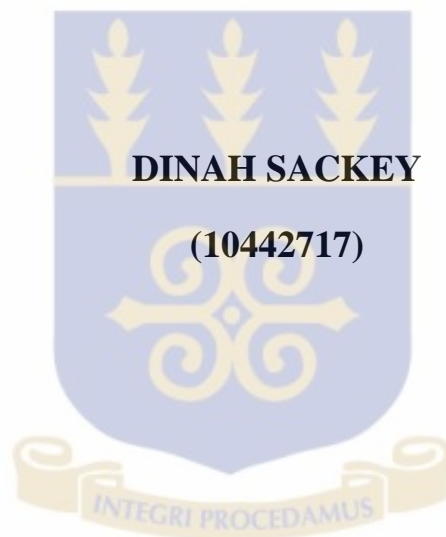


UNIVERSITY OF GHANA

**PUBLIC PARTICIPATION IN SOLID WASTE LANDFILL MANAGEMENT:
A STUDY OF THE GA SOUTH MUNICIPALITY OF THE GREATER
ACCRA REGION OF GHANA.**

BY



**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA,
LEGON IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR
THE AWARD OF MPhil PUBLIC ADMINISTRATION DEGREE.**

JUNE, 2015.

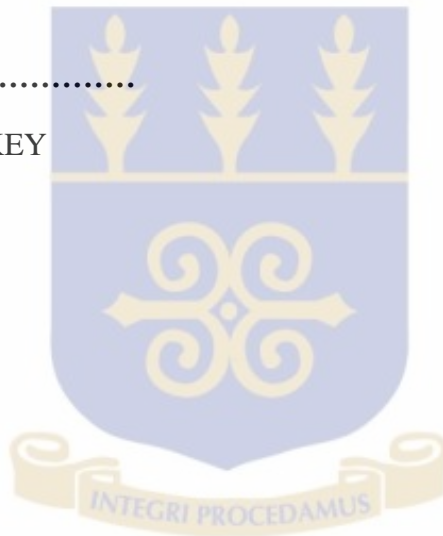
DECLARATION

I, **DINAH SACKEY** hereby declare that this thesis is the outcome of my own research except for the references to other people's work that have duly been acknowledged.

It has neither in part nor wholly been presented for another degree in this university or another university. I bear full responsibility for any shortcomings that may arise out of this work.

.....

DINAH SACKEY
(STUDENT)



.....

DATE

CERTIFICATION

I hereby certify that this thesis was supervised in accordance with procedures laid down by the University.

.....
DR. KWAME ASAMOAH
(SUPERVISOR)

.....
DATE



DEDICATION

I dedicate this thesis to my dear parents, Mr. and Mrs. Benjamin Aflah Sackey and my late grandfather, Mr Aaron Quarcopome Sackey. Thank you so much for being so supportive throughout my period of study.



ACKNOWLEDGEMENT

The successful completion of this study has been an exciting learning process facilitated not only by me, but other people and organisations. I wish to appreciate my supervisor Dr. Kwame Asamoah for his supervision and encouragement. I would not have come this far without your devotion. I wish also to extend my appreciation to Auntie Matilda, Auntie Mary and all the national service personnel with the Department of Public Administration and Health Services Management.

I wish to extend my heartfelt gratitude to Mr. Addo-Kyere, the Eastern Regional Director of EPA, Mr. William Hayfron-Ackah of EPA-Accra, and residents of the Ga South Municipality who willingly accepted to be my respondents.

Finally, I wish to extend my sincerest thanks to Dr. Abena Asante-Poku, Seth Obeng and my siblings, Miriam, Emmanuel and Johannes. This work has sailed through successfully because you committed your time and energy by proof-reading and making valuable inputs. I ask for God's rich blessings upon your lives. Also, my profound gratitude goes to my colleagues from the Master of Public Administration and Master of Philosophy in Public Administration class of 2015. Your constructive criticisms during seminar presentations has gone a long way to yield great results. This work would not have been successful without you all.

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LIST OF ABBREVIATIONS

AMA	-	Accra Metropolitan Assembly
CSO	-	Civil Society Organisation
DA	-	District Assembly
DESSAP	-	District Environmental Sanitation Strategy and Action Plan
EIA	-	Environmental Impact Assessment
EPA	-	Environmental Protection Agency
FGD	-	Focus Group Discussion
GAMA	-	Greater Accra Metropolitan Authority
GaSM	-	Ga South Municipality
GaSMA	-	Ga South Municipal Assembly
GOG	-	Government of Ghana
IAP2	-	International Association of Public Participation
LI	-	Legislative Instrument
LG	-	Local Government
LGA	-	Local Government Authority
MLG&RD	-	Ministry of Local Government and Rural Development
MSWM	-	Municipal Solid Waste Management
NCCE	-	National Commission for Civic Education
NIMBY	-	Not In My Back Yard
NPHC	-	National Population and Housing Census
RCC	-	Regional Co-ordinating Council
RPCU	-	Regional Planning Co-ordinating Unit
UNEP	-	United Nations Environmental Programme

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ABSTRACT

Public participation has gained widespread recognition by both theorists and practitioners in environmental decision-making especially, solid waste management. The study therefore examined public participation in solid waste landfill management in Ghana, using the GaSM as a case study. The study sought to examine the public's level of participation in solid waste landfill management, the effects of the level of participation and finally, the challenges involved in achieving public participation in solid waste landfill management. In order to gain in-depth understanding of the study, an exploratory and qualitative research approach was adopted. The research relied on both primary and secondary data sources. A purposive sampling technique was employed to target respondents from EPA, AMA and the GaSM. A total of fourteen (14) respondents were engaged in face-to-face interviews. Furthermore, the study held three (3) focus group discussions comprising five (5) participants each, in order to triangulate the responses gathered from the face-to-face interviews. It was revealed that the public's level of participation can be described as non-influential since not much consideration was given to the inputs made at public meetings and hearings. Consequently, this explains for the poorly managed landfill sites and numerous conflicts that have been recorded in the municipality in the past. This has further led to mistrust of local government officials and abuse of the fundamental human rights of the people in terms of enjoying a pollution-free and safe environment. The challenges involved in achieving public participation include financial constraint, public apathy, political interference and poor collaboration among government institutions. Key findings stemming from this study call for active collaboration between the EPA and NCCE to educate and create awareness about the rights and responsibilities of citizens in the management of solid waste. Furthermore, clear lines of operation should be drawn by the MLG&RD for the AMA and GaSMA so as to improve upon the quality of solid waste service delivery. The study also calls for creation of an enabling environment for the establishment of more civil society organisations that will monitor and evaluate the activities of the local government. Finally, the study recommends that the landfill guidelines should be elevated to the status of a legal document so as to allow for monitoring and sanctioning of offenders.

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

This chapter offers a general understanding to the study. It also discusses the problem statement, research objectives and research questions as well as the significance of the study. It concludes by detailing how the study is organized.

1.1 Background of the Study

Public participation has become a catch phrase in the public administrative decision-making process worldwide. As such, it has gained a lot of advocacy from both theorists and practitioners (Neshkova and Guo, 2011). According to the principle of public participation, those affected by a decision are entitled to be involved in the decision-making process. For this reason, the involvement of local citizens in the decision-making process of solid waste landfill management cannot be overemphasised. There are numerous reasons for encouraging public participation especially in solid waste landfill management. Some of these are to share information, to encourage the community to influence decision-making, to involve the community at an early stage of decision making, and to ensure that community aspirations are met (Momtaz and Gladstone, 2008).

Benefits that accrue to project beneficiaries are seen in the achievement of community aspirations, in terms of the provision of a safe and healthy environment. Project beneficiaries also gain from a strengthened democratic decision-making, which then acts as a tool for ensuring individual and community empowerment on issues that affect their lives (Arnstein, 1969; White, 1996; Stewart and Sinclair, 2007; Hostovsky et al., 2010; Neshkova and Guo, 2011; Font and Navarro, 2012; Lejano, 2012). On the other hand, benefits that accrue to project proponents include access to site-specific information that can only be received from the local residents to enhance decision-making process and the avoidance of unnecessary litigation cost that comes with settling conflicts (EPA, 2002; Hostovsky et al., 2010; Neshkova and Guo, 2011; Font and Navarro, 2012; Lejano, 2012; Oteng-Ababio, 2014).

