Lack of Proper Commercial and Domestic Waste Practices in Montserrado County 'Monrovia, Liberia'

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Abstract: Improper waste management practices are a global concern that is impacting the environment, health, and living conditions of households. The practices of corporations and households result in challenges that become evident due to inadequate waste management systems (David, Wenchaoa, Johna & Mmerekib, 2019). The considerations of the people regarding solid waste management can be elevated through spreading awareness of waste management. The awareness levels of the people reflect the practices of waste management that prevail within society. The development of a sustainable infrastructure that includes machinery and systems to correct waste management practices is integral for society.

The research focuses on evaluating the lack of proper commercial and domestic waste practices in Montserrado County, Monrovia, Liberia. The method used for this research quantitative method. A structured close-ended questionnaire has been used for conducting a survey analyzing the awareness and practices of the people of Montserrado County. Four hundred respondents' replies were analyzed to better understand people's waste management awareness and habits. The results reflect that people lack awareness of waste management and this reflects in their practices. The religion of the people is a depiction of their lifestyle and household standards.

Keywords: household waste management systems, infrastructure development, sustainability, climate change, environmental challenges

Introduction

Liberia is progressing rapidly over the years, yet some sectors require the attention of the authorities. The civil war situation and internal conflicts in Liberia have put a halt to the development of the region in the past. Liberia's civil war ended in 2003, resulting in the growth of crucial areas of the country. (David, Wenchaoa, Johna & Mmerekib, 2019). The United Nations intervened in the development of the country and provided a solution to multiple problems that were underlying the country. The rapid development and progress in Liberia gave a rise to the commercial industries that increased the overall population. The urbanization and expansion of cities have been of significant concern to the solid waste management practices of the country (David, John & Hussain, 2020). There are numerous gaps in the commercial and domestic waste practices that are being adopted by the country.

Waste can be described as un useful material that is discarded from the industrial, commercial, and domestic industries of a country. The primary significance of a proper waste management system is to ensure a healthy environment, promote environmental quality, and focus on securing environmental sustainability (Almazán-Casali, Alfaro & Sikra, 2019). Waste management is very important for economic growth and development as it contributes to resolving potential threats to the environment. The goal of building a solid waste management system is to provide a healthy environment, which can only be achieved by using appropriate waste disposal strategies. The environment can be made sustainable and healthy through the proper collection, storage, and transfer of waste that may contribute to recovery and recycling (Lloyd, Bhatt & Padhya, 2016). The development of proper infrastructure in the country crafts a solution to dealing with challenges associated with waste management efficiency.

Statement of the Problem

This research aims at focusing on the challenges that are being faced by the authorities of Liberia in developing an adequate waste management system. There is a lack of proper commercial and domestic waste management

practices in Montserrado County of Monrovia, Liberia. The study is destined to evaluate the reasons behind the lack of development of a waste management system in Liberia by analyzing information about the topic. Liberia's population increased dramatically after the end of the civil war. Liberia's population has eased dramatically after the end of the civil war. The lack of infrastructure in Liberia is causing challenges for the authorities to establish an adequate waste management system that is effective and sustainable (Gibson, 2019). The waste practices of the region need to be developed and improved for resolving loopholes that are being faced by the people.

Research Question

The research question of the study is the following:

- What is the lack of proper commercial and domestic waste practices in Montserrado County of Monrovia, Liberia impacting society?

Significance of the Study

Monrovia is developing extensively over the years and this is leading to urbanization in the city. The rate of trash generation has increased over the year which contributes to increasing urbanization, economic development, greater living standards, and changes in consumer habits (Famata, 2018). The lifestyle of the people is also improving yet there are significant gaps in solid waste management practices. This damages the environment and impacts the health and well-being of the people. Liberia has experienced many Civil Wars in the past from the years 1990 to 2000 (Voupawoe et al., 2021). Poor governance, economic instability, increased violence, environmental havoc, and lack of infrastructural development have been a few challenges that have been faced by Liberia at large (WHO, 2015). These challenges are linked with public health and environmental issues that are highlighting concerns for the economy.

