

## Waste Management Practices Among Trading Type of Business in Selected Municipalities of Davao Occidental

### ABSTRACT

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**Aims:** To know the waste management practices of trading type of business in selected municipalities of Davao Occidental province.

**Study design:** Descriptive.

**Place and Duration of Study:** Malita, Davao Occidental, Philippines in the year 2020.

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**Methodology:** This study has fifteen respondents from three selected municipalities of Davao Occidental which were chosen through random sampling. Data were gathered through an adapted survey questionnaire.

**Results:** Data shows that majority of the respondents were male, they belong to the age bracket 43-52 years old. All of them were aware about solid waste management as they heard it from their respective municipal and barangay councils. These councils aforementioned have educated them on the proper waste disposal by putting all the wastes to the garbage truck during the schedule of collection. Public bins were provided by local authorities in poblacion areas. Respondents have high level of awareness on the segregation of waste between bio-degradable and non-biodegradable as a result of their attendance to the trainings and seminars on proper waste management and practices conducted by the local authorities.

**Keywords:** Solid- Waste management, practices, bio-degradable and non-biodegradable , garbage, knowledge, among trading type of business in selected municipalities of Davao Occidental province.

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### 1. INTRODUCTION

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Solid waste management elements such as collection, transfer, and transport were reported to be affected by many factors. Unorganized collection system, lack of awareness about the impact of solid waste, non-fixed collection schedule or route and poor stockholder integration are some of the identified factors (Shekdar, 2009). The main objective of the study is to assess the waste management among trading businesses in selected municipalities of Davao Occidental. The concept of garbage recycling was common among the respondents as a result of their active participation on the campaign for a healthy and clean environment. William (2009) stated that on solid waste management, he recommended that recycling habit needs to be established in relation to sustainability of solid waste management.

Ali (2015) cited that one of the greatest challenges facing developing countries is the unhealthy disposal of solid wastes which resulted from human activities of development and survival. It is a problem recognized by all nations at the 1992 conference on environment and development and regarded as a major barrier in the path toward sustainability. If there is a strong evidence which suggests that individual or group awareness and attitude toward waste generation and management is critical in the effort to respond to the waste management challenge.

Rawlins (2005) pointed out that waste management through the use of landfills involves the use of large areas. This place is dug open and filled with the waste. The area is then covered up with soil. Landfills are not safe because they give off gases like methane through landfills if it cannot ensure proper safety means. The landfills should be properly lined and the waste should not come in contact with the adjoining areas.

The term "solid waste management" to the trading type of businesses means any garbage, refuse, or sludge from the waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material including solid, liquid, semisolid, contained gaseous material from industrial commercial mining and agricultural operation (US Law-Solid Waste Act 2008).

### 1.2 Statement of the Problem

This study was conducted in order to find out the waste management practices among trading type of business in selected municipalities of Davao Occidental province. Specifically, it sought answers to the following :

1. What is the socio-demographic profile of the trading type of businesses?
2. What are the wastes generated by trading type of businesses?
3. What are the waste management practices employed by trading type of businesses?
4. What are the different problems encountered related to waste management?

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### 1.3 Significance of the study

This study will determine the proper waste management of trading type of business in selected municipalities of Davao Occidental. Moreover, results of this study will serve as reference for local government units in the area for future policy-making. This will also serve as guide for future researchers in this particular field.

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### 1.4 Scope and Limitation of the Study

This study was limited to the waste management practices among fifteen respondents from the municipalities of Sta. Maria, Malita and Don Marcelino, Davao Occidental who were engaged in trading type of business.

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## 2. MATERIAL AND METHODS

### 2.1 Research Locale

The study was conducted in the municipalities of Sta. Maria, Malita and Don Marcelino, Davao Occidental province. These three out of five towns were the densely populated areas in the province where the trading type of businesses operated.

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### 2.2 Research Design

Descriptive method was used in this study. Data were gathered using a survey questionnaire from the respondents.

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### 2.3 Sampling Design

Random sampling technique was used in determining the respondents of the study.

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Table 1. Distribution of respondents of the study

Municipality	Sample Size
Sta Maria	5
Malita	5
Don Marcelino	5
Total	15

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### 2.4 Respondent of the Study

The respondents of the study were the selected owners of trading type of businesses legally operating with business permits issued by the concerned local government units.

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### 2.5 Research Instrument

The study used a survey questionnaire with the following parts: the socio-demographic profile; waste generated; waste management practices; and problems encountered.

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### 2.6 Data Gathering Procedure

Permission from the respective barangay captains to conduct the study was requested. Objectives and mechanics of the study were also explained to the respondents and each was given a survey questionnaire. Thereafter, these instruments were all retrieved from the respondents where entries were checked properly. All responses were properly tabulated, analyzed and interpreted.