Ghana aims to develop and maintain a clean, safe and pleasant physical environment in all human settlements that promotes social, economic and physical well-being of all sections of the population (EPA, 2002). To achieve this aim, a democratic participatory system of governance is to be used as a tool by the local government authorities. Consequently, all Municipal Assemblies have been duly tasked, in addition to other responsibilities, to handle the management of sanitation and solid waste (EPA, 2002). Although this is a challenging task, Ghana's local government authorities have resorted to the use of landfill sites as one of the means for managing solid waste generated within the respective local communities. The local government authorities have resorted to the use of landfills because such solid waste facilities have been described as efficient, the simplest and the most widely used means of solid waste disposal (World Bank, 1999; EPA, 2002).

Solid waste landfill management is an improved waste disposal and management mechanism, which has become an indispensable option for local governments in many developing countries (Hostovsky et al., 2010). However, one popular phenomenon characterized by the siting of landfills is the opposition local government authorities face from the public (EPA, 2002; Owusu et al., 2012). Therefore, in order to achieve success in the management of solid waste landfills, the Environmental Assessment Review Regulations, 1999 (L.I. 1652) of the Environmental Protection Agency (EPA) of Ghana, has clearly stated that local government authorities must encourage the participation of local citizens in the decision-making process for choosing and managing landfill sites. This was affirmed by Owusu et al. (2012), as it was pointed out in their study that there is the need to promote active participation of chiefs and community members in the decision-making process, so as to tackle landfill-related conflicts.

The large volumes of solid waste generated in Ghana daily have been attributed to rapid urbanization and increased population growth (EPA, 2002; Owusu et al., 2012). Before her independence, Ghana's population and level of environmental pollution was minimal, therefore, attention was focused on ensuring development in the area of trade and education from a centralized administrative decision-making process (Arthur, 2009). However, today the management of solid waste is now a decentralized activity that is handled by the local government system of the country. Per the regulations of the EPA, all undertakings that have the tendency of affecting lives and property must undergo a strict Environmental Impact Assessment (EIA).

Although public participation is included in EIA processes, it generates some level of interest for one to know the role it plays in influencing the waste management decision-making process, especially, for choosing and siting landfills for the management of solid waste. Conflicts and public opposition may be inevitable when it appears that project proponents or local government authorities in arriving at a decision on the choice of a landfill site, fail to gather information on specific issues from the public (Meier, 2000; Lejano, 2012). Whether citizens' interests and inputs provided at public gatherings and meetings are catered for in the decision-making process, and whether projects proponents deliver on their promises are matters of great concern (White, 1996; Bawole 2013).

The reasons for conflicts and massive project oppositions are associated with inability of project proponents to gain social legitimacy, even though the public might have been involved in the environmental decision-making process (Oteng-Ababio, 2014). Although public participation seems to have gained strong advocacy, not much is known in terms of the importance attached to the views raised at citizens' engagement platforms. Also, the role that these views and inputs play in influencing the decision of local government authorities in their bid to manage solid waste, in terms of the choice and management of a landfill site is vague. It is therefore an important exercise to explore the levels and effects of participation as well as the challenges associated with achieving public participation in solid waste management, in terms of landfill site selection and management.

1.2 Problem Statement

Over the years, the city of Accra has been plagued with the major problem of solid waste disposal. Significant among these problems are those related to the management of solid waste dumped at landfills. The common characteristics of undesirable operational practices at most landfills include, unfenced sites, visual nuisances, leachate pollution and unhealthy air emissions such as bad odour during rainy seasons. The effects of these practices include the spread of diseases, environmental degradation, and attacks from scavengers and rodents (Oteng-Ababio, 2014). Although local government authorities are putting in place efforts to manage solid waste, it is apparent that there is still more room for improvement. The evidence of this claim is argued by Owusu, et al. (2012:105) who noted: “the Ghanaian case is compounded by weak urban governance which virtually results in landfill host communities not participating in any meaningful way in the decision to locate and operate a landfill.”

Currently, landfills are used as one of the convenient ways of disposing urban solid waste. A citywide survey conducted by the World Bank and the Accra Metropolitan Assembly (AMA), revealed that solid waste management was ranked by residents as the third-most important urban service after sanitation, including toilets and drainage (World Bank, 2010). This indicates that solid waste management is paramount to local residents and therefore the need for their inputs in decision-making. However, there is a general assumption among members of the public that their inputs as local citizens or stakeholders are not regarded in the process of decision-making. It appears as though, the inputs made at public hearings and meetings have little influence on public policies, projects or programs (Neshkova and Guo, 2011; Lejano 2012; Bawole, 2013). Yet, wide advocacy has been made for public participation in both

theory and practice as a means of achieving successful formulation, implementation and evaluation of public policies, projects or programs (Neshkova and Guo, 2011).

Some have argued that involving the public in decision-making can pose numerous challenges to local government authorities (Nayak and Samanta, 2014; Turner, 2014). Gawthrop (1997:205) noted: “the engines of bureaucracy and democracy run on different tracks, leaving from different stations and heading for different destinations.” This assertion points to the fact that in as much as local government authorities or project proponents may have to engage the public through democratic processes in decision-making, this may make the whole process an uneasy one. This is because bureaucracy and democracy appear to be two divergent concepts in administration. As such, this may hinder successful decision-making processes. It is important to admit that bureaucrats are required to possess the required technical knowledge for the successful formulation, implementation, evaluation and even reformulation of public policies. Unfortunately, they tend to make judgments in a seemingly myopic manner to the detriment of other fields unknown to their specialized field (Meier, 2000). It then becomes a challenge when the views of major policy actors, such as the local stakeholders are apparently ignored in the decision-making process.

Interestingly, it is argued that site-specific information that rests with the local stakeholders could make a policy, project or government program successful when such inputs are taken into consideration in the process of decision-making (Neshkova and Guo, 2011; Lejano, 2012; Nayak and Samanta, 2014). It appears that in the developing world, such as Ghana, public inputs are encouraged through public hearing and public gatherings. However, the reason for massive opposition from the

public after due processes have been followed in the siting of landfills, has not been investigated much and this generates research interest. Oteng-Ababio (2014) found that “Accra’s landfills are in a state of ambivalence due to mismanagement.” This state of ambivalence could be traced to the apparent reasons that the views of key stakeholders, that is local citizens, who must be involved, are left out of the decision making process. This assertion is confirmed in the work of Oteng-Ababio (2014) as his study revealed that the wrath of the citizen is incurred when there is ineffective participation.

Additionally, there is high level of dissatisfaction and distrust of residents toward project proponents (Bawole, 2013). Perhaps, the reason for such displeasure may be as a result of the level of their involvement in the decision-making or their perceived thoughts of their inputs being non-influential. However, when the local citizens, see that their inputs are valued and are able to influence decision-making, there is the likelihood that projects will be successful. This could be due to the fact that they provide site-specific information and contributions that are needed by project proponents to make an informed decision on how to properly site landfills and safeguard their proper management (Turner, 2014).

Recent studies at the global level have touched on public participation and the performance of organizations, considering various units of analysis (Damme and Marleen, 2011; Neshkova and Guo, 2011; Font and Navarro, 2012; Lejano, 2012; Nicholson-Crotty and Miller, 2012; Zahariadis, 2012; Albalade and Bel, 2012). Ansari and Andersson (2011) did a study into public engagement and health care with the aim of measuring the costs and benefits as well as the opportunities and the threats posed by public engagement.

Other studies have also focused on public participation in the area of EIA. For instance, Hostovsky et al. (2010) conducted a study on the cultural sensitivity of public participation in EIA. This study revealed that public participation from a developing country's perspective using Vietnam, lacked the western style of transparency in decision-making. The study also revealed that the participation processes were not transparent enough and thus, persons consulted before reaching the decision were not made known. Also, Bawole (2013) looked at the involvement of local stakeholders in the EIA process of Ghana's first offshore oil fields. The findings revealed that project proponents tend to be more committed to meeting legal requirements than they are concerned about winning social legitimacy and trust. Legal requirements in the context of this study meant observing all the laid down procedures and practices as suggested by the EPA which includes organizing a public hearing.

Although there are a number of studies on public participation, the focus has largely been on the developed world than the developing world (Stewart and Sinclair, 2007; Font. and Navarro, 2012; Yackee, 2013; Kaur and Lodhia, 2014). Again, other public participation studies have focused on issues of environmental management (Arthur, 2009; Bawole, 2013; Hoornweg et al., 2013) and not specifically on solid waste landfill management. This study therefore aims at providing empirical evidence by filling the contextual and issue gaps. Thus, there is ample justification to conduct a study into public participation in solid waste landfill management in the Ga South Municipality (GaSM) of the Greater Accra Region of Ghana.

1.3 Research Objective

The main objective of the research is to study public participation in solid waste landfill management in Ghana, using the GaSM as a case study. Specific objectives that undergird the main objective include the following.

