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POLICY GAPS ON SOLID WASTE MANAGEMENT: CASE OF CHEGUTU MUNICIPALITY ZIMBABWE

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ABSTRACT

The purpose of this study was to explore policy gaps on urban solid waste management in Zimbabwe and suggest management strategies to close these gaps. This was motivated by the observation that there is no policy in Chegutu Municipality which deals holistically with solid waste management. A qualitative research design was adopted to analyze policies and establish gaps. A descriptive survey based on a case study of Chegutu Municipality was used. A survey of a purposive sample of 44 residents, 5 Council employees, and 2 EMA officials was conducted. Questionnaire, Interviews and document analysis were employed. The study found that, there is no policy in Chegutu Municipality which deals holistically with solid waste management. The study recommends that citizens should be educated as a matter of national policy on waste minimization. Policies with a holistic view of solid waste management should be drafted in Chegutu Municipality. Since there is lack of enforcement and responsibility in solid waste management policies, roles of stakeholders and institutions should be clearly defined.

Key Words: Policy gaps, solid waste management.

1. INTRODUCTION

1.1 Contextual Analysis

The Environmental Management Act (EMA), Chapter 20:27 is the legal instrument regulating dumping of waste in Zimbabwe. Environmentalists noted with serious concern that the constitution of Zimbabwe even after its amendment in 2000, did not have a clear section dealing with environmental safety. Following this observation, in 2000 the government of Zimbabwe publicized the EMA (Chapter 20:27) and a draft national environmental policy in 2003 to give legal provisions on how the environment would be safeguarded.

The declaration of the EMA in 2002, led to the repeal of some Acts as they were incorporated into the EMA. These include The Natural Resources Act, 9 of 1996; the Atmospheric Pollution Prevention Act, 31 of 1996; the Hazards Substances and Articles Act, 76 of 1996; and the Noxious Weeds Act, 16 of 1993. The repealing and subsequent incorporation of Acts was done to maintain consistency with the social, economic and political dictates of the country.

Although the EMA became the overall environmental legislation in Zimbabwe, no effort was made by government to come up with a holistic framework that would augment these legal provisions with a view to develop the scope of this policy to embrace the well-being and rights of other key stakeholders in the environment.

In Zimbabwe, the nature of the system of Government is such that there are three tiers which are the National Government, Provincial and local authorities. The National Government through the

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Ministry of Local Government and Public Works has an overall supervisory role. In line with the Constitution of Zimbabwe Amendment No: 23 (2013) All local authorities are constituted in terms of the Urban Councils Act Chapter 29:15 and the Rural District Council's Act Chapter 29:13. The Urban Councils Act Chapter 29:15 gives to urban local authorities the mandate to provide solid waste collection, transportation and disposal services in areas under their jurisdiction. Prevailing studies on solid waste management indicate that there is a relationship between governance and solid waste management. Tevera (1991) associates urban solid waste disposal complications with economic policy failures at either national government or the local level.

From a legal standpoint, Powell (1996) advances that solid waste management is a set of reliable and organized regulations intended to control movement of waste. The generation, storage, collection, transportation, processing should follow municipal regulations. Mangizo (2010) remarks that in developing countries several agencies at a national level are usually involved in solid waste management but their efforts are fragmented leading to a duplication of efforts and lack of extension services to areas of most dire need. It is however pertinent to note that the EMA Act Chapter 20:27 was enacted with a view to remove duplications hence synchronizing the execution of the law.

Arlosoroff (1991) assert that lack of appropriate policy framework create difficulties in effective solid waste management in developing countries. Weaknesses in policy, legal framework and organizational capacity create challenges for solid waste in developing countries. Therefore an all-encompassing legal framework is a key factor in the sustainability of a solid waste management system.