Methodology

This research is based on a social survey that discusses the lack of proper commercial and domestic waste practices in Montserrado County. The research method will show an integrated methodology serving as a framework for measuring, collecting, and analyzing the research using quantitative data.

Research Design

Research design is the most integral part of this work as it provides the framework for research and aligns the information that pertains to the research findings. The alignment of the research components is done logically to acquire the results using the empirical finding methods. The information used for this research will be based on quantitative information that will provide blueprints for the collection and measurement of the data that has been accumulated (Pandey & Pandey, 2021). The major forms of quantitative research are comprised using descriptive analysis. The information relevant to this research will also be accumulated using the worksheet analysis technique that will allow aligning of the information and structuring of the research formation (Ranjit, 2020). The objective of structuring a research design is to align the research methods and select the most suitable technique for the research.

Participants/Population and Sample

The sample size will be four hundred respondents to evaluate the level of awareness of the people of Liberia about tackling the issues of solid waste management.

The research will accumulate the responses of four hundred respondents residing in Montserrado County, Monrovia, Liberia. The respondents will be required to answer a few basic personal information questions along with analysis questions. The analysis portion will be classified into two parts that will evaluate the awareness and practices of the people of Liberia. The first part will assist in understanding the awareness of households regarding solid waste management. The second part will analyze the practices of the people regarding Solid Waste Management. The compilation of all the parts of the questionnaire is important as it discusses the awareness and practices of the people.

The data analysis will be done using the worksheet analysis method where the responses of the four hundred respondents will be classified. The responses will be structured using worksheets and graphs that will provide an assessment of the responses. The graphical representation will help in molding the data and analyzing the responses of the people. The focus of the research is on Montserrado County, Monrovia, Liberia which will help in evaluating data from that specific perspective.

Data Analysis

To find out if there is a significant difference, calculations Chi-square were performed.

Findings

- Significantly more participants stated that,
- they do not have any training in household solid waste management
- Household solid waste management committees are needed in the community
- Every people have to know about household solid waste management.
- Local authorities have no role to play in household solid waste management.
- Respiratory distress, diarrhea, and many other diseases arise due to improper waste management
- Household solid waste can't reuse or recycle.
- Not everybody is awarded for electronic household solid waste management
- Waste disposal in open places will be harmful to human health
- Community people are not awarded any legislation which governs household solid waste management.
- All streets should be clean and free of waste
- Incineration is an effective disposal mechanism for household solid waste management.
- Delay in household solid waste disposal causes many difficulties
- They are always concerned about collecting and disposing of the spouse of household solid waste management
- They do not use different bins for waste disposal
- They do not throw waste into the drain
- They do not use our kitchen waste as compost to me for gardening
- They do not reuse grocery bags
- They sometimes throw waste into an open dump
- They do not throw waste into the open field
- They sometimes collect the waste in a household container without cover
- They sometimes collect the waste in a plastic bag
- They do not segregate biodegradable (paper, banana peels, cardboard, and vegetables) and non-biodegradable (plastic toys, glass steel, rubber) wastes at home.
- They do not keep all the garbage in one garbage container
- They do not burn solid waste when I have a bulk amount of solid waste.
- They do not dispose of solid waste regularly
- They do dispose of solid waste to a waste collector