- i. To examine the public's level of participation in solid waste landfill management in the Ga South Municipality.
- ii. To determine the effects of the level of participation of the public in solid waste landfill management in the Ga South Municipality.
- iii. To examine the challenges involved in achieving public participation in solid waste landfill management.

1.4 Research Questions

To achieve the above specified objectives, there is need to provide answers to the following questions.

- i. What is the public's level of participation in solid waste landfill management in the Ga South Municipality?
- ii. How does the level of participation of the public affect solid waste landfill management in the Ga South Municipality?
- iii. What are the challenges involved in achieving public participation in solid waste landfill siting and management?

1.5 Significance of the Study

The significance of this study can be viewed along three aspects: research, practice and policy. In terms of research, the study goes beyond the current research on public participation and solid waste management to look further at how solid waste landfill sites can be better managed taking into consideration the inputs of ordinary citizens. This study is relevant as it responds to the scantiness of literature in the area of public participation in solid waste landfill management in Ghana. It thus provides literature for the purpose of academic reference.

The significance of this study in terms of practice is that it provides relevant guidelines to project proponents or local government officials on how to achieve successes with public projects, programs and policies, taking into consideration the views of the public. The study provides useful findings that may serve as lessons to local government authorities and all institutions that have roles to play in the siting and management of solid waste landfill sites.

The study has relevance for policy-making as it provides guidance to policy makers at both the national and local levels of government. In order to appreciate the role participants play in the performance and the sustainability of a public project or policy, the research provides policy makers knowledge on how to avoid policy or project failures, which seemingly occur as a result of little interaction and engagement with the public, especially landfill projects. Finally, the study informs public policy makers on how to involve the public, using the appropriate participatory mechanisms for the best results.

1.6 Organization of the Study

The first chapter focuses on the introduction and background of the study, the research problem, research questions and objectives and significance of the study. Chapter two discusses relevant literature on public participation in policy making. Both theoretical and empirical works in the research area were evaluated; key concepts and definitions were also provided. Chapter three contextualises public participation in solid waste landfill management within the Ghanaian setting. A review of statutory policies, regulation and guidelines as well as legislative instruments in municipal solid waste management was done. Chapter four comprises the research methodology, which is the general design of the study, key methods of analysis and collection of data. Chapter five concentrates on analysing data, presenting the results and discussing the findings of the study. Chapter six draws conclusions and makes recommendations based on the outcomes of the study as well as proposed direction for future studies.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter comprises an introduction of the concept of public participation in solid waste landfill management, the theoretical framework, and the empirical literature. The basic aim of this chapter is to explore the literature on public participation and on solid waste landfill management and contribute to knowledge in the study area. The empirical literature presents the ideas and views of early researchers on public participation. This chapter was guided by the research objectives and questions. The theoretical literature focuses on review of journal articles and also discusses the stakeholder theory (Freeman, 1984), the interest in participation (White, 1996) and the ladder of citizen participation (Arnstein, 1969).

2.1 The Concept of Public Participation

Public participation has been explained as a level of control over decision-making given to the public (Roberts, 1995). This means that public participation is the extent to which the public is given some degree of control in decision-making processes. Ideally, a participatory approach in policy making should not rely solely on bureaucrats and elected officials for the formulation and implementation of a public policy; citizens must be actively engaged in the policy-making process through consultations and direct involvement (Peters and Pierre, 2000).

The term public participation has been expressed by different scholars in various ways to imply citizenry involvement, citizenry participation, and community engagement as well as stakeholder involvement by different scholars (Arnstein, 1969; Hostovsky et al., 2010; Bawole, 2013). Most of the studies by these authors communicate the same meaning of getting the inputs of the citizen to influence the process of decision-making in public projects, programmes and policies.

For the purpose of this research, ‘public participation’ is operationalized to mean the process by which the public at the grass-root level in society, who is interested and affected by the decision of the siting and management of a landfill, is entitled to influence the decision-making process. The public may influence decision-making by providing inputs and also receiving information, as far as the decision of a solid waste landfill is concerned. It also includes, attending meetings, speaking at public gathering or meetings, lodging complaints, demanding feedback from proponents who site and manage landfills as well as paying for solid waste services. Again, for the purposes of this research, the term ‘public’ is operationalized to comprise the traditional rulers, the ordinary citizen and the local government representatives.

An EIA could be defined as the formal procedure to predict the environmental consequences of developmental activities and the planned mitigating measures to reduce or eliminate adverse effects and to augment positive effects (EPA, 2002). EIAs are conducted worldwide with the aim of sustainable development. The concept of sustainable development basically highlights the view that any activity undertaken by the present generation should not compromise the needs of the future generation (WCED, 1987). EIAs are therefore conducted worldwide with the aim of sustainable development through public participatory processes.

EPA defines a landfill as “a construction project, carried out over a period of time, to build a desired landform using waste materials and incorporating appropriate environmental protection measures.” In other words, a landfill is a project which involves filling or burying garbage under layers of earth.

2.1.1 Stakeholders and Public Participation

Studies on stakeholder engagement have centred largely on having a more network-based, relational and process-oriented approach rather than merely focusing on a stakeholder management approach (Andriof and Waddock, 2002). The reason may first be that organisations want to win the trust of the society they find themselves in. Also, the organisations want to ensure that there is transparency in all activities they embark on, that may affect the society they relate with. Finally, it is to enhance better communication between the organisations and the society (Burchell and Cook, 2006). It can thus be inferred that stakeholders play significant roles in the management of municipal solid waste, especially in the decision of choosing and managing a site.

The discussion of public participation cannot be complete without mentioning the role of stakeholders. The public is described as a stakeholder in this study. This makes the inputs of local residents as stakeholders a very important aspect as far as the management of solid waste landfill is concerned (EPA, 2002; UNEP, 2007). Principle 10 of the Rio Declaration states: “Environmental issues are best handled with the participation of all concerned citizens, on a relevant level. On a national basis, each individual should have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. The State should facilitate and encourage public awareness and

participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy should be provided.” This principle places a lot of emphasis on participation as a means and an end in itself.

The importance of public participation is that it provides an opportunity for project proponents to receive site-specific information that may be unknown and which could only be known through dialogue (Neshkova and Guo, 2011; Lejano, 2012; Nayak and Samanta, 2014). Stakeholder participation is also described as an effort to put public representatives in dialogue with public officials in order that the officials can get the reactions of the public (Crosby, Kelley and Schaefer, 1986). It therefore means these reactions can come as feedback to the public officials through the participation of the local residents only when there is the opportunity to dialogue.

2.1.2 Best Practices in Public Participation.

The United Nations Environmental Programme (UNEP) suggested views on what constitutes best practices in public participation. These include the development of a public involvement framework as early as possible to establish the scope, timing and resource requirements necessary to support the process; identifying the participants and stakeholders and establishing their legitimacy and representativeness using social analysis (UNEP, 2002).

In addition, it also noted that not all social actors can or should be consulted on every detail of proposed project. What is more, the appropriate techniques of public participation or communication should be identified to provide relevant information in a form which can be easily understood. For example, using a combination of seminars, simple written materials, visual aids and scale models can help to make the

technical material accessible to the non-specialist, planning and executing events at a time and having a conducive venue that will encourage the maximum attendance and free exchange of views by all interested groups.

Money may be specifically allocated to help facilitate community involvement (Turner, 2014). For example, pay for travelling expenses or costs involved in hosting meetings and inquiries; allow stakeholders sufficient time to assimilate the information provided, consider the implications and present their views. Additionally, identify mechanisms which ensure that decision makers consider views and suggestions made by stakeholders, integrate findings and recommendations into the environmental assessment report, financing proposals and agreement; and finally, ensure that responses and feedback are given on issues or concerns raised (UNEP, 2002).

2.2 Solid Waste Management

Waste can be defined as anything that is no longer useful to the owner or it fails to fulfil its purpose (Gourlay, 1992). Municipal solid waste is referred to as trash or garbage because, it is often made up of items we use daily, after which we dispose of when it is of no importance. The components of waste include food, scraps, glass, paper, metals, newspaper, furniture, appliances and batteries. Often this waste is generated from households, schools, hospitals and industries. Generally, waste can be grouped into two main types namely; solid and liquid waste (EPA, 2002).

Kumah (2007:2) defined solid waste management as “the administration of activities that provide for the collection, source separation, storage, transportation, transfer, processing, treatment and disposal of waste.” This definition implies that solid waste

management is a process that starts with the waste management company and ends with the same only. The definition failed to make mention of the role of local citizen and their interest in solid waste management.