1.2 Statement of the problem

The study has been triggered by the observation that to date (2021), there is no policy in Chegutu Municipality which deals holistically with solid waste management. There are numerous pieces of legislation on solid waste management; however limited research has been done to assess compatibility and synergy on these pieces of legislation. The problem is compounded by the fact that roles and responsibilities of various stakeholders are not clearly stipulated. Secondly, is the seemingly polarized realization that issues of political will on the part of government and members of the local authorities on waste management have not been clearly explored. Lack of policy enforcement is one of the reasons why Zimbabwean urban areas are being faced with solid waste management challenges. An Analysis of solid waste management in the informal sectors of Chegutu has revealed that large amounts of waste are generated indicating poor material efficiency in the enterprise especially in the food marketing area where huge amounts of biodegradable material and vegetable waste are generated and disposed haphazardly. This study therefore seeks to provide management strategies to close policy gaps on waste management in Zimbabwe.

The study is motivated by the assumption that a holistic policy on solid waste management in Chegutu Municipality will be a positive development for the government as well as other stakeholders. Specifically the study seeks to,

i) Establish gaps in solid waste management policies
ii) Suggest management strategies suitable to close policy gaps in solid waste management

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1.3 Significance of the study

The importance of the study emanates from the observation that there is lack of a holistic policy on solid waste management in Chegutu Municipality. Not much research has been done to identify policy gaps on solid waste management and to suggest management strategies to close policy gaps.

The study provides rich insights on solid waste management policies in Zimbabwe. This study provides significant literature to the legal framework within which solid waste is managed in Zimbabwe. The study findings can be useful in improving the policies governing urban solid waste in Zimbabwe and further research.

1.4 Research Questions

The following research Questions guided the study

i) What are the policies guiding solid waste management in Zimbabwe?
ii) What are the gaps in solid waste management policies?
iii) What management strategies can be adopted to close policy gaps in solid waste management

1.5 Objectives

The study sought to:

i) Find out policies guiding solid waste management in Zimbabwe
ii) Establish gaps in solid waste management policies
iii) Suggest management strategies suitable to close policy gaps in solid waste management

2.LITERATURE REVIEW

Solid waste policy framework in Zimbabwe

Solid waste management in Zimbabwe is governed by policies such as the Environmental Laws, Urban Councils Act, Public Health Act and Municipal by-laws. The purpose of Environmental policies is the protection of public health and the environment. These policies date to the 1950s. From the early 1960s the issue of solid waste has been clearly articulated. The Public Health Act (1972) instituted the main piece of legislation dealing with waste management and environmental pollution. In addition, the Urban Council Act Chapter 29:15 designates to urban local authorities the responsibilities to provide solid waste collection transportation and disposal services in areas under their jurisdiction. There is legal framework on solid management in Zimbabwe, Chegutu Municipality has no solid waste management policy

Notwithstanding the existence of several pieces of legislation, there has not been polished analysis into the implementation of policies. In fact, solid waste management has declined in most urban centres over the last decade.

Makuku and Masiye (2002) defined a policy as a plan of action with objectives and standards of a government. Legislation, on the other hand, according to Museva (2005) refers to the laws, or set

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of rules applicable in a country. These laws exist in the form of Acts, all of which are passed by parliament and endorsed by the State President before becoming law.

Chegutu Municipality does not have a waste management policy. This situation has worsened the crisis in the waste management section within Council. Museva (2005) observed that there are no policy directives demanding local authorities to implement waste management programs in particular ways. Nevertheless, there are several policy documents that recognize the importance of developing efficient waste management system in order to maintain people's health and their environment.

2.1 The Public Health Act of Zimbabwe

The Public Health Act (1996) established the general Board of Health, which was responsible for advising on public health matters such as epidemic and disease prevention The Act recognizes the Minister of Health and Child Welfare as authorized to control sanitary conveniences. Museva (2005) postulates that the Public Health Act (1996) addresses the issue of waste by barring a person from causing a nuisance on land which he occupies, owns and controls. Notably, there is no provision for prohibiting people from instigating nuisance in areas they do not have control over. Consequently these inconsistencies will, therefore, enable people to cause nuisances on open spaces or other land over which they have no control and get away with it. The department of Environment (1992) was the first move towards formalization state responsibilities for protecting the health of the public. The Act gave local boards rights to make conditions sanitary but there were no legal obligation to do so.

