



ASSESSMENT OF CORPORATE SOCIAL RESPONSIBILITY ON INDUSTRIAL WASTE MANAGEMENT WITHIN LAKE NATIONAL PARK AND ITS ENVIRONS

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ABSTRACT

Lake Nakuru National Park is choking of solid and liquid waste pollutants emanating from upstream more so during the windy and rainy seasons. Due to the nature of terrains, most of the flashflood water and the drainage system find its way to the lake. The strong winds from the upper area of the town collect waste which ends up on top of the forest trees around the lake. Further, at times the sewer system bursts and discharges the raw sewer to the park. These unfortunate incidences lead to damage or destruction of the ecosystem that has been protected over the years. The purpose of the study was to examine the influence of Corporate Social Responsibility on Industrial Waste Management within Nakuru Environs and Lake National Park. The study adopted Stakeholders and Institutional theories for its study. A sample of 55 employees of Lake Nakuru National Park and 15 Community Business Leaders were used for the study. Primary data was collected using questionnaires and interview schedule. It was established that an effective industrial waste management practices on the environment has positive economic effects for businesses prosperity, flora and fauna conservation as well as a sustainable environmental. Environmental conservation awareness trainings for most businesses had been undertaken. Most of the business people held some sense of responsibility on managing waste as they conduct their businesses but the issue mainly lies on the part of the consumer's disposal of packaging materials. Consumers were also becoming increasingly aware, sensitive and alive to the fact that a clean and safe environment is important. The emerging model shows the need to shift from the traditional 3Rs to 5Rs, owing to changes in national environmental policies, which emphasis on the use of Repackaging of products in terms of quality management, and reduce as additional waste management practices, thus, a shift from the 3Rs to 5Rs. The study recommended that the Ministry of Environment and Natural Resources should mobilize financial, technical and physical resources for building the capacity of the local community, and the business community towards effective industrial waste management. There should be strict compliance to industrial waste management policies by all stakeholders. Emphasis on the 5R'S from the marketing perspective was also recommended. This way, waste will be minimized and the environment will be conserved. The recommendations will be beneficial to the County Government, the Business Community as well as the Park Management. It can also assist the National government in formulating policies that can assist in addressing issues to do with environmental concerns and management.

KEY WORDS: *Corporate Social Responsibility, Industrial Waste Management, Environmental Education Programs, Waste Management Infrastructure, Recycling*

1.1 INTRODUCTION

Reasonable waste management is a global need that can significantly contribute to the protection of the environment and to sustainable development simply by accepting pro-environmental behaviour patterns. According to the United Nations, about 11.2 billion tonnes of solid waste is collected worldwide, almost all of which comes from humans alone (United Nations,

2018). One of the most significant threats in these protected areas is inappropriate waste management, which is related with the practice of landfilling or combustion of waste. The increased needs for quality of the residential environment foster the business to ensure comprehensive human welfare. However, there is still a global problem, how to collect, process, use, storage and sale the rapidly rising amounts of waste. Therefore, the environmental concern and sustainable development is a



key pillar of the prosperous corporate social responsibility (Karlaitė, 2013).

Waste is not only a by-product of economic activities by businesses and society; it is an input (through material or energy recovery) to economic activities too. Waste management refers to the practice of collecting, transporting, processing or disposing of, managing and monitoring various waste materials. The management of waste has economic effects for business expenditures, productivity, and for the environmental issues. Each year, over 100 million pounds of waste is generated in national parks through a variety of means including park operations, by visitors to parks, and other sources (Lawhon, Taff, Schwartz, Miller & Newman, 2018). In Lithuania the level of waste generated per inhabitant is growing and becoming similar to average of EU-27 (Eurostat, 2013).

A safe and pollution-free environment is not only a necessity but a right for every human being, as well as the aquatic and terrestrial life. Waste management practices in a business are important elements in determining the survival of any ecosystem. It is ironical that activities meant to provide basic human needs have the potential to generate diverse degrees of environment degradation and inherent conflicting demands on natural resources base. Protected areas play a key role in maintaining the biodiversity and services provided by natural systems (Kolahi *et al.*, 2013).