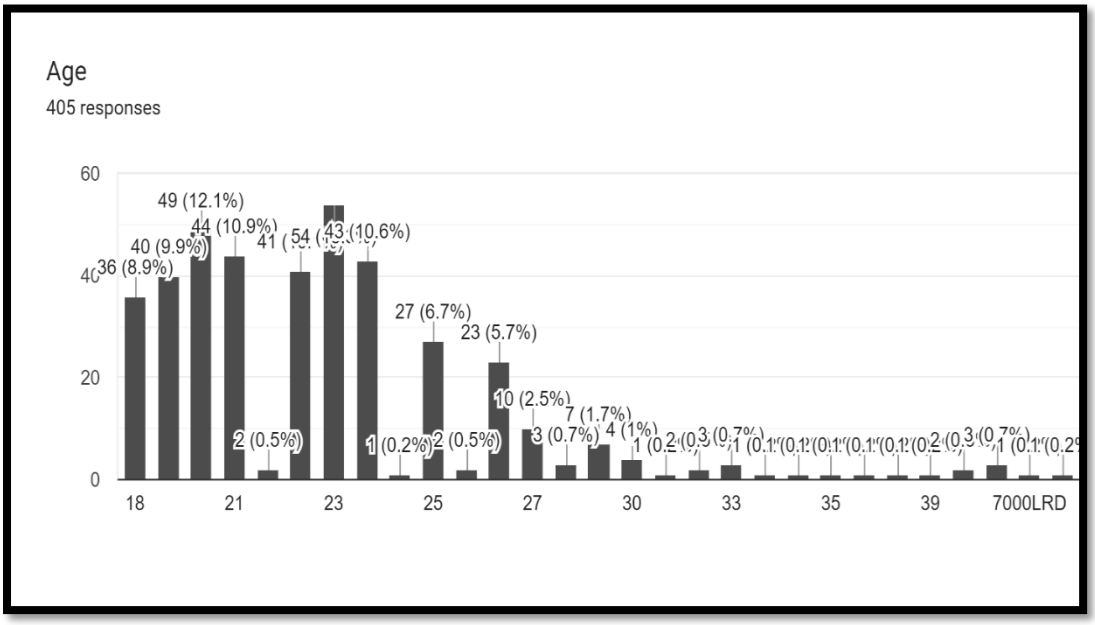
Personal Information

The first portion of the questionnaire is the personal information of the respondents. The demographics that have been assessed for the responses are important to understand the mindsets of the people.

Age

The age of the respondents was an open-ended question where the participants were free to enter their respective ages. This was done to specifically analyze the age of the participants and understand their levels of awareness about the importance of waste management systems.

Figure 1. The graphical representation is shown below:



The major age segment of the respondents was from 18- 30 years of age. This showed that the respondents were mostly youth and adults who understand the importance of having an adequate waste management system. The youth are more aware of waste management practices as they are updated with the recent economic trends and understand the importance of having sustainable infrastructures.

Gender

The classification of the gender of the respondents showed that 230 respondents are male which accumulates to 57.5% of the total respondents and 170 respondents are female which accumulates to 42.5% of the total respondents.

Table 1. The tabular representation is shown below:

Gender	Male	230	57.5%
	Female	170	42.5%

Figure 2

Religion

The religion of the people is a depiction of their lifestyle and household standards. The practices of waste disposal of the people depend significantly on the religion they follow. The respondents were categorized from Islam 25%, Hinduism 1%, Christians 73%, and Buddhists 2%. This shows that a large segment of the respondents follows Christianity as their religion.

Table 2. The tabular representation is shown below:

Religion	Islam	99	24.75%
	Hindu	2	1%
	Christian	291	72.75%
	Buddhist	8	2%

Figure 3

Marital Status

The marital status of the respondents shows that 27% were married, 58% were unmarried. So, it can be assumed that a huge number of respondents live alone at homes or in a shared space as they are unmarried.

Table 3. The tabular representation is shown below:

Marital Status	Married	107	27%
	Unmarried	233	58%
	Widowed	7	2%
	Divorced	53	13%

Occupation

The classification of occupation of the respondents shows that people are working in different kinds of jobs. 25% of respondents are business owners, 21% of respondents have self-service roles while to other respondents work at other kinds of jobs.

Table 4. The tabular representation is shown below:

Occupation	Govt job	53	13%
	Private job	67	17%
	Housewife	22	6%
	Business	98	25%
	Self-service	85	21%
	Other	75	19%

Education

The education level of the respondents shows that 27% are HSC and 30% are more than HSC. This reflects that most of the respondents are educated and aware of the basic requirement of waste management. The personal practices of waste management and hygiene shall be known to a large segment of the respondents.