Museva (2005) observed that, sections 87 and 88 of the Public Health Act, define the procedures and penalties for someone failing to comply with notice to remove a nuisance. The penalties for this crime include very low fines of $100.00 and $20.00. These fines are very low and therefore not effective in deterring the public from committing the crime. Museva (2005) concludes that if fines are put in monetary value it will be difficult to amend the Act. Museva (2005) further advises that the monetary values should be put in statutory instruments as opposed to an Act, since statutory instruments are easier to amend compared to Acts.

Section 83 of the Public Health Act of Zimbabwe (1996) states that it shall be the duty of every local authority to take all lawful necessary and reasonably practical measures for maintaining a clean and sanitary condition by preventing the accumulation of waste which may be injurious or dangerous to health. This law is in line with the EMA Act of 2002. However, the Act did not give specifics of what the council, waste generators and residents ought to do to achieve a healthy environment. It can be argued that for local authorities to achieve a healthy environment they should provide receptacles, collect refuse and dispose it in engineered landfills. Notably, there is a policy gap in that what the Public Health Act (1996) calls "reasonably practical" is relative and open to abuse.

2.2 Environmental Management Act (EMA) 2002

Environmental Management Act (EMA) of 2002 is the absolute law governing the management of waste in Zimbabwe. Museva, (2005) affirms that EMA is the principal Act that deals with environmental issues. According to the Environmental Management Act (2007), all people have the right to live in a clean and health environment.

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The Act encourages the sustainable management of all-natural resources. Protection of the environment, the prevention of pollution and environmental degradation are also embedded in this policy. Mudzengerere and Chingwena (2012) concur that, the Environmental Management Authority (EMA) and the Ministry of Health officials are mandated to do some check-ups and enforce the hygiene and environmental laws. These officials control the collection, disposal and treatment of waste.

The EMA Act as espoused by Madzengerere and Chingwena (2012:12) requires all persons whose activities generate waste, to employ measures critical to reduce the waste through treatment, reclamation and recycling. This study will establish the level of public awareness of the contents of EMA and their obligations to it.

Section 70 (3) of EMA, as illustrated by Museva (2005), does not encourage sustainable waste management practices as there is an omission of effective practices such as reusing, reduction and composting. This omission will lead people to believe that only those practices mentioned in the Act should be applied. Sorting of waste at the waste generation points is also not indicated. These omissions are worrying given the state of solid waste in most urban centres in Zimbabwe.

Currently solid waste mismanagement is a major threat to both human and environmental resources. Mwai et al (2008) alleges that one of the reasons why there is little progress being made in waste management, is a lack of clear objectives, coupled with a lack of information. Actually, a strong analytical base in which various policies and strategies can be formulated or aligned during the decision-making processes is lacking. Therefore, protecting the health of citizens and the environment from the negative impacts of solid waste requires more than just good policies. It calls for strategies and guidelines in line with international trends conducive to local needs.

Section 69 of the Environmental Management Act (2002) prohibits the disposal of waste that will pollute the environment or affect the health of people. Direct implication of this part of the act is that, one is guilt if the waste '*polluted* the environment' or '*affected the health*' of people. The words in italics are not easy to provide technical evidence in a court of justice. This gap makes it difficult to effect the instrument.

Notwithstanding the fact that this law on Section 36 states that every user would take necessary measures to reduce waste through minimization reuse and deposit inert waste in engineered landfills, section 36 did not specify the processes that need to be carried out to recycle waste and specific programs that need to be taken. It is apparent that waste minimization is not followed in Zimbabwe as witnessed by few public campaigns on waste minimisation. Although there are strategies for separation of waste, these have not been fully adopted at national level.

Section 83 of the EMA Act (2002) cites illegal dumping in roads, water, streets, land or at any place as illegal, but to dispose in designated places or containers that are provided for that purpose. In addition, the same section clearly proposes that the owner of the vehicle, ship or an airplane is required to make sure that no passengers throw waste to the environment.

The inclusion of 'ship' for a landlocked country like Zimbabwe depicts a copy and paste formation of laws. They lack the local context and are a mockery to the implementers. Furthermore, Section

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83 also states that all people or local authorities responsible for a certain area or premise must provide receptacles or designated sites for waste storage. An analysis of this law in line with the prevailing situation of waste on roads and pathways, points to the fact that the policies are in place although there is no enforcement. It is also not clear on who is responsible for providing receptacles as the law gave the responsibility to both the local authority and citizens.