In Kenya, approaches to conservation have been initiated against identified existing problems and constraints. These approaches are organizational and institutional development; hot spots and pollution loads management and catchment and park management. Constraints have been identified as unclear demarcation of responsibilities, lack of budget, skilled staff and know-how and lack of environmental standards and regulations (Riaini, 2009).

Lake Nakuru park management has adapted a team effort approach with its stakeholders under the name Lake Nakuru Park Action Committee. The team works together in minimization of human wildlife and further try to solve emerging issues relating to the park. Started in 2003 by Nakuru Hoteliers Association and Nakuru Business Association, they complement the park management activities and support all conservation activities putting Lake Nakuru National Park in the world map in Kenya and the world at large. The Committee conducts a yearly event dubbed Cycle with the Rhino as a fundraiser to construct an electric fence to prevent encroachment; create awareness of conservation of Lake Nakuru National Park; undertake local community education and sensitization programs.

This report will assist the government, Kenya Wildlife Service management and the donors to formulate proper and effective legal and enforcement machinery in order to protect the flora and fauna; the business community will conduct their activities with responsibility on how to manage their environmental waste and also achieve a win-win situation from the local and international tourism activities in the park. Further, effective community participation and sensitization in the design, management and operations of the park activities, shall give the community an experience and a sense of belongingness thus protect park resources.

1.2 PROBLEM STATEMENT

Traditionally, industrial waste management has been the responsibility of the County Government of Nakuru. Nevertheless, despite efforts by the government, there is still a problem with the efficacy of the waste management system. This is most likely due to the fact that government agencies are fragmented and uncoordinated and these handicaps the sustainability of the ecosystem. At least 30 to 40 tonnes of single use plastic bottles found their way into Lake Nakuru National Park every rainy season, posing danger to the wildlife and were a threat to one of Kenya's most visited parks. The single use plastic bottles' waste generated from Nakuru town centre and the neighbouring estates is swept into the park through River Njoro, the main life line of Lake Nakuru (Ministry of Environment and Forestry, 2013). The business community has taken a lead role in CSR activities such as supporting environmental education programs, donations for waste disposal cans. However, the situation has not improved, especially with Lake Nakuru. If this continues unchecked, the lake will eventually be too toxic for the current aquatic life as well as herbivores that often come into contact with non-biodegradable material leading to their deaths. A total of 145 buffaloes translating to 3.45 per cent of the total population of 4, 100 buffaloes within Lake Nakuru National Park died of the highly infectious anthrax disease that is caused by bacteria (Kenya Wildlife Service, 2019). Mutual waste recycling partnerships with wildlife stakeholders within Nakuru town anchored on Reducing use, Recycling and Reusing (3Rs) model is significant in conserving the wildlife. Improper waste direction to Lake Nakuru from Nakuru town has increasingly hampered growth of algae in the lake leading to migration to other places of flamingoes and other bird species. Flamingos that once were synonymous with Lake Nakuru have moved to Lake Bogoria and Lake Elementaita. Researchers have blamed their flight on increased alkalinity in Lake

Nakuru and pollution, among other factors. There is therefore need to investigate if CSR activities carried out by the business community have an influence on waste management in Lake Nakuru National Park and Town Environs.

1.3 STUDY OBJECTIVES

The specific objectives are:

- i To establish the influence of stakeholder's participation in environmental education programs on waste management in Lake Nakuru National Park and Town Environs
- ii To establish the influence of acquisition of requisite waste management infrastructure on waste management in Lake Nakuru National Park and Town Environs
- iii To establish the influence of the 3R'S on waste management in Lake Nakuru National Park and Town Environs

1.4 THEORETICAL FRAMEWORK

1.4.1 The Stakeholder Theory

The stakeholder theory, popularized by Freeman (1984; 1994), essentially argues that a company's relationships with stakeholders (and treatment of the natural environment) are core to understanding how it operates and adds value as a business. Freeman (1994) argues that stakeholder language has been widely adopted in practice and is being integrated into concepts of corporate responsibility/citizenship by scholars who recognize that it is through a company's decisions, actions and impacts on stakeholders and the natural environment that a company's corporate responsibility/citizenship is manifested. Corporate social responsibility is a concept whereby companies fulfill accountability to their stakeholders by integrating social and environmental concerns in their business operations (Tanimoto and Suzuki 2005).

