



“SOLID WASTE MANAGEMENT SYSTEM IN VADODARA: A REVIEW”

Chaudhari Vaibhavi S.¹, Bhanushali Akash A.², Rathwa Aarti A.³, Tandel Hetal J.⁴, Raka Bhattacharjee⁵, Jasmini Khatri⁶

^{1,2,3,4} Student, Civil department, Sigma Institute of Engineering

⁵ Assistant Professor, Civil department, Sigma Institute of Engineering

⁶ Head of Department, Assistant Professor, Civil department, Sigma Institute of Engineering

Abstract – Due to rapid population growth and economic development in the country. Solid waste disposal has become a major environmental issue in India as well as in Vadodara. As Vadodara has been included in the list of a smart city solid waste management system in Vadodara must be improve. This project represents a recommendation for solid waste management to improve present SWM system in Vadodara. In this project we will focus on characteristics of SWM system to make it more economical and efficient in which we have include route planning & vehicle which are present in current SWM system. We also planning like segregation recycle and recovery at transfer station to make it more efficient.

Keywords –Solid waste, Management, Improvement of cleanness

I. INTRODUCTION

Solid waste refers to the range of garbage arising from animal and human activities that are discarded as unwanted and useless. Solid waste is generated from industrial, residential and commercial activities in a given area. For disposal a solid waste landfill sites are there which are classified as sanitary, municipal, construction and demolition or industrial waste sites. Solid Waste Management is defined as the discipline associated with control of generation, storage, collection, transport or transfer, processing and disposal of solid waste materials in a way that best addresses the range of public health, conservation, economics, aesthetic, engineering and other environmental considerations.

Waste generated by domestic, commercial and industrial activities is often disposed indiscriminately. Unscientific management of such wastes leads to serious environmental problem. It is very common to find large heaps of garbage in disorganized manner at every nook and corner of the city. In sanitary method being adopted for disposal of solid wastes is a serious health concern. Particularly, during monsoon season, run-off and high humid conditions increases the health hazardous. The landfill site, which are not well maintained are prone to ground water contamination due to leachate percolation. Open dumping of municipal solid waste serves as breeding ground for disease vector such as flies, mosquitoes, cockroaches, rats and other pests. High risks of spreading disease like typhoid, cholera, dysentery, yellow fever, encephalitis, plague and dengue fever may not be rule out. There are three major steps involved in the management of municipal solid waste viz. collection, transportation and disposal. The collection methods currently adopted by the municipalities (civic authorities) are primitive and lacking in specific, standards or guidelines which are required to be laid for designing and siting of collection centers. Transportation of municipal solid waste is carried out using old outdated trucks and trippers. Inadequacy of transportation fleet and frequent breakdown of vehicles the major hardship in proper collection of garbage. Disposal of municipal solid wastes is generally done through open land filling leading in the deterioration of surrounding environment as well as ground water contamination due to leachate percolation. Objective of this project is to create a system of storage of waste and segregation of recyclable waste at source and to plan system to eliminate practices of throwing garbage on the road causing nuisance & health threat.

II. LITERATURE REVIEW

Dr. Komal P. Mehta and Mrs. Himani Pandey have work on Solid waste generated by domestic, commercial and an industrial activity is often disposed indiscriminately. This paper represents the status and future planning of solid waste management of Baroda city. The paper contains characteristics of municipal solid waste. It includes the status, manpower engaged, equipment and its handling etc. also the information regarding rig packers, dumping site, transportation vehicles is provided. Observations and recommendations looking to site situation are given which is very helpful to manage it in a better way.

Ar. Amish Kumar Bhanu and Ar. Ravish Kumar has work on Rapid urbanization which is given rise to the production of waste in the cities. Most of the Municipal bodies are not capable to manage the Municipal Solid Waste (MSW) efficiently. The production of the waste and its management has been a matter of concern and threat to the environment. At some places the ill management of the waste has given rise to environmental problems. The way in which, local bodies collect and dispose various types of waste is not scientific and eco-friendly. It needs concern and new approach. There is

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scarcity of land around the big cities. The landfill method which is used today needs large piece of land to dispose of the MSW. Segregation at the source, reuse and recycling can be a very effective method to manage MSW. Zero waste technology can also play very important role. If segregation at the source is done then it is estimated than 80% of the waste can be reused and recycled. This will save the handling cost and costly land.

III. CONCLUSION

In this present work it has been concluded that Detecting Text or character in Natural Scenes with Stroke Width Transform allows us to apply the method to many fonts and languages. The grouping of letters can be improved by considering the directions of the recovered strokes. Using the hybrid approach curvy character and hand written letters can be detected.

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