However, Tchobanoglous et al. (1993:7) offer a more elaborate definition. In their definition, solid waste management is explained as “the discipline associated with the control of generation, storage, collection, transfer and transport processing and disposal of solid waste in a manner that is in accord with the best principles of public health, economics, engineering, conservation, aesthetics and other environmental considerations and that is also responsive to public attitudes.” This definition points to the fact that there is the need to control the generation of waste, which obviously demands a collaborated effort of both the waste generator and the waste collector. The definition emphasised the fact that the process must be in sync with the best principles of public health and thus, needs to be environmentally friendly and acceptable.

In the early days of solid waste management, dumping on land and mining pits, dumping in water, ploughing into the soil, reduction and incineration were the commonly recognized ways for managing waste (Tchobanoglous et al., 1993). Poor waste collection, storage and disposal, pollution and environmental degradation were the challenges that characterised the early days of solid waste management (Ramachandra and Bachamanda, 2007). Historically, all solid wastes in Ghana have been deposited on land, because it was considered as a cheap and a very convenient method of solid waste disposal (EPA, 2002). However, the most commonly accepted forms of solid waste management include source reduction, composting, engineered landfilling, recycling and incineration (Denison and Ruston, 1990; EPA, 2002). For

the purpose of this study, landfill will be focused on as the recognized solid waste management practice.

2.2.1 Solid Waste Management from a Global Perspective

Solid waste management is arguably one of the most important service any municipality can render to members of their local communities (EPA, 2002; Hoornweg and Bhada-Tata, 2012). Some waste management measures include landfilling, incinerating, reusing, reducing waste, and recycling. In 2012, the World Bank reported that the amount of solid waste generated by the world cities is about 1.3 billion tonnes per year and is expected to increase to 2.2 billion tonnes by the year 2025.

Globally, there is a continuous growth in the market for solid waste management as it appears to be influenced by factors such as increasing waste volumes, shrinking landfill space and higher ecological standards (Hoornweg and Bhada-Tata, 2012). The continuous growth in the market for solid waste management has an implication for local governments across the world. Public participation cannot be relegated to the background when there is the need to manage large volumes of solid waste generated, in the face of scarce lands as well as the pressing need to meet legal and social standards.

Increasing volumes of solid waste has been explained to be as a result of rapid urbanisation (EPA, 2002; UNEP, 2007). Presently, more than fifty percent (50%) of the world's population reside in the cities, causing an increase in the rate of solid waste generation. It appears there is a link between solid waste generation and wealth creation (Satterthwaite, 2003). Globally, the waste volumes are increasing even faster than the rate of urbanization and increases in gross domestic products. Examples are

made in reference to China, parts of Eastern Europe and the Middle East as places where municipal solid waste growth rate is very high (Hoornweg and Bhada-Tata, 2012).

Solid waste is generated in higher volumes in some countries than in others. For instance, in 2012, the World Bank reported that about one-third less solid waste was generated per person in Japan in comparison to the United States. Explanations offered for this variance were the higher density living and cultural norms in the United States versus Japan (Hoornweg et al., 2013). The same report stated that in 2004, China surpassed the United States in terms of waste generation and is expected to produce twice as much municipal solid waste than the United States in the nearest future. This presupposes that when there is higher density living, more waste will eventually be generated. It is not surprising that in the urban areas with a huge population, there is high level of waste generation. For example, in the city of Accra it is not surprising to come across heaps of garbage along the roadsides as a result of urbanisation and inadequate solid waste management practices.

There is also a view that affluent and productive societies are able to manage their waste more effectively and efficiently than in poorer societies, since a greater portion of their budget takes care of solid waste disposal and the least portion goes into waste collection (Hoornweg and Bhada-Tata, 2012). The general perception is that low-income earning societies, do not take keen interest in maintaining and keeping a safe and healthy environment, whereas the opposite is true for high earning income societies.

Landfilling or dumping is practised by low income, middle income and high income level countries (EPA, 2002). However, the manner in which landfilling is carried out varies in each of these countries depending on their income levels. For instance, in the low-income level countries, landfills are characterised by low technology and usually open dumpsites; the pollution of water bodies is also prevalent (Hoorweg and Bhada-Tata, 2012). All of these have negative health impacts on local residents. In the middle-income countries, landfills are characterised by some environmental controls, although open dumping is not rare. However, in most high-income countries, solid waste management practices are of a high standard. Sanitary landfills are operated with a combination of liners, leak detection, leachate collection and gas collection and treatment systems.

2.2.2 Solid waste management from the African perspective

Generally, nations across the African continent have resorted to the most common means of solid waste management, namely, burning, burying, dumping on land and landfilling. Sadly enough, most African countries categorised under low-income level economies do not manage their solid waste properly (UNEP, 2007; Hoorweg and Bhada-Tata, 2012). Consequently, such improper solid waste management has led to health hazards that are detrimental to human and animal life (EPA, 2002).

Solid waste management is an alarming problem in developing countries as compared to developed countries. The reason for this disparity can be attributed to the fact that the rate of solid waste generation does not commensurate the capacity to properly manage it (UNEP, 2007). As such, while municipal authorities in nations across the African continent are putting in a lot of effort to effectively manage their solid waste, more is required. Thus, effective public participation has received much attention and

recognition as a conduit through which effective solid waste management can be achieved.

2.2.3 The History of Solid Waste Management in Ghana

The history of Ghana's solid waste management, especially with the use of landfills, can be traced back into the days when there was less urban migration with increasing urban development. In other words, before people started migrating to urban areas, the use of landfills had been in existence but was not as common as it is today. The practice of landfilling basically took the form of open dumps because the lands were abandoned quarry pits due to sand winning and stone quarrying (Ali et al., 2005, Oteng-Ababio, 2014).

The consequences of the sand winning and stone quarrying left the lands as quarry pits which threatened human and animal lives. Anytime it rained heavily, the pits were filled with rain water and thus became harmful to unsuspecting strangers and innocent children. Most people drowned in an attempt to pick up floating substances. As a result of countless fatalities, local government authorities, chiefs and opinion leaders considered filling up the old quarry pits with rubbish (Owusu et al., 2012).

The GaSM in the Greater Accra Region has over the years been plagued with series of solid waste challenges, exposing vulnerable members of municipality to environmental hazards (Oteng-Ababio, 2014). For instance, Mallam, Oblogo, and Gbawe being landfill hosting communities in GaSMA have experienced repeated conflicts between the citizens and officials at AMA and GaSMA (Osei et al., 2011; Owusu et al., 2012).

Some of the reasons attributed to the conflicts that occurred in the past were because of how the chiefs and the local government body allowed old quarry pits to be converted into landfill sites without seeking the consent of the public (Owusu et al., 2012). These landfill sites as at then, were characterised with improper leachate or gas recovery systems, thus, threatening human lives and the properties of residents. In the view of the public, it appears as though the solid waste landfill sites are death-traps. This is because the rate at which solid waste facilities are commissioned and decommissioned seemed to be done with little regard to public health (Oteng-Ababio, 2014).

Over the years, AMA has been making efforts to deal with the solid waste problem by acquiring lands to be used as solid waste facility, even though that has always been faced with public opposition (EPA, 2002; Oteng-Ababio, 2014). The solid waste situation has been characterised with spread of diseases, environmental degradation, unpleasant odour from the site, poor leachate management, poor management of gas emission, attacks from scavengers and rodents (Oteng-Ababio, 2014). A properly engineered landfill is often lined with layers of absorbent materials and sheets of plastic to keep pollutants from leaking into groundwater. Mensah and Larbi (2005) reported that Ghana generates 3 million tonnes of solid waste yearly and at the time, the estimated population was 22 million, the daily waste generation per capita was 0.45kg. In Accra alone, the amount of solid waste generated daily was between 1500-800 tonnes (Anomanyo, 2004).

2.3 Theories Used

This section reviewed the stakeholder theory by Freeman (1984) and two public participation models, namely the ladder of citizen participation by Arnstein (1969) and participation interest by White (1996). A strong case for the application of the theoretical framework is made based on the objectives of the study and with the reason that it can help in assessing the extent and quality of public participation in solid waste landfill management.

The stakeholder theory is discussed to offer a basic understanding into stakeholders and their role in public participation. In addition to having a basic understanding of stakeholders, the ladder of citizen participation is reviewed, with the aim of assessing the level at which public participation is done. Since the ladder of participation is grouped into eight (8) rungs, it helps in better assessing the level of public participation in the GaSM. Finally, the model by White (1996) on interest of participation is relied on to help in assessing the effect of the level of public participation in solid waste landfill management.

2.3.1 The Stakeholder Theory

The stakeholder theory was originally propounded by R. Edward Freeman. According to him, a stakeholder can be defined as “any group or individual who can affect or is affected by the achievement of the organisations objective.” Relating this definition to the study, it may then be said that the stakeholders in the management of municipal solid waste consist of the EPA as a government mandated regulatory body; GaSMA being the local government body tasked with the responsibility of ensuring proper sanitation at the local level of government, contracted privately owned solid waste

management companies as well as the local people residing in landfill hosting communities (EPA, 2002).