Section 180 of EMA (2002) Chapter 20:27 assign the Agency to set regulations and standards regarding the activities which have influence on the environment. Thus, the Environmental Management (Effluent and Solid Waste Disposal) Statutory Instrument Number 6 of the year 2007 enforces every generator of waste except households to develop a waste management plan by the end of each year. From this stance, it is an offence for the waste generator to fail to produce the plan. Unfortunately, there is no enforcement.

Likewise, Statutory Instrument 10 of 2007 requires that each year the generator of hazardous waste should also develop a waste management plan which should include an inventory of hazardous (quantity and composition), goals for reducing waste and its adverse effects on the environment. The instrument seems to have been crafted for industrialists. This is an important instrument for the management of solid waste. It provides data on waste inventory and the plan for sound solid waste management. However, the regulation did not emphasise the involvement of stakeholders in the formulation of the waste management plan. The current study does not include industrial waste since Chegutu does not have industries to write home about.

As advanced by Mangizvo (2010), section 14 of Statutory Instrument 6 states that every local authority shall designate suitable sites as waste disposal sites and waste shall be collected at a collection frequency that does not allow decomposition of waste. The same regulation also states that the local authority or the owner of the premises shall ensure that there are adequate receptacles to receive litter or refuse until the collection time lapsed.

Environmental Management (Plastic Packaging and Plastic bottles Regulation) Statutory Instrument 98 of 2010 highlighted the need to reduce plastic by encouraging the use of biodegradable plastic and sets the minimum requirements of plastics. The above regulations help to maintain a town in a clean environment as the waste generators would be having enough receptacles to store waste. In addition, the local authorities are regulated to collect waste at an ideal frequency which was left to be determined by local authorities and health inspectors. The regulation on plastics is very important in the reduction of waste as plastics constitute a significant amount of municipal solid waste. In fact, plastic and bottles do not decompose and form the bulk of household waste.

2. 3 Urban Council's Act Chapter 29:15

The Urban Councils Act: Chapter 29:15 regulates activities taking place in areas designated as urban. Section 218 (b) of this Act allows councils to charge for the removal of waste where this service is provided. However, the Act is silent on the monetary value of the charge. This gives council the powers to set the monetary value of the charge for the services provided in refuse collection.

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The policy gap within this Act is that Council budgets are approved by the ratepayers. This means that even if the council wants to charge market related values for its services, ratepayers will not allow it. Urban councils fall under the Ministry of Local Government, Public Works and National Housing hence their budgets are subject to this Ministry's approval. At times the budgets may not be approved if they are considered to be too heavy for the ratepayers. This usually leaves cash strapped urban authorities with very little resources which may not allow for the frequent collection of refuse.

Museva, (2005:22) comments that although there is a section that empowers councils to charge for refuse removal, nothing has been mentioned in the Act as to what use the service fees collected will be put to. The money collected may end up being used for something different from cleaning the environment. Therefore, in the interest of good corporate governance, the money should be used for the improvement of the waste management delivery system. In many cases, the money charged for waste removal does not go towards supporting waste management services. If such a provision could be put into legislation, it would improve waste management service delivery.

The Urban Council's Act Chapter 29:15 falls short of promoting the current sustainable waste management practices as it does not mention the use of the three Rs – reduce, recycle and reuse. It is also silent on how the council disposes waste that it collects and what is to be done in the event of failure by the council to fulfil its obligations. The Act is silent on where and how the waste will be disposed and the requirements for establishing a disposal site. This might explain why most of the local authorities in Zimbabwe do not have up to standard landfills.

2 .4 Regional, Town and Country Planning Act: Chapter 29:12

The Regional, Town and Country Planning Act defined zoning of industrial and other (economic) activities, to ensure that specific activities (resulting in specific types of waste) are confined to designated areas. This Act is however silent on the issue of waste management. Museva (2005:24) went on to point out that the Act does not even mention the issue of design and selection of waste disposal sites despite the fact that the planning stages of selecting and designing waste disposal facilities determine the impact that the facilities will have on the environment and on public health.