1.4.2 Institutional Theory

According to Berger and Luckmann (1966) institutions refer to a certain exemplification where under a certain situation X, an actor Y, is expected to do Z. Alternatively, institutions are considered to be a habitual pattern of behavior which further enables or constrains people. Organizations are driven to incorporate the practices and procedures defined by prevailing rationalized concepts of organizational work and institutionalized in society.

2.1 LITERATURE REVIEW

2.2.1 Waste Management Concerns

Guynup (2018) in the U.S. National Park Service (NPS) faces a waste management quandary: it aims for a zero-landfill future, yet visitors deposit over 100 million pounds of waste there every year. To avoid sending enormous loads of trash to the dump, the NPS is keen on finding ways to recycle, reuse, and compost as much waste as possible. The researcher found that the park has promotes CSR activities with the aim of scaling up effective waste management. However, the parks' efforts are hampered by limited budgets, maintenance backlog issues, and extreme climatic environments (Karidis, 2018).

Perna (2019) observed that companies who work with the National Park Foundation are given the opportunity to not only invest into corporate social responsibility (CSR) initiatives that empower the national parks, but initiatives that touch upon their own values and priorities. Subaru, which has made a point to emphasize renewable initiatives including the operation of a zero-landfill plant in Indiana, used part of its donation to help remove 6 million pounds of waste from the parks and share its best practice. They are helping the National Park Service understand how they can become more sustainable and reduce the waste that they have to deal with. Over 300 million people visit the national parks each year, bringing in and generating millions of tons of trash. From plastic to food waste to discarded clothing, the waste brought into national parks can pollute our nation's most pristine wilderness and wildlife (Hanna & Morales, 2021).

Holcomb, Okumus and Bilgihan (2010) examined what the top three Orlando theme parks report about their corporate social responsibility (CSR) activities. The research findings suggest that according to their reporting efforts the top three theme park companies in Orlando undertake and participate in various CSR activities and initiatives, which are important for the environment, local community, customers, and employees. Some of the activities studied included conservation community support and charities, employee volunteerism and jobs for disadvantaged. However, their reporting and emphasis of certain CSR activities seem to vary. These companies can better publicize and promote their CSR activities. With rising awareness regarding CSR activities, it is important for the theme park industry to begin profiling their CSR efforts as part of their overall corporate and business strategies.



2.2.2 Participation in Environmental Education Programs

Ardoin, Bowers and Gaillard (2020) looked at Environmental education outcomes for conservation. The narrative analysis indicated that environmental education programs documenting direct impacts included: a focus on localized issues or locally relevant dimensions of broader issues; collaboration with scientists, resource managers, and/or community organizations; integrated action elements; and intentional measurement/reporting structures. Low environmental awareness of both residents and tourists is conducive to the degradation of the natural environment; this is particularly true in Asia (Przydatek, 2019).

The social-cultural aspect encompasses various aspects pertaining to the local communities, such as civic pride, the revival of local culture and most importantly, environmental education (Liang & Hui 2016, Jeon *et al.* 2016). The basic objectives of education were to shape appropriate attitudes to nature in children, youth, and all park visitors, to broaden the knowledge related to nature conservation, and to familiarize people with the principles of park accessibility.

Oleśniewicz *et al.*, (2020) studied sustainable management of the natural environment in national parks in Poland. The research revealed that all parks implement ecological education, established educational pathways, and cooperated with local government units. These actions, however, are insufficient. The study found that national park tasks also involved providing information on and promoting nature conservation, including running a nature museum, information and education centres, and publishing information and promotion materials. All parks implemented ecological education, established educational pathways, and cooperated with local government units. Educational activities were conducted in the form of field lessons, workshops, and lectures.