The interest of a stakeholder may either be to support the objective of AMA and GaSMA or to fight against it. For instance, the interest of EPA as a regulatory body, is to see to it that local government bodies meet all necessary requirements before they are granted permit for the siting of landfills within any given community. Likewise, the interest of the ordinary citizen residing in a landfill hosting community is to live in a risk-free and serene environment that promote good health and physical well-being. This therefore means that ordinary citizens, in their capacity as key stakeholders, have a crucial role to play as far as organisational decision-making is concerned in the achievement of organisational objective. It can therefore be said that local residents may conclude that their interests are being met when their inputs have the ability of influencing the decision of project proponent in the area of solid waste management and the siting of landfills.

Donaldson and Preston (1995) argued that the stakeholder theory has multiple distinct aspects that are mutually supportive. They indicated in their study that these aspects include the descriptive aspect or the empirical aspect, instrumental aspect and the normative aspect. The descriptive aspect is used in research to describe and explain how firms or managers actually behave. It includes how firms are managed and reflect the past, present and the future state of affairs of firms and their stakeholders. In relation to this study, the descriptive aspect of stakeholder theory describes the multiple elements of municipal solid waste management in the public domain. It also describes the history of municipal solid waste management in urban Accra; the procedures and guidelines governing municipal solid waste management in urban

Accra; the overall socio-economic impact of municipal solid waste management and the relationship existing among all stakeholders involved in solid waste management.

The instrumental aspect as identified by Donaldson and Preston (1995) uses empirical data to identify the connections that exist between the management of stakeholder groups and the achievement of corporate goals. This aspect is used in explaining what happens when managers behave in a certain way. Relating the instrumental aspect to public participation in municipal solid waste landfill management, it may be explained that when laid down procedures are followed in the siting of a landfill, under the supervision of the local government authority, it may lead to improved environmental health in the community; results in public trust and reduce the severity of public opposition to public projects, policies or programmes.

The normative aspect is identified as the core of the stakeholder theory, as it examines the function of a corporation and identifies the “moral guidelines for the operation and management of the corporation” (Donaldson and Preston 1995). Relating this aspect to the research, the normative aspect explains the rationale guiding public participation in municipal solid waste landfill management, and what defines it as the right thing to do. The normative aspect assumes that all stakeholders have the right to be treated as an end and not as a means to an end (Donaldson and Preston, 1995). Based on this assumption, it can be said that all stakeholders need to participate in determining the direction of the organization in which they have a stake. In other words, all stakeholders, especially the local residents in landfill hosting communities need to participate in the decision-making process of municipal solid waste landfill management in their community.

2.3.2 The Ladder of Citizen Participation

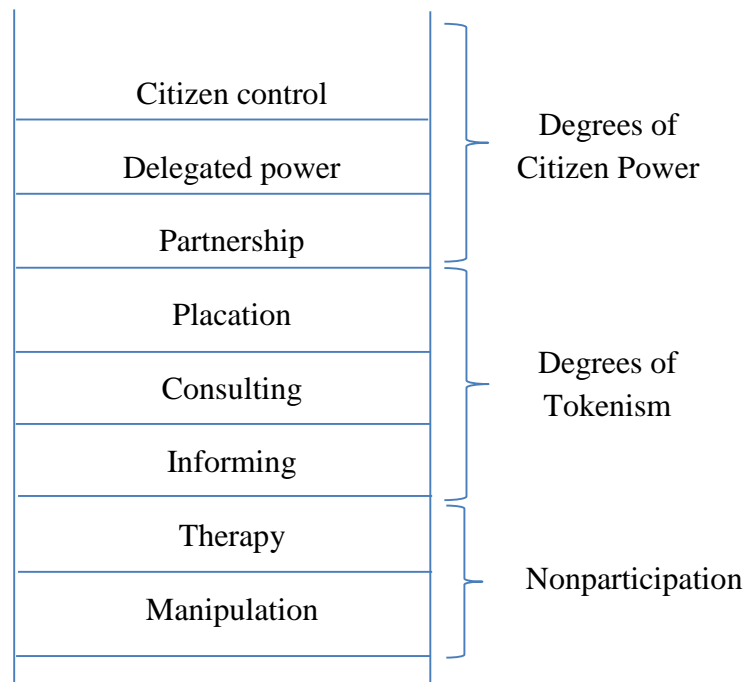
One can appreciate the fact that in varied contexts it seems as though public meetings and public hearings are organized basically to convince local citizens of decisions that have been made and not necessarily to grant them the opportunity to provide an input. Arnstein (1969) argued that participation is seen in three major categories. These categories are non-participation, degrees of tokenism and degrees of citizen power.

The first category of participation is 'Non participation'. It basically describes the form of participation in which project proponents explain their independent decision to the affected stakeholders without soliciting their inputs. The levels of participation in this category include 'manipulation' and 'therapy'. At this level of participation, it is simply a one-way communication whereby the local government or the project proponent has the power to 'educate' and 'cure' through public relations (Cummings, 2010). However, such participation makes no room for the public to influence the decision-making process.

The next category of participation is 'degrees of tokenism'. It describes the form of participation which allows stakeholders to voice out their interest. However, the public lacks the power to influence decisions being made. The levels of participation in this category include, 'informing', 'consulting' and 'placation'. At the 'informing' and 'consulting' stages, there is no guarantee of the public's ability to influence decision. People are informed through information van and through the electronic media. This form of participation is merely for display so as to fulfil legitimate requirements (White, 1996). Although participation should be a two-way form of communication and allow citizens to have a voice and also be heard, their participation does not guarantee their influence in the final decision.

According to Arnstein (1969), 'placation' is described as the highest level of tokenism because it allows ordinary members of the community to be part of committees and advisory boards to offer pieces of advice. However, such people are placed there because they may not be able to greatly influence decisions in any significant manner. This is done to simply give them a feeling of inclusion and also a feeling of some level of influence, but may not necessarily be reflected in reality. They are often out there to facilitate procedures and to meet certain requirements on the 'face of it' and to serve as rubber stamps.

The final category is about 'degrees of citizen power' and it describes how the public as stakeholders are able to both voice out their interests and also directly influence the decisions-making process. This category comprises 'partnership', 'delegated power' and 'citizen power'. At the rung of 'partnership', the level of participation is such that power is distributed between the project proponents and the ordinary citizen. It is at this stage that citizens have the power to influence decision-making processes, because they are part of the planning, implementation and evaluation stages of the project. In addition, citizens can negotiate and engage in trade-offs. At the level of 'delegated power' and 'citizen control', the public has the majority decision making seats and full management power. From the review, a context gap is evident in the work of Arnstein (1969), as the study was focused on the developed world setting. Again, the typology did not point out how the level of participation affects the decision-making process, that is, whether positively or negatively.

Figure 2.1: The ladder of Participation

Source: Arnstein (1969: 217) Eight Rungs on a Ladder of Citizen Participation.

2.3.3 Interests in Participation

Several authors of participation have mentioned transparency, cost-efficiency, avoidance of cost, which comes with resolving conflicts as a result of litigation processes, sustainability of project, empowerment, leverage, and enhanced trust, as the interests, benefits or positive effects of participation (White, 1996; Stewart and Sinclair, 2007; Hostovsky et al., 2010; Neshkova and Guo, 2011; Font and Navarro, 2012; Lejano, 2012). When participation is ensured, irrespective of the level at which it takes place, both the local government and citizens pursue their respective interests. It can therefore be argued that there are some effects of public participation when decisions are made between the local government authorities and the public.

White (1996:7) mentioned in her study that “if participation is to mean more than a facade of good intentions, it is vital to distinguish more clearly what these interests are.” For the purposes of this study the interest of the project proponent and the public also means the effects of the level of participation.

Table 2.1: Interests in Participation

Forms	Top-Down	Bottom-Up	Function
Nominal	Legitimate	Inclusion	Display
Instrumental	Efficiency	Cost	Means
Representative	Sustainability	Leverage	Voice
Transformative	Empowerment	Empowerment	Means/End

Source: White (1996:7) Four Major Types of Participation and the Characteristics of Each.

The table above shows four (4) major types of participation, the effect of participation from the project proponent perspective, and the ordinary citizens’ perspective. The forms of participation is in the first column. These include the nominal, instrumental, representative, and transformative forms of participation (Neshkova and Guo, 2011). The second column displays the effect of participation from the project proponent’s perspective which is traditionally a top-down approach. The third shows the effect of participation from the project beneficiary perspective. The last column shows the overall function of each form of participation.

