009. Adviser: Dr. Lilibeth P. Novicio.

The study was conducted in Regina Ville 2000 subdivision, Brgy. Inocencio, Trece Martires City, Cavite to assess the solid waste generated in a low income subdivision. It specifically aimed to: (1) determine the socio-economic profile of the community and its relationship to the wastes generated by the community; (2) evaluate the level of awareness of the community about waste segregation and recovery of wastes from the source up to the disposal site; (3) determine the types and amount of wastes in terms of weight and waste recovered per household; (4) determine the types and amount of wastes and waste recovered in each stage of the solid waste stream; (5) determine the monetary value of the recovered wastes in each stage of the waste stream.

From the list of 755 households at Phase 1 of Regina Ville 2000 subdivision, 70 respondents were selected through systematic sampling. They were all occupants and/or homeowners of the subdivision. The male respondents dominated the female respondents. Most of the respondents were married and were able to finish college. Businessman, soldier, driver, government employee and engineer were the leading careers of the respondents. The family income ranged from Php 2,500 up to Php 16,502 and above. Majority (98.6%) disposed their wastes through garbage collection and were not able to attend solid waste seminars which resulted to the low level of awareness on solid waste management.

Stages of the solid waste stream in Regina Ville 2000 include waste generation, storage, collection, processing and recovery and disposal. Recovery and selling of recyclable wastes were present in every stage of the waste stream.

Results of the study showed that the average waste generated by a household in one day is 0.72317 kg/day. About 60.31 percent were biodegradable waste and 31.69 percent were non-biodegradable. Among the biodegradable wastes, kitchen wastes were the biggest wastes produced.

Correlation analysis between socio-economic characteristics of respondents and amount of wastes produced showed no significant relationships between them. It showed that the socio-economic characteristics of the respondents did not significantly affect the amount of wastes that they produced.

Analysis of the recovery of wastes in the different stages of the solid waste stream was assessed through actual interview and weighing of the recovered wastes. At storage, people in the community recovered an average of PhP1,254.33 of wastes in a one month period. At the collection stage, collectors earned an average of PhP1,358.3 in a one month period. Waste pickers at the dumpsite also recovered wastes coming from dumped wastes at an average of PhP425.15.

TABLE OF CONTENTS

	Page
BIOGRAPHICAL DATA	iii
ACKNOWLEDGMENT	vi
ABSTRACT	viii
LIST OF TABLES	xii
LIST OF FIGURES	xiv
LIST OF APPENDIX TABLES	xvii
LIST OF APPENDIX FIGURES	xviii
INTRODUCTION	1
Statement of the Problem	2
Objectives of the Study	3
Importance of the Study	3
Time and Place of the Study	4
Scope and Limitation of the Study	4
Operational Definition of Terms	6
REVIEW OF RELATED LITERATURE	8
METHODOLOGY	16
Ocular Survey of the Study Area	16
Sampling and Selection of Respondents	16
Interview of Respondents	16
Collection of Data	16

Page

Statistical Analysis..... 17

RESULT AND DISCUSSION..... 18

Brief Description of the Study Area..... 18

Socio-economic Profile of the Respondents..... 18

Level of Awareness of Respondents on Solid Waste Management..... 26

Solid Waste Characterization in Household..... 30

Correlation Between the Socio-economic Profile and Waste Generation..... 39

Characterization of Waste Recovered in each Stage of the Solid Waste Stream..... 39

Waste generation..... 39

Storage..... 39

Collection..... 39

Disposal..... 42

Monetary Value of Recovered Wastes in the Households, During Collection and in the Dumpsite..... 48

Monetary value..... 50

SUMMARY, CONCLUSION AND RECOMMENDATION..... 54

Summary..... 54

Conclusion..... 57

Recommendation..... 58

REFERENCES..... 59

APPENDICES..... 61

LIST OF TABLES

Table		Page
1	Profile of respondents according to age	23
2	Profile of respondents according to gender	23
3	Profile of respondents according to marital status	23
4	Profile of respondents according to religion	24
5	Profile of respondents according to educational attainment	24
6	Profile of respondents according to number of dependents	25
7	Profile of respondents according to number of years of residence in the subdivision	25
8	Profile of respondents according to major occupation	27
9	Profile of respondents according to income from major occupation	28
10	Profile of respondents according to other source of income	28
11	Profile of respondents according earnings from other source of income	28
12	Profile of respondents according to number of family members gaining income	29
13	Attendance of respondents to solid waste management seminar	29
14	Types of seminars attended by the respondents	29
15	Topics learned by the respondents from seminars/training on solid waste management	31
16	Practices learned and applied at home by the respondents	31
17	Methods of solid waste disposal	32
18	Selling of recyclable wastes	32