In a study by Przydatek (2019) in Asia, observed that one possible way of ensuring effective management is the development of education to increase the environmental awareness. This is because, low environmental awareness of both residents and tourists is conducive to the degradation of the natural environment; this is particularly true in Asia. One of the most significant threats in these protected areas is inappropriate waste management, which is related with the practice of landfilling or combustion of waste.

2.2.3 Acquisition of Requisite Waste Management Infrastructure

Jerie and Tevera (2014) in Zimbabwe observed that as a result of stringent budgets, the limited financial resources are committed to maintaining collection vehicles. Maintaining an adequate inventory of spare parts has posed problems for the local authority when makes of vehicles imported from different sources are being used. This scenario has resulted in the refuse removal section of the Gweru City Council having inadequate equipment which does not perform efficiently. The enterprises that reported that lack of facilities promoted open dumping of waste included the service sector. Moreover, most of the enterprises indicated that they dumped their waste inside the skips although observations indicated that some illegal dumping was taking place in the backyards and the open spaces around the informal enterprises. Wood shavings, paper, cardboard boxes, plastics, and tyres were also seen burning with huge amounts of smoke emanating from the area. The dumping sites are also exposed to animals such as dogs, cats, and other rodents and these scatters the waste during scavenging activities.

According to National Environment Management Authority (NEMA) (2015), waste management infrastructure involves doing any or all of the following. Organizations need to Improve existing waste management facilities. They need to set aside resources for Provision of adequate and appropriate collection facilities and services, provision of adequate and appropriate transport systems for segregated waste. they need to develop standard incinerators with energy recovery facilities, to establish composting facilities, to establish recycling facilities, and to develop sanitary landfills. When this is done, the result will be Improvement on existing waste management facilities, collection and transportation systems, transfer stations, treatment and disposal facilities.

Encouraging appropriate alternatives to the landfills such as recycling and composting

Recycling is not just about separating paper, cardboard and plastics. It's also about the safe and responsible disposal of all your waste, including computers and electronic equipment. If you have old equipment you are replacing, do not throw it away. Consumer organization which, recommends an organization called which will take a wide range of business and household waste such as computers, electronic devices, office equipment, domestic appliances, and music and sports equipment. If you have no other policy in place, it seems like a great place to start.



Kaunakakai (2021) discusses the success of the National Park Service (NPS) at Kalaupapa National Historical Park (NHP)' CSR activities in the promotion of waste management at the Park. The organization implemented a project which had a benefit of on encouraging appropriate alternatives to the landfills such as recycling and composting. A sustainable recycling and waste management policy will help promote your business as a trustworthy and ethical brand. As will the corporate promotion of your team's charitable work.

Raimi, Ganiyu Adelopo and Yusuf (2019) investigated the relationship between corporate social responsibility (CSR) and sustainable management of wastes and effluents (SMWE) in Lagos Megacity. The results show that there is a significant positive relationship between CSR and sustainable management of solid wastes and effluents in the sampled companies in Lagos.

The most commonly recycled materials at Monomotapa and Shamrock Park include ferrous metal from tin cans and scrap metal from old vehicles and nonferrous metals such as aluminum, copper, and lead. Heavy metals such as zinc, mercury, and silver are also recovered from vehicle and household batteries while automobile and truck tyres and road building materials are recovered from tyres for recycling. Recyclable construction and demolition wastes in Monomotapa and Shamrock Park have been a source of soil, asphalt, concrete, wood, dry wall, shingles, and metals for builders and have in some cases constituted up to 25% of the building and construction material.

3.1 RESEARCH METHODOLOGY

The study adopted the descriptive survey design. The target population comprised of employees of Lake Nakuru National Park. A sample of 55 employees and 15 community leaders was used for the study. The sample was selected using simple random sampling technique. Primary data was collected. Primary data was collected using questionnaires. Data was analyzed for descriptive statistics (frequencies, means and percentages) and inferential statistics (Pearson Correlations and Regression Analysis).