The table above points out the corresponding effect of participation based on the type of participation that is engaged in. For instance, the first form of participation is ‘nominal’, meaning that participation exists in name only and not in reality. The effect of this form of participation is that it facilitates meeting legitimate requirements on

the part of the project proponent. However, the participation of the ordinary citizen produces an effect of a sense of inclusion. It can thus be seen that at this stage, participation facilitates the project proponent's interest of meeting legal requirement while it gives the ordinary citizen the feeling of inclusion. This may be likened to what Arnstein (1969) describes as 'non-participation'. This is because, the ordinary citizen may be part of an advisory board or a committee. However, that alone is still not enough, especially when a citizen is unable to influence the decision-making process at such a level.

The instrumental form of participation produces the effect of facilitating cost-efficiency to the project proponent. However, it produces an effect of having an opportunity cost to the project beneficiary. Participation at this stage serves as a means to an end. It further produces inherent effects such as avoiding litigation costs on the part of the project proponent and enhancing commitment on the part of the ordinary citizen. When people give up their comfort, leisure, freedom and bear the cost of supporting a decision, they become committed to that cause (White, 1996).

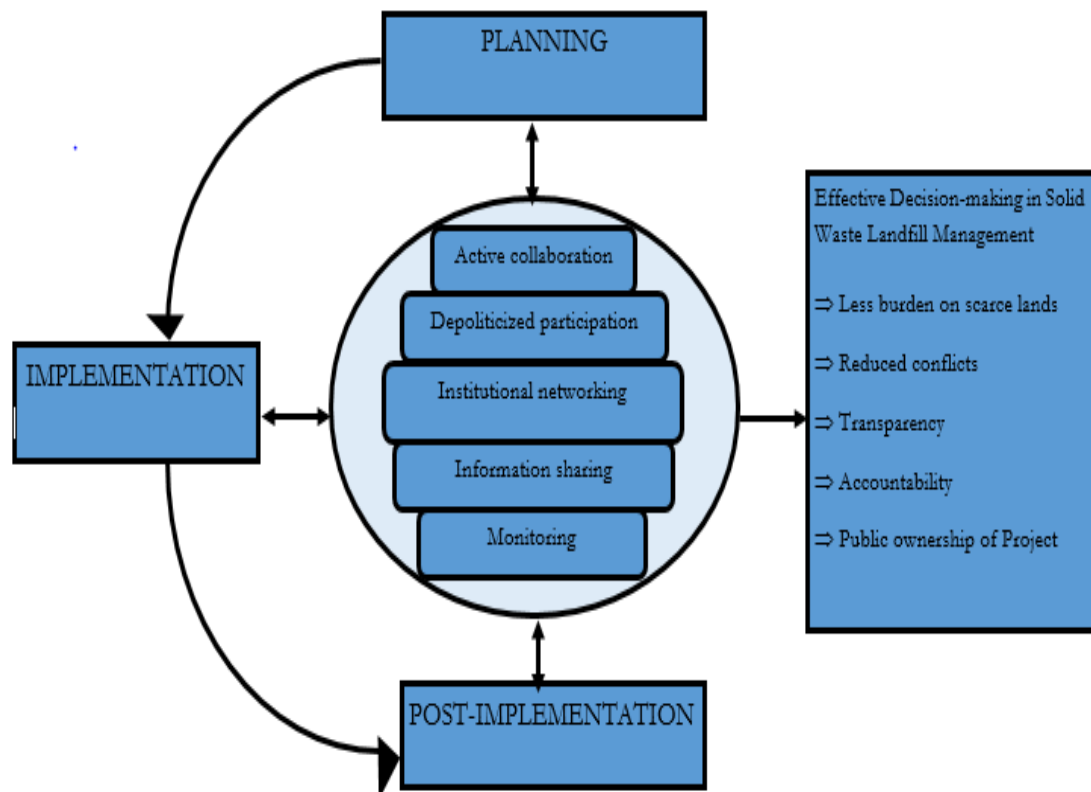
In a representative form of participation, project proponents look forward to ensuring the sustainability of their project, while the beneficiaries look forward to placing demands and leveraging from the project. This could be equated to what is described as degrees of tokenism (Arnstein, 1969). This stage is characterised by attending meetings, having a voice and making demands.

The last form of participation described by White (1996) is transformative participation. The effect of this form of participation is that it results in empowerment for both parties to the project. This form of participation functions as both a means and an end. Citizens are empowered and they have a maximum influence, likewise also, project proponent have influence. This may be equated to what Arnstein (1969), describes as citizen power. Arnstein's typology characterised this category of participation with partnership, delegated power and citizen control.

2.3.4 Conceptual Framework

The conceptual framework displays the planning, implementation and the post-implementation stages of decision-making process in a solid waste landfill management project. The framework is built on the assumption that if public participation is encouraged at each stage of decision-making, it would lead to effective decision-making in solid waste landfill management.

The framework posits that the main drivers for enhanced decision-making at planning, implementation and post-implementation stages for solid waste landfill projects include active collaboration; depoliticised participation; institutional networking; information sharing and monitoring. From the framework, the influence of these closely-knitted drivers on the decision-making process of solid waste landfill management generates outcomes such as reduced conflicts, transparency, accountability and project ownership and sustainability.

Figure 2.2 Conceptual Framework

Source: Author's own construct (Field work, 2015).

2.4 Empirical Literature

2.4.1 Level of Public Participation in Decision-making Processes

The nature of public participation can take various forms. Public participation can be seen as formal or informal, active or passive, bottom-up approach or top-down approach and one-way or two-way communication (Bryd, 2007). Public participation is seen to be formal when it uses the laid down procedures to either receive or give out information. The informal form of public participation does not follow the laid down procedures in the receiving or giving of information to the public. Participation is said to be active when those affected by a public decision are directly involved in the decision-making process. When those affected by a public decision are indirectly

involved or represented by their local authorities in decision-making, then that form of participation is described as passive.

Public participation is conducted to inform, consult, involve, collaborate, and finally empower (International Association of Public Participation, 2014). Informing the public entails providing the public with balanced and objective information to assist them in understanding a problem, alternatives opportunities, and or solutions. Consulting the public includes the collection of the public's feedback on analysis, alternatives and or decisions from the community. To involve the public simply means, working directly with the public throughout the process to ensure that the public's concerns and aspirations are consistently understood and considered. Collaboration entails partnering with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution. Finally, to empower means placing the final decision making in the hands of the public and promising to implement what citizens decide (Hostovsky et al., 2010; IAP2, 2014).

In Ghana, public participation is considered one of the key tenets of democratic governance especially at the local government level. The management of solid waste at the local government level is faced with great challenges in present times. The Ministry of Local Government and Rural Development (MLG&RD) in conjunction with the EPA and Ministry of Environment Science Technology and Innovation (MESTI) developed an environmental sanitation policy which emphasizes the role of the various Metropolitan, Municipal and District Assemblies in the discharge of environmental sanitation services. In conformity with the spelt out policy, local government structures have developed strategies and mechanisms to continuously

engage and negotiate with local residents in the selection and choice of landfill sites to manage solid waste generated in the urban areas in Accra (MLG&RD, 2010).

Nguyen and Virginia (2005) reported on forms of opposition to a new landfill in Hanoi that opened in 1999. In the study, it was reported that many residents living close to the landfill wrote protest letters about pollution from the site to district and higher authorities and some even blocked truck access to the landfill shortly after it opened. Garbage piled up in the streets of Hanoi for a number of days until municipal officials were forced to negotiate with local residents and offer them assurances of improved operations at the site along with better compensation. This clearly shows that local authorities are sometimes not proactive, and appear to be rather reactive in their approach of engaging the local residents. The study revealed that the local authorities managing the landfill site had not fully won social legitimacy, even though they had gained the legal permit to be in operation.

A study by Kaur and Lodhia (2014), on stakeholder engagement in sustainability disclosure in Australia, revealed that local councils are positioned at the third (informing), fourth (consulting) and fifth (placation) rungs of Arnstein's ladder of citizens participation. It reported that the mechanisms of stakeholder participation included informing techniques such as newsletters, e-newsletters, direct mails and local newspapers. Consultation techniques included online fora, peer reviews, workshops and public meetings. Finally, placation took the form of public fora, focus groups and face-to-face discussions. The study revealed that the consultative approach was the most preferred approach as it helped in the identification of the concerns and issues of the public and allowed for the gathering of feedback. Cummings (2001)

reported a similar finding from a study in the United Kingdom, that the most commonly used approach in stakeholder participation was informing and partnership.