Table 5. The tabular representation is shown below:

Education	No Education	43	11%
	Primary	35	9%
	Secondary	94	24%
	H S C	107	27%
	More than HSC	121	30%

Residential Status

The residential status of the people shows that 42% of people live in their own homes whereas 58% of people live in rented homes. The quantity of people living in rented homes is higher than respondents living in their own homes. The difference in the figures does not have a significant difference reflection on an unbiased research analysis.

Table 6. The tabular representation is shown below:

Residential Status	Own	168	42%
	Rented	232	58%

Types of Solid Waste

The types of solid waste that households dispose of include 59% recyclable waste, 40% non-recyclable waste, and 2% others. The quantity of recyclable waste is significantly higher in comparison with non-recyclable waste. The non-recyclable waste is an environmental hazard and harms the health of the people. This kind of waste needs to be reduced.

Table 7. The tabular representation is shown below:

Types of Solid Waste	Recyclable waste	236	59%
	Non-Recyclable waste	158	39.5%
	Others	6	1.5%

The Problem in Household Solid Waste Management

The respondents were asked about the problems with recent household solid waste management systems which showed that 45% consider that the waste disposal system is not good or effective while 25% of the people think that there is a lack of containers to collect waste at home. This reflects that the people are not satisfied with the existing system and consider that the system requires to be reformed.

Table 8. The tabular representation is shown below:

The problem in household solid waste management	There is no good System for the disposal of waste.	180	45%
	Cost is high	62	16%
	Irregular Service	60	15%
	Lack of Container to collect waste at home	98	25%
	Others	0	0%

Have you any training on household solid waste management?

The respondents were asked whether they had any training in household solid waste management. 40% of the people affirmed that they had adequate training and 60% disagreed that they had not received any training. This shows that there is a lack of awareness amongst the people regarding waste management systems and must be educated.

Table 9. The tabular representation is shown below:

Have you any training on household solid waste management?	Yes	160	40%
	No	240	60%

The evaluation of the respondents' personal information reveals that the respondents are educated and employed. The sample is made up of a mix of male and female respondents who are active members of their families and are aware of the importance of trash management. People believe that the infrastructure of the waste management

system needs to be changed since it is insufficient to satisfy the needs of the people. Respondents also believe that training in household trash management is vital and should be made available to the public. It is vital to note that a large proportion of the sample population has never received any waste management training.

The respondents are aware of the need of waste management and believe that the facilities available for trash management are inadequate. This has an impact on the efficiency of Montserrado County's whole waste management infrastructure and necessitates improvements.

Part 2: Awareness of Household Solid Waste Management

From a home standpoint, household awareness of solid waste management is critical. People's consumption habits and awareness of solid waste management impact the consequences of a clean society. The awareness of Montserrado County families regarding solid waste management is critical to comprehending societal practices. To assess the results of this phase of the research, 400 respondents were asked about their awareness of solid waste management. This will depict the role of the people and aid in the in-depth analysis of the status of solid waste management in Montserrado County. Household solid waste management committees are needed in the community.

The respondents were asked whether there was a need for forming committees on a household level regarding solid waste management. The responses showed that 307 respondents which accumulate to 77% of the sample population agreed to form committees that monitored household solid waste management practices. 21% of respondents disagreed with the need of having committees monitor solid waste management practices.

Table 10. The tabular representation is shown below:

Household solid waste management committees are needed in the community.	**Yes**	**No**	**Don't Know**
	307	85	8

This reflects that the people are aware of the importance of solid waste management practices and agree that committees are formed to monitor the practices of the people.

Every people have to know about household solid waste management.

The respondents were asked about people knowing about the importance of solid waste management practices. 287 respondents which accumulate to 72% people agreed that knowledge of household waste management practice was critically important. 26% of respondents disagreed about people being aware of solid waste management practices.

Table 11. The tabular representation is shown below:

Every people have to know about household solid waste management.	**Yes**	**No**	**Don't Know**
	287	103	10

Local authorities have no role to play in household solid waste management.

The respondents were asked whether the local authorities have no role to play in household solid waste management. 195 respondents which accumulate to 49% of respondents agreed with this fact and 41% of respondents disagreed suggesting that the local authorities have a critical role in monitoring household solid waste management practices.