2 .5 Local Authority By-laws on urban solid waste management

Apart from the above-mentioned Acts of Parliament, local authorities also make their own by-laws to deal with waste management in their areas of jurisdiction. This is in line with the requirements of the Urban Councils Act section 227(1) (Chapter 29: 15), which enables each local authority in Zimbabwe to have by laws guiding the way certain activities and functions are undertaken. There is need to enforce these by-laws if the cities are to achieve sustainable waste management. Mudzengere and Chingwena, (2012) advances that Municipal police officers need to be given arresting powers and municipal courts established to punish refuse dumping and littering culprits.

3. METHODOLOGY

3.1 Research Design

The purpose of the study (to explore policy gaps on urban solid waste management in Zimbabwe) renders the study exploratory. A qualitative design was considered appropriate because of the study's content (policy analysis). The study used a descriptive survey research design based on document analysis to identify policy gaps on waste management in Zimbabwe. Maregedze,

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Chinamasa and Hlenga (2012:12) defined a descriptive survey as a method of research which describes what we see. According to Van Wyk (2001:9), the main aim of descriptive research is to provide an accurate and valid representation of the variables relevant to the research question.

Qualitative research approach focuses on understanding the social phenomena from the perspectives of the participants. In this study the researcher will gather information on awareness of policies on solid waste management from the residents. Qualitative approach will be used to gather multiple forms of data from interviews and survey.

3. 2. Instruments

In this qualitative research, I the researcher was a key instrument of data collection as suggested by Nyawaranda 2003. Document analysis of the policies and statutes governing solid waste in Zimbabwe was a primary instrument in this research.

A questionnaire was also used as a data collection instrument in this study due to its ability to gather data from a large population within a short space of time. An Interview guide was useful in the data collection for this study. A review to the legal framework of EMA Act, its statutory instruments, fine schedules, relevant policies, questionnaire and interview guide formed the triangulation of instruments in this study. This idea of triangulating instruments was echoed and supported by Miles and Huberman (1994).

3.3 Validity and Reliability

Validity is the extent to which a construct measures what it is supposed to measure. It refers to the issue of whether the data collected is a true picture of what is being studied. Chinamasa (2015) concede that validity is a relative and subjective concept depending on whoever is determining it. Gray (2009) concur with Chinamasa (ibid) that validity is the degree to which data in a research are accurate, sound and credible.

To ensure content validity in this study, a questionnaire audit was done. The questionnaire was constantly referred to research questions to make sure that the questions being asked are a true representation of the construct to be measured. To ensure validity in this study, a process of triangulation of various data collection methods was underscored.

Denscombe (2010) defines reliability as the neutrality or consistency of the research instrument. Chinamasa (2015) affirms that while validity is focused on study findings, reliability is focused on instruments and data collection methods. By way of contrast, Walliman (2005) describes reliability in relation to human perception and intellect, as the power of memory and reasoning to organize data and ideas in order to promote understanding.

The use of multiple sources of data collection and analysis enhanced transferability. The study's findings can be transferred to similar municipalities. Transferability is a critical component of reliability.

3.4 Population and sampling

In this qualitative study, purposive sampling of 44 residents from 12 wards, five Council employees and 2 EMA employees was done. These participants are rich sources of the required information. Coyne (1997) remarks that the logic and power of purposive sampling lies in selecting

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information rich sources for the study. Patton (1990) concur that purposively selected informants are suitable as they are well informed about the phenomenon the researcher is investigating.

3.5 Document Analysis

An analysis of policies identified leads to informative aspects for observation and interviews. Table below is a summary of the policies which were analyzed in this study and the key variables identified.

Policy	Variables to be analysed
Environmental Management Act (2002)	Regulatory mechanisms
Urban Council's Act chapter 29: 15	Regulatory mechanisms
Regional Town and Country Planning Act 29:12	Regulatory mechanisms
Local Authority by laws	Regulatory mechanisms
Environmental Management Act20.27 (2007)	Regulatory mechanisms
Statutory Instrument 6 of 2007	Regulatory mechanisms

4. FINDINGS AND DISCUSSION

4 .1 Solid waste management policies in Zimbabwe

The first principle of the Rio Declaration puts human beings at the centre of concerns for sustainable development. Humans are therefore entitled to a healthy and productive life in harmony with nature. Principle 5 of the Rio Declaration states that in order to achieve sustainable development, environmental protection needs to be an integral part of the development process. In Zimbabwe, Section 83 of the Public Health Act Chapter 15.09 of 1996 states that all local authorities are responsible for maintaining their areas of jurisdiction in a clean and sanitary condition and preventing the accumulation of waste which may be hazardous to health. This is also supported by the Zimbabwean Constitution which provides every citizen with the right to a clean environment.