4.1: STUDY FINDINGS

4.1.1 Environment Educational Programs

The findings in Table 1 show that the statements describing the state of environment educational projects at Lake Nakuru National Park reported the following mean scores: employee dealing with waste management are trained regularly (3.3279), visitors are educated on waste disposal practices (3.3115), promote environmental education for tourists and the local community (2.9672), the local community members are educated on waste disposal practices (2.9180), employees educated on maintenance of waste management machinery and equipment (2.8525), and promoting public awareness on waste management and related opportunities (2.9836). The results that there is a low engagement in environmental education projects. There is little investment in environmental education projects.

Table 1: Descriptive Statistics for Environment Educational Projects

	N	Min	Max	Mean	Std. Deviation
Employee dealing with Waste Management are trained regularly	61	2.00	5.00	3.3279	.87027
Visitors are educated on waste disposal practices	61	2.00	5.00	3.3115	1.11864
Promote environmental education for tourists and the local community	61	2.00	5.00	2.9672	.96553
The local community members are educated on waste disposal practices	61	2.00	5.00	2.9180	.86207
Employees educated on maintenance of waste management machinery and equipment	61	2.00	5.00	2.8525	.79238
Promoting public awareness on waste management and related opportunities	61	2.00	5.00	2.9836	.90354

Valid N (listwise) 61

4.1.2 Investment in Waste Management System

The result in Table 2 show that indicators of investment in waste management system recorded the following mean scores. Investment in road network for

waste collection (2.9016), ensuring adequate of technical personnel vast in waste management practices (3.2623), prompt payment for waste services (3.1967), proper zoning of waste collection areas (3.1969), vandalism of security fences and equipment on



dumpsites (3.2459), have dedicated trucks which can carry segregated waste (3.0656), and proper scheduling of waste collection and transportation (3.1311). This means that investment in waste management system was

low and this affected the quality of waste management. The result show though there are efforts to strengthen the waste management system, much needs to be done.

Table 2: Descriptive Statistics for Investment in Waste Management System

	N	Min	Max	Mean	Std. Deviation
Investment in road network for waste collection	61	2.00	5.00	2.9016	.83076
Ensures adequate of technical personnel vast in waste management practices	61	2.00	5.00	3.2623	.91107
Prompt payment for waste services	61	2.00	5.00	3.1967	.94551
Proper zoning of waste collection areas	61	2.00	4.00	3.1969	.81281
Vandalism of security fences and equipment on dumpsites	61	2.00	5.00	3.2459	.92477
Have dedicated trucks which can carry segregated waste	61	1.00	5.00	3.0656	.96383
Proper scheduling of waste collection and transportation	61	2.00	5.00	3.1311	.93942
Valid N (listwise)	61				

4.1.3 Investment in Waste Management Infrastructure

The findings in Table 3 shows that the mean scores for items describing investment in waste management infrastructure were as follows. Appropriate waste disposal and collection facilities (3.3115), Adoption of emerging technologies in waste management (3.2459), Adequate and appropriate

transport systems for segregated waste (3.3934), recycling facilities well established (3.0820), Composting facilities properly established (3.2295), Sanitary landfills fully developed (3.1967), and Standard incinerators well developed (3.1475). The results show that investment in waste management infrastructure was low.

Table 3: Descriptive Statistics for Investment in Waste Management Infrastructure

	N	Min	Max	Mean	Std. Deviation
Appropriate waste disposal and collection facilities	61	2.00	5.00	3.3115	.92270
Adoption of emerging technologies in waste management	61	2.00	5.00	3.2459	.88799
Adequate and appropriate transport systems for segregated waste	61	2.00	5.00	3.3934	.89961
recycling facilities well established	61	2.00	5.00	3.0820	.89991
Composting facilities properly established	61	2.00	5.00	3.2295	.88305
Sanitary landfills fully developed	61	2.00	5.00	3.1967	.89106
Standard incinerators well developed	61	2.00	5.00	3.1475	.83339
Valid N (listwise)	61				

4.1.4 Waste Management

The respondents were asked to rate the level of waste management along select aspects of, and the mean score results as provided in Table 4 and Figure 1 were as follows. waste generation (3.2131), waste disposal

(2.9344), waste collection (3.1475) and use of incinerators (3.1803). The results show that the level of waste management is low.