Table 12. The tabular representation is shown below:

Local authorities have no role to play in household solid waste management.	**Yes**	**No**	**Don't Know**
	195	163	42

Respiratory distress, diarrhea, and many other diseases arise due to improper waste management.

Many diseases are associated with household solid waste management such as respiratory diseases and diarrhea. These diseases arise due to improper household solid waste management systems. 320 respondents which accumulate to 80% of the respondents agreed that diseases arise due to improper solid waste management and 16% disagreed with this fact.

Table 13. The tabular representation is shown below:

Respiratory distress, diarrhea, and many other diseases arise due to improper waste management.	**Yes**	**No**	**Don't Know**
	320	65	15

Household solid waste can't reuse or recycle.

The awareness level of the respondents was checked by asking them whether household solid waste cannot be reused or recycled. 43% of people agreed that household solid waste management cannot be reused, 38% said that it can be reused and 20% of respondents were unaware whether waste was recyclable or not.

Table 14. The tabular representation is shown below:

Household solid waste can't reuse or recycle.	**Yes**	**No**	**Don't Know**
	170	150	80

Everybody is awarded for electronic household solid waste management.

The respondents were asked whether everybody is awarded for solid waste management of which 33% replied yes, 48% replied no and 19% were completely unaware of it.

Table 15. The tabular representation is shown below:

Everybody is awarded for electronic household solid waste management.	**Yes**	**No**	**Don't Know**
	132	191	77

Waste disposal in open places will be harmful to human health.

The respondents were asked whether waste disposal in open places will be harmful to human health. 311 respondents which accumulate to 78% of the respondents replied yes and 19% of respondents replied with no as an answer. 3% of respondents said that they were unaware whether disposing of waste in the open air was or was not harmful to human health.

Table 16. The tabular representation is shown below:

Waste disposal in open places will be harmful to human health.	**Yes**	**No**	**Don't Know**
	311	76	13

Community people are awarded any legislation which governs household solid waste management.

The respondents were asked whether community people are awarded any legislation which governs household solid waste management. 33% of the respondents affirmed it and 48% of respondent's negated awareness of this fact. 20% of the people were completely unaware and declared that they did not have any awareness of this fact.

Table 17. The tabular representation is shown below:

Community people are awarded any legislation which governs household solid waste management.	**Yes**	**No**	**Don't Know**
	132	190	78

All streets should be clean and free of waste.

The respondents were asked whether all streets should be kept clean and free of waste all the time. 323 respondents accumulate to 81% people said that the streets should be clean and free of waste all the time. 16% of respondents replied that the streets should not be clean and free of waste and 4% replied that they did not know about the importance of cleanliness of the streets.

Table 18. The tabular representation is shown below:

All streets should be clean and free of waste.	**Yes**	**No**	**Don't Know**
	323	63	14

Incineration is an effective disposal mechanism for household solid waste management.

The respondents were asked whether incineration is an effective disposal mechanism for household solid waste management. 59% of respondents said that yes it was effective, 31% replied no it was not effective and 10% said that they did not know the answer.

Table 19. The tabular representation is shown below:

Incineration is an effective disposal mechanism for household solid waste management.	**Yes**	**No**	**Don't Know**
	236	125	39

Delay in household solid waste disposal causes many difficulties.

The respondents were asked whether the delay in household solid waste disposal causes many difficulties. 299 respondents which accumulate to 75% agreed that delay in household solid waste disposal causes many difficulties, 20% disagreed. This shows that people are aware that delay in household solid waste disposal is a reasonable cause of many difficulties.

Table 20. The tabular representation is shown below:

Delay in household solid waste disposal causes many difficulties.	**Yes**	**No**	**Don't Know**
	299	79	22

I am always concerned about collecting and disposing of the spouse of household solid waste management.

The respondents were asked whether they were always concerned about collecting and disposing of the spouse of household solid waste management. 75% of the respondents affirmed, 21% of the respondents negated.

