

UNIVERSITI TEKNOLOGI MARA

**THE EFFECTIVENESS OF
COMMUNAL BIN SYSTEM FOR SUB
URBAN AREA. A CASE STUDY IN
TELOK MAS, MALACCA**

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In the name of Allah, The Most Gracious, The Most Merciful.

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ABSTRACT

Effective solid waste management plays a very important role in ensuring that waste issues in an area can be managed properly. In this study, the Telok Mas constituency was taken as a sample for the study area in order to see the effectiveness of using a communal bin system for waste disposal and collection. Before the communal bin was used, data on the amount of garbage collected for five years from 2015-2019 as well as data on the number of complaints in that year were taken and compared with the year after the communal bin was used which is at year 2020. Comparison of data for the amount of garbage collection and also the number of complaints received shows a declining trend after the application of communal bin in Dun Telok Mas and this shows that the objectives of this study have been achieved. Apart from that, the issues found in waste management in this area are also mentioned in this study, among the issues found such as illegal dumping of garbage in unauthorized locations, dumping of garbage in areas on unsuitable roads, and also issues from the activities of scavengers looking for recycled garbage for sale. To overcome the problem, this study shows that the Malacca Municipal City Council has taken several actions such as implementing illegal waste closure operations, implementing waste management promotion activities in the study areas and also a provide communal bins for waste disposal and collection. In this study, there are also suggested some additional measures for improvement such as increasing the number of bins in selected locations where the garbage weights exceeding the capacity of bins and also implement more integrated cleaning operations and closure of illegal garbage disposal area. In overall, the study of the effectiveness of the communal bin system in Telok Mas has succeeded in achieving its objectives. The results of this study can also be used to be used to other areas.

Keywords: Effective solid waste management, effectiveness of using a communal bin system, comparison of data ,illegal, achieving its objectives

CHAPTER ONE

INTRODUCTION

1.1 Background

“Solid waste” includes “any scrap material or other unwanted surplus substance or rejected products arising from the application of any process;” Solid waste also defined as “any substance required to be disposed of as being broken, worn out, contaminated or otherwise spoiled;” or any other material that according to this Act (The Solid Waste and Public Cleansing Management (SWPCM) Act 2007) or any other written law is required by the authority to be disposed of, but does not include scheduled wastes as prescribed under the Environmental Quality Act 1974 [Act 127], sewage as defined in the Water Services Industry Act 2006 [Act 655] or radioactive waste as defined in the Atomic Energy Licensing Act 1984 [Act 304](The Solid Waste and Public Cleansing Management (SWPCM) Act 2007).

The problems of solid wastes disposal have become more significant lately. The latest statistics shows that the average solid waste per resident in Malaysia is 250 kg per year. From that amount, only 2% is recycled whereas the remainder is buried in landfills or dumped illegally. Unpaid tax charges to the people at sub-urban area and geographical problem also make a waste collection become unsystematic ineffective. Regarding to the National Solid Waste Management Department Ministry of Housing and Local Government Malaysia, solid waste that produced by the people of Malacca state almost 300 tonnes -350 tonnes per year. In average, total solid waste at Dun Telok Mas is about 140 kilograms (kg) – 200 kilograms (kg) per months. So, this is a very high waste production for one area compare to the other another area.

Proper waste management system must be carried out in order to make sure waste collection can be effective and systematic. The cost of solid waste