Table 4: Descriptive Statistics for Waste Management

	N	Minimum	Maximum	Mean	Std. Deviation
Waste Generation	61	2.00	5.00	3.2131	.85858
Waste disposal	61	2.00	5.00	2.9344	.87310
Waste Collection	61	2.00	5.00	3.1475	.98041
Use of Incinerators	61	2.00	5.00	3.1803	1.00843
Valid N (listwise)	61				

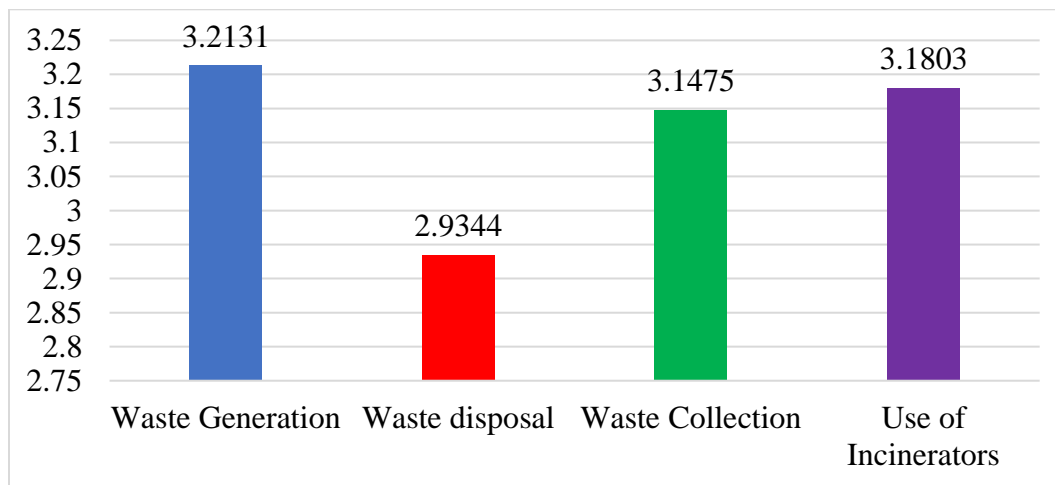


Figure 1: Level of Waste Management

4.1.5 Correlations

The results show that there was a weak positive correlation between environment educational projects and waste management at ($r = 0.142$; $p = 0.273$), between investment in waste management system and waste management at ($r = 0.135$; $p = 0.301$). The p values for the two correlations were higher than the test

significance level at 0.05, thus implying the relationships were not statistically significant. The results also show that there was a weak positive correlation between investment in waste management infrastructure and waste management at ($r = 0.301$; $p = 0.019$).

Table 5: Relationship between Corporate Social Responsibility and Waste Management

		Waste Management
Environment Educational Projects	Pearson Correlation	.142
	Sig. (2-tailed)	.273
	N	61
Investment in Waste Management System	Pearson Correlation	.135
	Sig. (2-tailed)	.301
	N	61
Investment in Waste Management Infrastructure	Pearson Correlation	.301*
	Sig. (2-tailed)	.019
	N	61
Waste Management	Pearson Correlation	1
	Sig. (2-tailed)	
	N	61

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

4.1.6 Regression Analysis

The R Square value in the Model Summary table shows the amount of variance in the dependent variable that can be explained by the independent variables. The independent variables listed below Table 6 accounted for 11.5 percent of the variability in waste management.