Table 21. The tabular representation is shown below:

I am always concerned about collecting and disposing of the spouse of household solid waste management.	**Yes**	**No**	**Don't Know**
	300	84	16

The analysis of the awareness of the respondents about household solid waste management shows that there are some aspects where people are aware of the importance of solid waste management whereas there are critical places where people are completely unaware. The lack of awareness of people can impact their practices of household waste management (Khan, Cheng, Khan & Ahmed, 2019). The awareness levels of the people need to be increased so that an adequate understanding of solid waste management can be developed.

Part 3: Practice Household Solid Waste Management

The practices of the people regarding household waste management are a reflection of society. The practices of the people determine the concerns of health and fitness aspects and the corrective actions that are required from the people (Abdel-Shafy & Mansour, 2018). The respondents were asked about their practices and their responses were analyzed using a Likert scale. The responses showed the behavioral patterns of the people and their practices regarding household solid waste management.

I use different bins for waste disposal.

The respondents were asked whether they use different bins for waste disposal. 20% responded that they never use different bins for waste disposal and 34% responded that they use different bins for waste disposal. This proves that people are actually aware of to some extend but they choose to pay little or no attention

Table 22. The tabular representation is shown below:

I use different bins for waste disposal.	Never	Seldom	Sometimes	Often	Always
	80	45	137	64	74

I throw waste into the drain.

The respondents were asked whether they use different bins for waste disposal. 20% responded that they never use different bins for waste disposal and 34% responded that they use different bins for waste disposal. This proves that people are actually aware of it to some extent but they choose to pay little or no attention

Table 23. The tabular representation is shown below:

I throw waste into the drain.	Never	Seldom	Sometimes	Often	Always
	192	68	62	37	41

I use our kitchen waste as compost to me for gardening.

The respondents were asked whether they use their kitchen waste as compost to me for gardening. 34,2% responded that they never use their kitchen waste as compost to make for gardening, 27.5% responded that they sometimes use their kitchen waste as compost for gardening.

Table 24. The tabular representation is shown below:

I use our kitchen waste as compost to make gardening.	Never	Seldom	Sometimes	Often	Always
	137	60	110	50	43

I reuse grocery bags.

The respondents were asked whether they reuse grocery bags. 31.75% responded that they never reuse grocery bags, 28.75% responded that they sometimes reuse grocery bags, this frequency shows that due to economic constrains people are unknowingly contributing to the reduction of plastics waste.

Table 25. The tabular representation is shown below:

I reuse grocery bags.	Never	Seldom	Sometimes	Often	Always
	127	59	115	50	49

I throw waste into an open dump.

The respondents were asked whether they throw waste into an open dump 17% responded that they often throw waste into an open dump and 48% responded that they always throw waste into an open dump.

Table 26. The tabular representation is shown below:

I throw waste into an open dump.	Never	Seldom	Sometimes	Often	Always
	48	30	62	68	192

I throw waste into the open field.

The respondents were asked whether they throw waste into the open field. 23.25% responded that they always throw waste into the open field and 24% responded that they never throw waste into the open field.

Table 27. The tabular representation is shown below:

I throw waste into the open field.	Never	Seldom	Sometimes	Often	Always
	96	59	75	77	93

I collect the waste in a household container without cover.

The respondents were asked whether they collect the waste in a household container without cover. 26% responded that they never collect the waste in a household container without cover, 35% responded that they sometimes collect the waste in a household container without cove.

Table 28. The tabular representation is shown below:

I collect the waste in a household container without cover.	Never	Seldom	Sometimes	Often	Always
	104	49	140	61	46

I collect the waste in a plastic bag.

The respondents were asked whether they collect the waste in a plastic bag. 24.5% responded that they sometimes collect the waste in a plastic bag, and 24.25% responded that they always collect the waste in a plastic bag.

Table 29. The tabular representation is shown below:

I collect the waste in a plastic bag.	Never	Seldom	Sometimes	Often	Always
	69	53	98	83	97

I segregate biodegradable (paper, banana peels, cardboard, and vegetables) and non-biodegradable (plastic toys, glass steel, rubber) wastes at home.