Nevertheless, Chegutu municipality is failing to meet these requirements since it is struggling to collect household solid waste generated by its residents. The Zimbabwe Waste Management by-law of 1979, Statutory Instrument 477 of 1979, 127 of 1981 and 197 of 1987 provide a description of a receptacle in Section 3 as (i) an approved rounded and lidded container in non-corrugated galvanized sheet metal which is reinforced and welded and is of a capacity not exceeding 0,1 cubic meters or (ii) an approved polythene bag of a thickness of not less than 200 microns and a capacity not exceeding 0,1 cubic metres when filled to within 200 mm of its open end or (iii) any other approved receptacle.

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The same instruments which define receptacles also indicate that it is the duty of council or municipality to remove waste from the residential areas. Nevertheless the respondents in Chegutu showed that the council is failing both to provide the receptacles defined in the instrument and to ferry all the generated waste to the recommended dumpsites. Officials in the Waste Management Department also confirmed, during the interviews.

4.2 Residents Awareness of Waste Management Policies

Lardinois (1996), Van de Klundert and Anschutz (1997), and Rosario and Scheinberg (2004) deemed policy and legal frameworks as some of the key aspects in a sustainable integrated solid waste management system. Residents' awareness of the policies and laws governing waste management is vital in ensuring that residents are conscious of their roles and responsibilities in waste management in their areas.

During the household survey 82% of respondents said they were not aware of any policies and laws governing solid waste management in Chegutu. Of those who said they knew some policies and laws most of them only mentioned that they knew that it was illegal to dispose waste in open areas and by the roadside. These findings of little awareness of policies and laws governing waste management among residents also confirmed the findings of Maseva (2005) and Practical Action Southern Africa (2006) whose studies concluded that there have been poor communication of national policies on waste management to local authorities. Evidence from this study points to lack of public awareness on the existence of these laws as one of the main weaknesses with regards to laws governing waste management in Chegutu.

The EIA policy document makes recovery and recycling of waste as one of its prescribed activities but again like with composting the policy document does not spell out practical steps with which this should be done. The question what do you recycle was asked not only to find out about the types of materials that residents of Chegutu recycled but also to establish knowledge amongst respondents as to what recyclable materials constituted. With regards to knowledge pertaining to recyclables, it was clear that bottles, paper and plastics were the most well-known recyclables with almost no respondents indicating awareness as to the recycling potential of bones and textiles.

4.3 Discussion of the Current Waste Management Strategies in Chegutu

Although the research findings revealed that most of the waste management strategies in use in Chegutu conformed to international standards, the level of compliance to even very basic norms like recycle and re-use still differed greatly from regional and international standards. Waste management in Chegutu (and in Zimbabwe as a whole) is mainly monitored by the EMA, which is an arm of the government, but city councils have their own by-laws on waste management. It has been observed that the inability of Chegutu council to effectively manage waste is mainly due to inadequate personnel.

Most generators mixed their waste which shows that waste was not separated at the source. It is disappointing to note that only a paltry 7% separated waste at the source, which made the characterization and management of non-formal solid dump sites difficult. This shows that the culture of separating waste was still in its infancy in Chegutu (and the whole country in general). 28% of the waste generated in Chegutu was handled by wrapping, indicating that quite a great deal

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of the waste was managed by using very rudimentary methods not befitting a city in the 21st century.

Residents in Chegutu should be encouraged to adopt cleaner products practices to reduce waste. Waste reduction is the second most desirable option since this results in less waste to be managed.

5. CONCLUSION

What emerged from this study of policy gaps on solid waste management in Zimbabwe is that there is no policy in Chegutu which deals holistically with solid waste management. An assessment of the by- laws on solid waste management revealed that there is no compatibility on the pieces of policies being used. There is need to align by-laws with the parent law.