2.4.2 Effects of Level of Participation in Decision-making Processes

The effects of the level of participation may be seen in relation to the type or form of participation that is done. When participation is done just for the sake of ‘display’ or takes the form of nominal participation, it simply results in the legitimization of the participatory process. This type of participation is similar to what Arnstein (1969) describes as non-participation. When members of the public are simply ‘educated’ and are engaged in a participatory activity that does not allow for their influence in decision-making, it can be described as non-participation. This is because it makes no provision for feedback, communication is one-way and there is also no chance for citizens’ input.

Advocates of citizenry consultation and participatory approaches argue that decisions made by traditional policy actors such as the bureaucrats and elected officials have both anticipated and unanticipated consequences on the ordinary citizens in many ways. The reason is that such decision-making processes make no room for dialogue. However, a decision-making process that incorporates the views and preferences of members of the public in the policy process does not only help to build confidence and trust in a democratic system, but also legitimizes final policy choices by imbuing in citizens a sense of ownership of policy outcomes (Cohen, 1989; Cohen and Sabel, 1997).

Brodie, Cowling, and Nissen (2009) explained that participatory processes may be required for four (4) primary interconnected reasons. First, it helps strengthen

legitimacy and accountability of democratic institutions. Second, it empowers communities and builds social cohesion. Third, it helps serve public services to the communities according to their needs. Finally, it helps enhance citizens' self-esteem by developing their intrinsic skills and knowledge, and makes them politically aware of their roles as active citizen.

Also the success of policies require large-scale compliance or support from the general public. However, such support is dependent on the extent of public participation and consultation, as well as on perceptions of who is consulted (Vogel, 1986). This is because participation is perceived to have an immense influence on the degree of trust that the groups have in the policy process and the extent to which they view policy outcomes as legitimate. Wang (2007) noted that when the public's level of participation is minimal, it results in mistrust of local government authorities. The World Bank, as a major advocate of civil society participation in development, especially in developing countries, has not only made citizenry involvement in the policy process an essential component of its lending practices. But has also maintained that the civil society helps to generate feedback in ways that ensures efficiency in the public sector, and ensures transparency and public accountability (Harrold, 2000; Esau, 2008).

Negative effects may be inevitable when public participation is not encouraged or when participation is improperly done in the decision-making processes. A few studies have revealed that using only traditional approaches in decision-making is regarded as insufficient, since it places little emphasis on effective public participation and thus neglect the involvement of interested and affected persons (Osei et al., 2011; Owusu et al., 2012). Such an approach relies exclusively on systematic observation

and is bureaucratic in nature. Thus, giving no room for democratic decision-making and lacks popular acceptance from the public. Administrators, politicians and developers are at best hesitant, or at worst find it problematic, although there is theoretical and practical recognition that the public must be involved in public decisions (Neshkova and Guo, 2011). Reasons that some administrators provide for not encouraging the involvement of the public include; unnecessary complication of participatory processes which results in delays and inefficiencies.

Neshkova and Guo (2011), conducted a study on public participation and organizational performance with evidence from state agencies using two theoretical frameworks. The traditional perspective, which holds that there is a trade-off between democratic and administrative decision making and a competing perspective that suggests that citizens input provides administrators with valuable site-specific information and contributes to more efficient and effective public programmes. Data on public participation were from a large survey administered in 2005. An online questionnaire was administered to state official administrators to find out the effects of participation on organizational performance. The findings showed that there is not necessarily a trade-off between democracy and bureaucracy. The data provided strong support for the hypothesis that citizens' participation positively affects organizational performance. From the study, it may be argued that when the inputs of stakeholders are used in the decision-making process it has a positive effect on the policy output and outcome. The reason being that stakeholders give the policy their support and see to its success, as the proponents of project do not only win social legitimacy but also the trust of the citizens.

Damme and Marleen (2011), however presented a contrary view in four (4) Belgian case studies. A case study approach was used in the research, allowing for an in-depth analysis of public consultation process and for cross-case comparisons. Four (4) cases were selected with different rule configurations. Data collection employed a mix of qualitative and quantitative methods. Forty-one (41) semi-structured interviews were held with organizers, process managers and participants. The analysis of the four (4) Belgian cases shows that the absence of open process rules does not prevent good outcomes. The level of managerial autonomy is positively correlated with the intensity of process design and management. Cases with intensive process designs and management have better overall results. This study posits that when decision-making is solely left in the hands of bureaucrats, the outcome of the project is not negatively affected, rather there is a positive correlation.

2.4.3 Challenges in Achieving Public Participation in Decision-making

Public participation is hindered by several factors. Among several other challenges, practical realities of life in contemporary society, techniques used in participation and mistrust of authorities have been identified (Turner, 2014). Extant literature on the challenges of public participation in general has largely been attributed to factors such as financial constraints, inadequate capacity building, cultural issues, institutional factors, time constraints, among others (Ahenkan et al., 2013). It is however worth mentioning that both the public and local government institutions are confronted with

challenges. This aspect of the literature seeks to critically synthesis the work of others in the area of challenges with public participation in solid waste landfill management.

One of the greatest challenges faced by a project proponent is that of public apathy and mistrust of authorities (EPA, 2002; Oteng-Ababio, 2014). In the view of the local government authorities, the public is unconcerned and attaches negative emotional response to issues of solid waste and the management of landfills. The reason for this may be because, the public may not be well informed previously on issues related to the management of solid waste landfills. They therefore tend to perceive that the local government authorities do not have their interest at heart. As a result of being unconcerned from the planning stages of decision-making, the public later reacts negatively to issues about solid waste management and tend to react in a way described in literature as the 'Not In My Backyard' (NIMBY) syndrome (EPA, 2002).

Issues of mistrust characterises public participation when the process does not reflect the inputs of the public. Turner (2014), revealed that administrators valued participation only when it supported their agenda. In effect, residents perceive administrators and city officials as adversaries, simply because the process of participation was often a one-way communication, from the administrator's end to other stakeholders. Thus, lacking a two-way flow of information. Administrators tend to desire inputs that do not challenge the administrative status quo. It is apparent that these local residents and community organisers expressed mistrust and cynicism regarding whether their inputs would be utilised in the decision-making process and so they are hesitant in partaking in the decision-making processes.

Public apathy is also evident in the manner in which the public participates in decision-making processes. Hostovsky et al. (2010) noted that in contemporary times most people living in urban centres do not often personally engage themselves in the process of participation. Most citizens prefer a representative voicing out their concerns at public gathering to being directly involved in a decision-making process. Reasons are that most citizens in urban centres travel far away from their neighbourhoods to their place of work and so are not around at the time that participatory processes are in session. In other instances, citizens feel the whole process is time consuming and not worth it, and perceive that local authorities have already made their decision on issues to be discussed.

Secondly, inadequate consultation which further results in lack of transparency has been identified as one of the challenges of public participation in solid waste management. In line with the best practices, public participation should take place right from the planning stage of the decision-making of a project and in the latter stages of the project. In his study, Kakonge (1996) identified lack of transparency and late public consultation as one of the challenges in public participation in environmental impact assessment. The study found that the EIA process for most major public projects lacked the necessary transparency as a result of little or no flow of information.

Also, the role of capacity building in public participation is of relevance to both the public and local government, even though it is weak, especially in the developing world. Ahenkan et al. (2013) identified weak capacity building on the part of the public and the local government as one of the hindrances in ensuring effective public participation in Ghana. When the public is incapacitated in their ability to articulate their aspirations and interests, the project proponent or the local government may take advantage of their situation. Likewise, when local government is handicapped in terms of the relevant skills such as the skill of lobbying, they may not be able to convince the public of the need to have lands released for the purposes of managing solid waste.

Finally, cultural setting has also been identified as a factor impeding the process of public participation. In some cultural settings, women are not allowed to speak at public meetings (Hostovsky et al., 2010) and this contradicts the assertion by Nayak and Samanta (2014) that participation should entail four important dimensions namely, attending meetings, raising voice, lodging complaints, and making contributions.

2.5 Conclusion

This chapter was presented in three main sections. The first part explained the concept of public participation. The second part discussed theoretical literature in public participation and solid waste management. The stakeholder theory, interest in participation and the ladder of citizen participation were reviewed. The final part of this chapter presented empirical literature based on the specific objectives of the study.

The stakeholder theory was reviewed and applied to the study by explaining which people constitute stakeholders in the discussion of solid waste landfill management. It further considered the discussion of the three main perspectives of stakeholder theory being descriptive, instrumental and normative aspects. Issues such as the history of solid waste practices from the global and African context were discussed.