The R-value (.340) is the multiple correlation coefficients between all the entered dependent variable and the independent variables. The Adjusted R Square adjusts for bias as the number of variables increases. The Std. Error of the Estimate is a measure of the accuracy of the prediction.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.340 ^a	.115	.069	.53327

a. Predictors: (Constant), Investment in Waste Management Infrastructure, Environment Educational Projects, Investment in Waste Management System

In the study, the predictors are significant when Sig. (p-value) $p < 0.05$. The findings in Table 7 show that p-value was 0.040. Since the p values are less than 0.05 (confidence level), we can conclude that the relationship between corporate social responsibility and waste management in Lake Nakuru National Park and Town Environs is significant. As $p < 0.05$, our predictors are

significantly better than would be expected by chance. The regression line predicted by corporate social responsibility explains a significant amount of the variance in waste management. This is reported as follows: $F(3, 57) = 2.481$; $p < 0.048$, and therefore can conclude that the regression is statistically significant.

Table 7: Analysis of Variances (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2.117	3	.706	2.481	.040 ^b
Residual	16.209	57	.284		
Total	18.326	60			

a. Dependent Variable: Waste Management

b. Predictors: (Constant), Investment in Waste Management Infrastructure, Environment Educational Projects, Investment in Waste Management System

From the findings in Table 8, it emerges that the most influential determinant of waste management was environment educational projects (Beta = 0.058; $p = 0.607$). This was followed by Investment in Waste Management System (Beta = -0.191; $p = 0.208$), and investment in waste management (Beta = 0.315; $p =$

0.018). It is only investment in waste management infrastructure that has a statistically significant relationship with waste management, given that the aspect had a p value of 0.018, lower than the test significant level at 0.018.

Table 8: Beta Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	2.525	.335		7.546	.000
	Environment Educational Projects	.058	.113	.080	.517	.607
	Investment in Waste Management System	-.191	.150	-.269	-1.274	.208
	Investment in Waste Management Infrastructure	.315	.130	.467	2.427	.018

a. Dependent Variable: Waste Management

5.1 CONCLUSIONS AND RECOMMENDATIONS

5.2 Conclusions

The study concludes that there is a low engagement in environmental education projects by the business community owing to limited resources, and mismatched priorities. There are insufficient programs for the local community. The study concludes that investment in waste management system by the local community was low and this affected the quality of waste management

practices. The study also concludes that investment in waste management infrastructure was low thus necessitating intervention.

5.2.1 Emerging Model from the Study

Traditionally and throughout this document, there was more emphasis on the 3Rs, that is Re-use, Re-place and Re-cycle as illustrated in Figure 2. Figure 3 shows an emerging model from the research undertaken. This was based on the 5 Rs, which are Repackaging, Reduce, Re-use, Re-place and Re-cycle