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### 2.7 Data Analysis

All data were tallied, tabulated, analyzed and interpreted manually by the researcher with the various problems identified in this study. The following tables were provided to clearly depict results of the study.

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## 3. RESULTS AND DISCUSSION

Table 2 shows the socio-demographic profile of the selected trading type of businesses. It was found out that most of the respondents were 43-52 years old. On the number of respondents, 87% were female and 13% were male, majority were Roman Catholics with 87%, 60% were college undergraduate and 47% had a monthly income between P20,000-25,000.

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Table 2. Socio-demographic Profile of the owners of selected trading type of business.

Particulars	F	%
Age		
43-52 years old	13	87.00
53-62 years old	2	13.00
Gender		
Male	13	87.00
Female	2	13.00
Religion		
Roman Catholic	13	87.00
Seventh Day	1	6.60
Jehova Witnesses	1	6.60
Educational Attainment		
College under-Graduate	9	60.00
College Graduate	6	40.00
Monthly Income		
P20,000-25,000	7	47.00
26,000-50,000	6	40.00
51,000-70,000	2	13.00

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Table 3. Waste generated from trading type of business. It was found out that most of the wastes generated were sacks, cartoons, and plastics with 73%. While the type of container used for garbage collection were sacks with 80%. In terms of frequency of garbage collection, the result shows that once a week got 86.66%.

Table 3. Waste Generated from trading type of business

Particulars	F	%
Type of Waste Generated		
Sacks, cartoons, and plastics	11	73.33
Bottles	3	20.00
Cans	1	6.67
Type of Container Used for Garbage Collection	12	80.00
Sacks	2	13.33
Cartoons	1	6.67
Plastic Bag		
Frequency of Collection		
One a week	13	86.66
Every Other Day	1	6.67
Every Three Days	1	6.67

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Table 4. Waste management practices among trading type of business. Data shows that 100% of the respondents were aware about solid waste management. More than majority or 80% heard it from their respective municipal and barangay councils. These councils aforementioned, have educated them (86.67%) on the proper waste disposal. More than one half (60%) said they put all the wastes to the garbage truck during the schedule of collection. Respondents (73.33%) said that public bins were provided by local authorities in poblacion areas where they live. Respondents have high level of awareness on the segregation of waste between bio-degradable and non-biodegradable as a result of their attendance to the trainings and seminars on proper waste management and practices conducted by the local authorities. Garbage recycling was highly adapted by all (100%).

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Table 4. Waste Management Practices among trading type of business

Particulars	F	%
Have you heard about solid waste management?		
Yes	15	100.00
Where have you heard about solid waste management?		
a. Municipal/ barangay Councils	12	80.00
b. Local radio station	2	13.33
c. School	1	6.67
Have you been educated by the barangay council on proper waste disposal?		
Yes	13	86.67
No	2	13.33
Where do you usually dispose your garbage?		
Garbage Truck	9	60.00
Roadside	5	33.33
Garbage hole at home	1	6.67
Are garbage bins provided within your community by local authorities?		
Yes	11	73.33
No	4	26.67
Do you practice segregation of wastes from bio-degradable to non-biodegradable?		
Yes	15	100.00
Have you attended a training or seminar on waste management?	13	86.67%
Yes	2	
No		
Have you heard about the importance of recycling?		
Yes	15	100.00
Will you agree in practicing solid waste management at home?		
Yes	15	100.00

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Table 5. Problems experienced by trading type of businesses. Results show that all (100%) respondents have not experienced problems particularly on compliance to government environmental policies, employee and customer health hazard, lack of knowledge on proper waste disposal, irregular garbage collection, and improper waste management practices.

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Particulars	F	%
Compliance to government environmental policies No	15	100.00
Employee and customer health hazard problems No	15	100.00
Lack of knowledge on proper waste disposal No	15	100.00
Irregular garbage collection No.	15	100.00
Improper waste management practices No	15	100.00

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#### 4. CONCLUSION

Based on the findings of the study the following conclusion was drawn:

That majority of the respondents were male, they belong to the age bracket of 43-52. Most of them were Roman Catholics with college undergraduate educational attainment and having an average range monthly income of P26,000-50,000. All of them were aware about solid waste management as they heard it from their respective municipal and barangay councils. These councils have provided them better education on the proper waste management. Public bins were provided by local authorities in poblacion areas. Respondents have high level of awareness on the segregation of waste between biodegradable and non-biodegradable as a result of their attendance to the trainings and seminars on proper waste management and practices conducted by the local authorities. All (100%) of the respondents have not experienced problems on the compliance to the government environmental policies, employee and customer health hazard issues, lack of knowledge or proper waste disposal, irregular garbage collection and improper waste management practices. Garbage recycling was highly adapted by all.

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