The study inferred that there is lack of public awareness on the existence of solid waste management laws. This resulted in lack of consciousness of citizen's roles and responsibilities in waste management in their areas.

Solid waste management has emerged as one of the major challenges confronting almost all urban local authorities in Zimbabwe. Rapid urban population growth during the last decade, coupled with hyperinflation, economic decline and a fall in both capital and recurrent real budgets of local authorities, among other factors, placed considerable strain on local authority resources, resulting in the failure to provide adequate services to their residents and areas under their jurisdiction**.**

6. RECOMMENDATION

Strategies that involve reducing the level of waste and recycling waste at individual or community level are more cost effective and pose less risk to the environment and public health. In urban areas, as population sizes increase, it is not sustainable to generate and manage the increasing volume of waste without such strategies. This calls for information dissemination and organization at household level. Households need knowledge, incentives, and support for participation in these strategies for solid waste management. Effective communication between local authorities and communities on solid waste management is critical.

On the basis of policy gaps identified in this study, the study recommends the following:

1. Since there is lack of enforcement and responsibility in solid waste management policies, roles of stakeholders and institutions should be clearly defined.
2. Littering has been exacerbated by the absence of realistic penalties.These penalties should be reviewed accordingly and there should be consistent enforcement.
3. To close the attitude and behavior gap, convenience of garbage bins should be prioritized by Municipal authorities.
4. Improvement of public awareness of policies and community participation through seminars and workshops. Chegutu Municipality should come up with a solid waste management policy to guide solid waste management within the Municipality.
5. Citizens should be educated as a matter of national policy on waste minimization.
6. Behavior change and waste prevention policy needs to be designed with convenience in mind.

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7. To convert refuse from non-biodegradable (waste) material into organic mature for greenhouse .The reduction of waste at the point of generation include returnable bottle deposited and containers such as glass, metal and plastic.
8. Weekly collection of garbage's and disposal facilities.

REFERENCES

Chinamasa, E. (2015). Development of Lecturer Research Skills in Higher Education Institutions: Case of mentoring at mentors University of Zimbabwe, Unpublished Doctorate thesis. Pretoria University of South Africa

Densecombe, M . (2010). The good research guide for small scale social research projects (4th Ed). New York: McGraw Hill.

Environmental Management Act (EMA), (2007). Environmental Management (Hazardous Waste Management) Regulations 2007, Statutory Instrument 10: Chapter 20:27, Government Printers, Harare, PP 162.

Gray, D.E (2009). Doing Research in the Real World (2nd Ed) London: Sage Publications.

Makuku, L and Masiye, G. (2002). "Urban Solid Waste Management in Zambia" in Conyers,

Mangizvo R.V. 2010. Illegal dumping of solid waste in the alleys in the central business district of Gweru, Zimbabwe. *Journal of Sustainable Development in Africa*, 12(2): 110123.

Maseva, C. 2005. A review of the legislative and policy framework for waste management in Zimbabwe with special reference to Harare, Chitungwiza Municipality and Epworth Local Board. Harare: Practical Action Southern Africa

Mudzengerere, F. H. and Chigwenya, A. (2012). Waste Management in Bulawayo City Council in Zimbabwe: in Search of Sustainable Waste Management in the City. *Journal of Sustainable Development in Africa.* 14(1), 98-120.

Miles, M.B and Huberman, A.M (1994). Qualitative Data Analysis, London: Sage

Mwai, M., Siebel, M. A., Rotter, S. and Lens, P. (2008). Integrating MDGs in the Formulation of Strategies for Solid Waste Management – A Life Cycle Approach Water knowledge for the new millennium. Kenya.

Nyawaranda, V. (2003). Doing a Qualitative Research study. The Zimbabwe Bulletin of Teacher Education. 12(1), 1-5

Practical Action, (2006). Community Based Solid Waste Management in Urban Areas. Second International Conference on Appropriate Technology. Harare.

Tevera, D. S. (1991). Solid Waste Management in Harare and its Effect on the Environment: Some Preliminary Observation. Department of Geography, Harare: University of Zimbabwe