The respondents were asked whether they segregate biodegradable (paper, banana peels, cardboard, and vegetables) and non-biodegradable (plastic toys, glass steel, rubber) wastes at home. 39% responded that they segregate biodegradable wastes at home, 15% responded that they segregate biodegradable wastes at home, 27% responded

that they segregate biodegradable wastes at home, 10% responded that they segregate biodegradable wastes at home and 9% responded that they segregate biodegradable wastes at home.

Table 30. The tabular representation is shown below:

I segregate biodegradable (paper, banana peels, cardboard, and vegetables) and non-biodegradable (plastic toys, glass steel, rubber) wastes at home.	Never	Seldom	Sometimes	Often	Always
	156	59	109	39	37

I keep all the garbage in one garbage container.

The respondents were asked whether they segregate biodegradable (paper, banana peels, cardboard, and vegetables) and non-biodegradable (plastic toys, glass steel, rubber) wastes at home. One hundred and fifty-six people which account for 39% responded that they segregate biodegradable wastes at home while one hundred and thirteen accounting for 27% responded that they sometimes segregate biodegradable wastes at home, from the statics and information gathered it can be proven that people are actually aware but to some extent but they choose to pay little or no attention to this situation.

Table 31. The tabular representation is shown below:

I keep all the garbage in one garbage container.	Never	Seldom	Sometimes	Often	Always
	97	61	73	75	94

I use to burn solid waste when I have a bulk amount of solid waste.

The respondents were asked whether they burn solid waste when they have a bulk amount of solid waste. 26% responded that they never burn solid waste when they have a bulk amount of solid waste, while 34.75% responded that they sometimes burn solid waste when they have a bulk amount of solid waste,

Table 32. The tabular representation is shown below:

I use to burn solid waste when I have a bulk amount of solid waste.	Never	Seldom	Sometimes	Often	Always
	104	49	139	59	49

I dispose of solid waste regularly.

The respondents were asked whether they dispose of solid waste regularly. 54% responded that they never dispose of solid waste regularly and 18% responded that they sometimes dispose of solid waste regularly.

Table 33. The tabular representation is shown below:

I dispose of solid waste regularly.	Never	Seldom	Sometimes	Often	Always
	216	48	72	38	26

I dispose of solid waste to a waste collector.

The respondents were asked whether they dispose of solid waste to a waste collector. 24,5% responded that they always dispose of solid waste to a waste collector while 23.75% responded that they sometimes dispose of solid waste to a waste collector.

Table 34. The tabular representation is shown below:

I dispose of solid waste to a waste collector.	Never	Seldom	Sometimes	Often	Always
	69	53	95	85	98

Discussion

Numerous factors lead to waste management issues that must be remedied by the government to safeguard the precious lives of the people and the environment at large. Tackling the issues of waste management require adequate attention from the authorities to correct the infrastructure of the country and support sustainable environmental practices. The commercial and domestic practices within society need to be corrected and made compatible to sustain the growing problems associated with waste management. There are factors associated with poor waste management that need to be combated by discovering inefficiencies and remedying them. The most prominent issues are lack of public awareness, refusal to learn about compliance, insufficient investment in the waste management sector, and lack of infrastructure and machinery.

Combating Waste Management Issues

Combating waste management challenges necessitates organizing the concerns and working on strategies to address them. There are also numerous good strategies and measures Montserrado can do to address garbage that go beyond collection and disposal, such as lowering the amount of waste they produce by recycling, investing more in environmental technologies, and so on. To assess the impact of trash on society and design a waste management policy, society and authorities must collaborate. People's throwaway culture must be corrected by increased education and awareness within society.

The corresponding growth in waste dump landslides demonstrates a lack of infrastructure and city collaboration inability to assess present policy and how the new policy would interline with the old ones, if any, to handle the expanding excretion of garbage. Commercial and residential users contribute to the unprocessed garbage, resulting in people living and selling in rubbish piles. The poor are disproportionately affected since they live near trash dumps and are unaware of the risks to their health and well-being. The recycling system of society is supported by waste picking, which serves as a source of cash for the poor. As a result, the impoverished are vulnerable to catastrophic health consequences.