Table		Page
19	Methods of disposing animal waste	32
20	Correlation between socio-economic characteristics and amount of waste generated by the respondents.....	40
21	Monetary value of recovered waste.....	51
22	Total amount of waste recovered in household in one month period and its monetary value.....	51
23	Total amount of waste recovered by collectors and its monetary value.....	52
24	Average amount of waste recovered at dumpsite and its monetary value.....	52

LIST OF FIGURES

Figure		Page
1	Conceptual framework of the study	5
2	The interrelationship among the functional elements of solid waste management	11
3	Map of Trece Martirez City, Cavite showing the location of the study site	19
4	Map of Phase 1 Regina Ville 2000	20
5	Population pyramid of Regina Ville in 2000	21
6	Average amount of solid wastes generated in one month period	34
7	Percentage distribution of wastes generated in one month period	34
8	Compostable wastes generated from households in one month period	35
9	Recyclable wastes generated from households in one month period	37
10	Residual wastes generated from household in one month period	37
11	Special wastes generated from household in one month period	38
12	Total amount of waste recovered in households from one month period	41
13	Percentage distribution of recovered waste from household in one month period	41
14	Average amount of waste recovered by garbage collectors in one month period	42
15	Percentage of recovered wastes by the collectors in one month period	44
16	Percentage distribution of compostable wastes dumped at the dumpsite	44
17	Percentage distribution of recyclable wastes dumped at the dumpsite	45

Figure		Page
18	Percentage distribution of residual wastes dumped at the dumpsite.....	45
19	Percentage distribution of special waste dumped at the dumpsite.....	46
20	Average amount of waste recovered by waste pickers at the dumpsite in one month period.....	47
21	Percentage distribution of recovered waste at the dumpsite.....	49
22	Amount of waste recovered in each stage of the solid waste stream.....	53

LIST OF APPENDICES

Appendix		Page
1	Interview schedule for household.....	62
2	Interview schedule for collectors.....	68
3	Interview schedule for waste pickers.....	70

LIST OF APPENDIX TABLES

Appendix Table		Page
1	Sample datasheet of the weight of waste day in one month period.....	73
2	Sample datasheet of the amount of solid waste generated per day...	74
3	Sample datasheet of compostable wastes.....	75
4	Sample datasheet of recyclable wastes.....	76
5	Sample datasheet of residual wastes.....	77
6	Sample datasheet of special waste.....	78
7	Sample datasheet of compostable wastes at the dumpsite.....	79
8	Sample datasheet of recyclable waste at the dumpsite.....	79
9	Sample datasheet of residual waste at the dumpsite.....	79
10	Sample datasheet of special wastes at the dumpsite.....	79
13	Sample datasheet of recovered wastes by the collectors.....	80
12	Sample datasheet of recovered wastes at the dumpsite.....	80
13	Monetary value of recyclable wastes.....	81

LIST OF APPENDIX FIGURES

Appendix Figure		Page
1	Interview with the respondents at Regina Ville 2000	83
2	Characterization of wastes at Regina Ville 2000	84
3	Weighing of wastes collected from the respondents	85
4	Interview with the garbage collectors	86
5	Wastes recovered by the collectors	87
6	Interview with the waste pickers at the dumpsite	88
7	Characterization of wastes dumped at the dumpsite	89
8	Recovered wastes from the dumpsite	90

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INTRODUCTION

The genuine concern of the nation is the problem on solid waste and its management. The rapidly swelling population, increasing urbanization and intensifying economic activities have all contributed to the generation of solid wastes, especially in the urban centers and urbanizing areas (EMB, 1996). Solid waste management has always been a weak spot among the services rendered by the Local Government Units (LGU's) in many urban and urbanizing municipalities (Feje, 2002).

Solid waste management refers to all activities pertaining to the control, transfer and transport, processing, and disposal of solid wastes in accordance to the best principles of public health, economics, engineering, conservation,