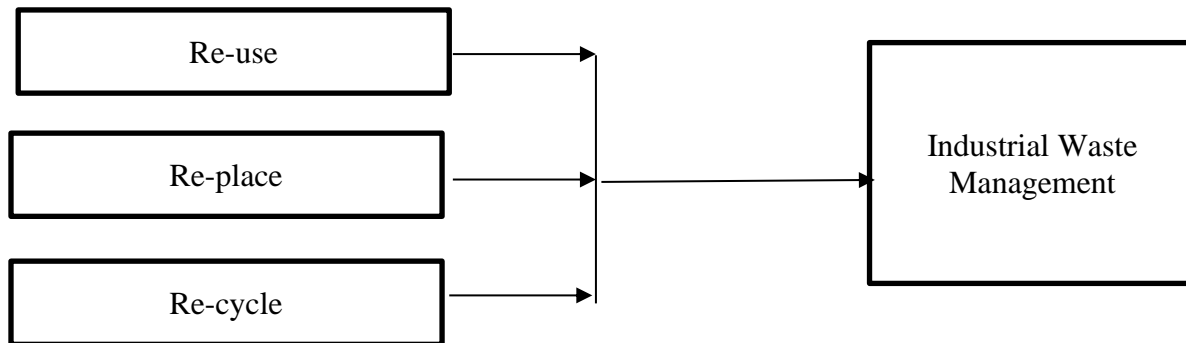


Figure 2: Old Model with 3 Rs

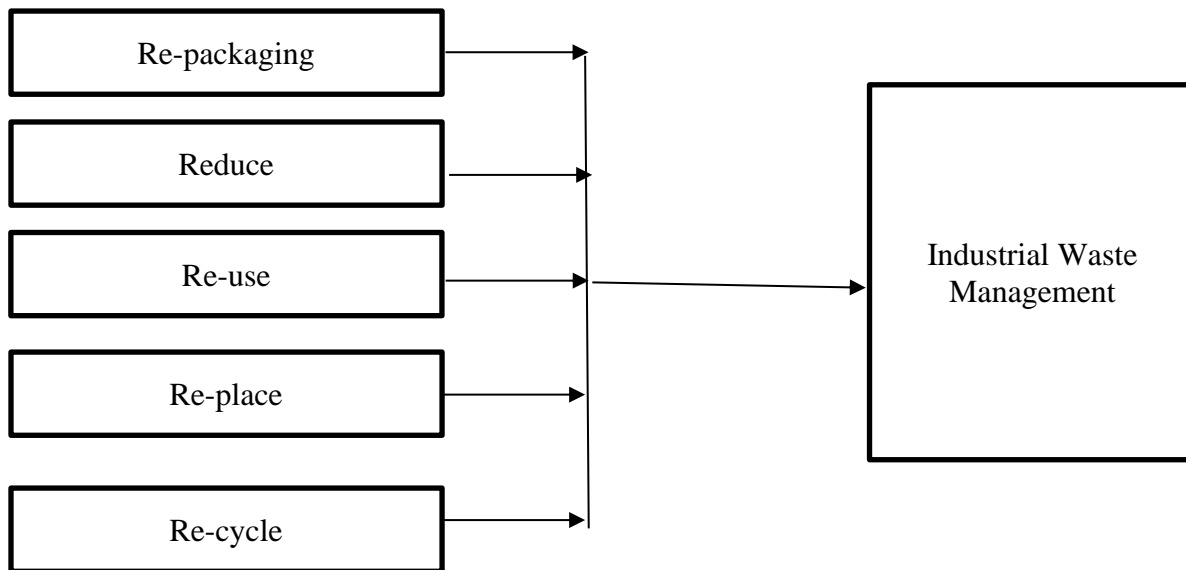


Figure 3: Emerging Model with 5Rs.

Source: Researcher (2021)

The emerging model was necessitated by the fact that there are changes in Kenya National Environmental Policies, which emphasis on the use of “Repackaging” of products in terms of quality management and the practice of “Reduce” were additional R’S in waste management practices, thus, a shift from the 3Rs to 5Rs.

5.3 Recommendations

5.3.1 Recommendations for the Ministry of Environment and Natural Resources

- i. There is need for the Ministry of Environment and Natural Resources to mobilize financial resources or otherwise for provision of



requisite waste management infrastructure such as waste disposal and waste disposal systems.

- ii. The Ministry should consider scaling up monitoring and evaluation activities to assess the quality of waste management policy implementation in Nakuru County

5.3.2 Recommendations for the County

Government of Nakuru

- i. The County Government of Nakuru should consider recruiting more technical personnel for effective waste management in the area.
- ii. The County Government of Nakuru should consider reviewing waste management policies so that they include the aspect of proactiveness when dealing with breaches along disposal and collection processes. Policy changes should be implemented to the letter.
- iii. The County Government of Nakuru should consider motivating the business community by recognizing their efforts towards quality waste management in the area.
- iv. The County Government of Nakuru should consider organizing sensitization for the business community and local community on appropriate waste management practices and programs.
- v. LNNP should consider allocating more resources for supporting environmental education projects for its staff and community stakeholders, as well as for the procurement of requisite infrastructure.
- vi. LNNP should consider allocating more resources for supporting environmental education projects for its staff and community stakeholders.
- vii. There is need emphasis on the 3R'S Re-use; Re-place; Re-cycle was also recommended.

5.3.3 Recommendations for the Local

Community

- i. The local community leadership should be encouraged to embrace community policy approach so as to promote good waste management practices such as separation of wastes for easier management.
- ii. Community leaders should be encouraged to make waste management a priority in their respective communities.

5.3.4 Recommendations for the Business

Community

- i. The local community should ensure strict compliance to the industrial waste

management policies, when implementing related CSR activities

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