Insufficient Investment

To save money, certain organizations or small business subcontractors in the garbage sector remain non-compliant, resulting in waste disposal to unlawful places or fly-tipping (open field) which is usually done at midnight. Non-compliant procedures are less expensive than legal garbage disposal since they do not seek to protect the environment. Because legal requirements are not imposed on companies, they do not consider waste management. Compliance measures imposed by regulating organizations and municipal committees can alter people's practices and encourage investments in an acceptable waste management system. Cutting costs on essential practices harms society's foundations, resulting in problems that cannot be predicted in advance. Operating illegal garbage facilities and combusting waste has far-reaching effects for the entire population.

Proper Machinery

Waste management machinery is expensive, and organizations strive to prevent unnecessary expenses. Machineries such as balers, dump trucks, and compactors are required by the country to manage garbage and plan a strategy for recycling waste effluent. Commercial and residential users must be made aware of the solutions in order for these practices to become ingrained in the system. The machinery is capable of lowering waste if it is gathered correctly and in a timely manner. This improves the operational efficiencies of enterprises by allocating waste management methods and deciding where to carry out these actions.

Conclusion

Numerous factors contributed to waste management difficulties in Montserrado County, which must be addressed by the government in order to protect people's lives and the environment as a whole.

Poor towns and environs in Montserrado that are quite close to business areas are the most exposed to this problem. If not all, the majority of the county's big and small cooperations choose to stay within the capital, unwilling to operate in other counties, and I blame this on the government and Monrovia city cooperation, the municipal cooperation is a toothless bulldog that lacks the will power to implement its mandate to the county.

The investigation of the obstacles that exist in Liberia's Montserrado County indicates a lack of awareness among the populace, love for the country, and trash separation, which leads to a change in their habits.

Waste management machinery is expensive, and as a result, municipalities prevent such expenses in the name of low budget allocation.

The lack of appropriate disposal facilities and processes endangers people's health and creates additional social problems that tax society.

Knowing well well that Liberia has two seasons (rainy/wet season and dry season), clogged drains generate flooding during rains, which spread diseases beyond the control of the poor community people in Montserrado. The people's religion reflects their way of life and family standards. The respiratory difficulties are exacerbated by rubbish burning since there are insufficient safeguards in place to handle the waste that is generated. Animals and livestock unwittingly consume garbage that damages them and causes animal deaths. The societal economic development also comes to a standstill as the community's resilience suffers greatly.

Following a careful review of published papers from neighboring countries, it is also believed that the state of solid waste shows that the African region contributes to high numbers of aquatic and landfilled wastes as the region's economic development increases waste generation due to population growth and lower-middle-income countries.

Recommendation

The global assessment of waste management and evaluation of the strategic implementation of policies to correct the waste management practices of the people is important. There should be economic viability of the plan imposed for correcting waste management practices. The waste that is left uncollected and poorly disposed of has significant health and environmental impacts. The cost of addressing the impact is considerably higher and requires the implementation of strategies that are adequate for the waste management system. The infrastructure development of this system must be over hall to aligned with the financial capacity of the governments proposing solutions that are effective and long-lasting. The strategic implementation and correction of waste management practices must be monitor properly or effectively to benefit the environment and human capital. Waste management practices that are cost-effective have the potential of serving the society for a longer time. The consideration of the areas of engagement is critical for the community helping reform the practices for the societal good.

Solid waste management concern everyone in society whether they are individuals or corporations. The actions of individuals and corporations are critical to ensuring effectiveness and proper solid waste management. The accomplishment of sustainable developmental goals is critical for correcting societal initiatives. There should be a financing of waste management systems within the country even though the costs are overwhelming. The rehabilitation of the people and imposing practices that enhance environmental sustainability are safeguarded through imposing an effective solid waste management system. There should be more recycling and reuse of waste into constructive products to help the communities fight the challenges associated with solid waste management.

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