CHAPTER THREE

CONTEXTUALIZING PUBLIC PARTICIPATION IN SOLID WASTE LANDFILL MANAGEMENT IN GHANA

3.0 Introduction

This chapter offers a general understanding of the current state of public participation in solid waste landfill management in Ghana. It specifically looks at the case study area, GaSM. This review is based on statutory documents, policies, regulation and guidelines as well as legislative instruments as far as the discussion of municipal solid waste management is concerned. A discussion on a brief history of how the public has been engaged in the past in the management of municipal solid waste landfill site is discussed. Again, the chapter presents the regulatory and institutional framework that have been provided by the Government of Ghana to guide and promote the management of solid waste landfill by District Assemblies.

3.1 Overview of Public Participation from the Ghanaian Perspective

Public participation is considered one of the prime foci of democratic governance in the country. In Ghana, public participation may be seen as an opportunity for local citizens to influence decision-making at the local level system of governance (EPA, 2002). Quite interestingly, public participation in Ghana appears to be known by citizens and their representatives within the local government. Therefore to ensure democratic decision-making, Municipal Assemblies and District Assemblies are obliged to encourage the participation of the local citizens in all facets of decision-making at the local level.

By way of deepening democracy in Ghana, participatory mechanisms have been used as tools to enhance an all-inclusive democratic approach in developmental decision-making process. For instance, before specific developmental projects, programmes or policies are embarked upon in a specific municipality, EPA of Ghana as a regulatory body ensures that the project proponent carries out an EIA. This process is facilitated by organising public hearings and meetings, without which the project will not be able to meet the legal requirements for gaining a permit. Thus, by means of organising public hearings and meetings, the local citizens are granted the opportunity to provide inputs that may influence decision-making, via the provision of site-specific information to project proponents. As part of the participatory process, the public gains relevant insights about any project to be embarked upon in their community.

It is important to note that a culture of all-inclusiveness in decision-making is encouraged at the local level of governance, involving all stakeholders. There are however challenges encountered with the manner in which people at the grass-root level, comprising non-statutory stakeholders, may or can influence decision-making in relation to solid waste landfill management. Even though these people at the grass-

root make up the majority of stakeholders with interest in a project, their ability to influence a decision is vague.

In Ghana, the citizens at the grass-root level are represented by their Assembly Member. Thus, like it is in other parts of the world, the Assembly Member represents local citizens at public hearings and meetings and is therefore responsible for expressing the interests of the local people at such gathering (Hostovsky et al., 2010). However, most of these Assembly Members are unable to organise the local citizens all by themselves, prior to attending meetings on their behalf. The reason for this is that they do not have adequate financial and logistical resources to facilitate such a process. As a result of these constraints, Assembly Members tend to rely on their own intuition in making decisions on behalf of the people (Ahenkan et al., 2013).

3.2 Ga South Municipality's Experience in Solid Waste Landfill Management

The most common participatory mechanisms used in the GaSMA are information vans, notices, public hearings, dialogue, ad-hoc meetings with specific stakeholders. Members of the public who are considered as stakeholders in the decision-making process of the municipality includes traditional rulers who in-turn are the custodians of the lands, the Assembly Members, Unit Committee Members and community-based organisations (CBO's).

The use of information vans involves the dissemination of information through a microphone or an audio-recorded message to members of the community within the municipality from a moving van. This is usually done to keep members of the community abreast with information in relation to up-coming or ongoing developments within the municipality. Notices are also placed on the notice board of

the Municipal Assembly. The use of banners and backdrop are also other means of conveying information to the general public. Generally, anytime the Municipal Assembly intends to organise a public hearing, or meeting, Assembly Members, residence association members and all other concerned stakeholders are sent notices to that effect

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3.3 Key Agencies and Stakeholders Involved in the Solid Waste Management

3.3.1 State Agencies Involved in Municipal Solid Waste Management

The EPA of Ghana is the agency for environmental protection as far as solid waste landfill management is concerned. It also plays a regulatory and sanctioning role as far as protection of the environment is concerned. On the other hand, MLG&RD has a direct oversight role of the District Assemblies and the Metropolitan and Municipal Assemblies (EPA, 2002). These categories of stakeholders have legal backing to directly influence the decision of any solid waste management project, policy or program, because they were brought into existence by an Act of Parliament.

The involvement of state actors at the local government levels cannot be ignored as solid waste management decision are implemented by their help. For instance, Unit Committee Members, Assembly Members and other local government officials work with the District Assembly, the Waste Management Department of AMA, the Environmental Health and Management Department and the Regional Co-ordinating Council (RCC) to ensure a safe clean and serene environment (EPA, 2002).

3.3.2 Non-State Actors Involved in the Municipal Solid Waste Management

Individuals, traditional authorities, opinion leaders, and youth organisers, are non-state actors, yet they have the ability to influence decision-making in solid waste management directly or indirectly. It is important to point out that in Ghana, the traditional authorities although informal agents, have influence as far as solid waste management is concerned. Thus, they are recognised as key stakeholders in the management of solid waste. More importantly, they are recognised as the custodians of the lands (Owusu et al., 2012).

3.4 Institutional and Regulatory Framework of Municipal Solid Waste Management in Ghana

The management of solid waste is facilitated by several documents in the form of manuals, guidelines and policies, legal instrument and regulatory framework. A policy guideline on the development, management and regulation of landfills titled ‘Ghana Landfill Guideline’ has been put together in a document prepared by the EPA in conjunction with the MESTI and the MLG&RD. The document places much emphasis on site selection and the need for extensive public consultation as a necessity to reduce massive public opposition and potential negative environmental impacts of landfills. Interestingly, the document is in sync with Ghana’s decentralisation policy, which also emphasises the active involvement of the citizenry in local development decision-making processes.

In January 2014, MESTI launched its latest document: the “National Environmental Policy.” The aim of the “National Environmental Policy” hangs on the pillars of economic and social development, as well as environmental protection as far as the tenet of sustainable development is concerned in the attainment of the Millennium Development Goals. In Ghana, Municipal Assemblies are the key institutions

responsible for sanitation and solid waste management at the local levels. However, the Assembly receives support from other statutory institutions such as EPA, RCC and the private sector. EPA provides support to the Municipal Assembly by way of setting standards and administering permits and certificates to them. The Regional Planning Co-ordinating Unit (RPCU) under the RCC monitors the assemblies' activities and thus, ensures that the assemblies discharge all responsibilities with regard to the identification and acquisition of landfill sites (EPA, 2002). A Municipal Assembly may manage a landfill on its own or can contract private sector entities, but the onus still lies on the Assembly to enforce best practices and environmental standards (EPA, 2002; Owusu et al., 2012).

EPA is the agency responsible for environmental protection and thus has the legal backing of the state to fully discharge such duty. Three (3) main instruments are involved in the regulation of landfills. They include the Environmental Assessment Regulations, 1999 (L. I. 1652), the Landfill Operating Licenses issued by the District Assessment and the Landfill Guideline (EPA, 2002).

The Environmental Assessment Regulation, LI 1652 was promulgated in 1999 to give complete legal status for the need for an EIA relating to the execution of specified developmental activities and programmes in Ghana. The Environmental Assessment Regulation (L. I. 1652) clearly indicates that all undertakings, including landfills, require an EIA prior to construction. Upon approval by the EPA, an Environmental Permit is issued allowing for landfilling to start at the proposed site within 18 months, subject to stated conditions.

The operation of a landfill can only start after the 'Environmental Permit' is issued. As site selection and acquisition is a function of the District Assembly, it is the sole responsibility of the Assembly to apply for the 'Environmental Permit'. In order to maintain its certified status, the operator should submit annual environmental reports to the EPA as well as an updated Environmental Management Plan every three years. Breaches of performance are punishable by means such as the withdrawal of environmental certificate, fines and prison sentences (EPA, 2002).

Generally, there is a provision for the licensing of environmental sanitation services. The District Assembly's bye-laws are issued by the MLG&RD in the form of a Legislative Instrument (L. I.) (EPA, 2002). Prior to the introduction of the landfill system in Ghana, dumping of household solid waste in open dump site was common. The current trend is that within the Accra metropolis, waste is collected by private actors in collaboration with the AMA. One of the most important decisions taken by an assembly in executing its waste management responsibilities is the selection of a site for developing a landfill, taking into consideration social, environmental and economic factors (EPA, 2002). Since landfilling is an activity that may have substantial adverse effects on the environment, it is subjected to the Environmental Assessment Review Regulations, 1999 (L.I. 1652) of the EPA. This regulation makes it mandatory to include public consultations in the procedures leading to the selection of a site for landfilling (EPA, 2002).

EPA's provision of a guideline for landfill site identification highlighted that public participation should be a consultative process aimed at promoting public understanding of the need for a landfill and its operational principles; keeping the public well informed on the status of various planning, design, and operation

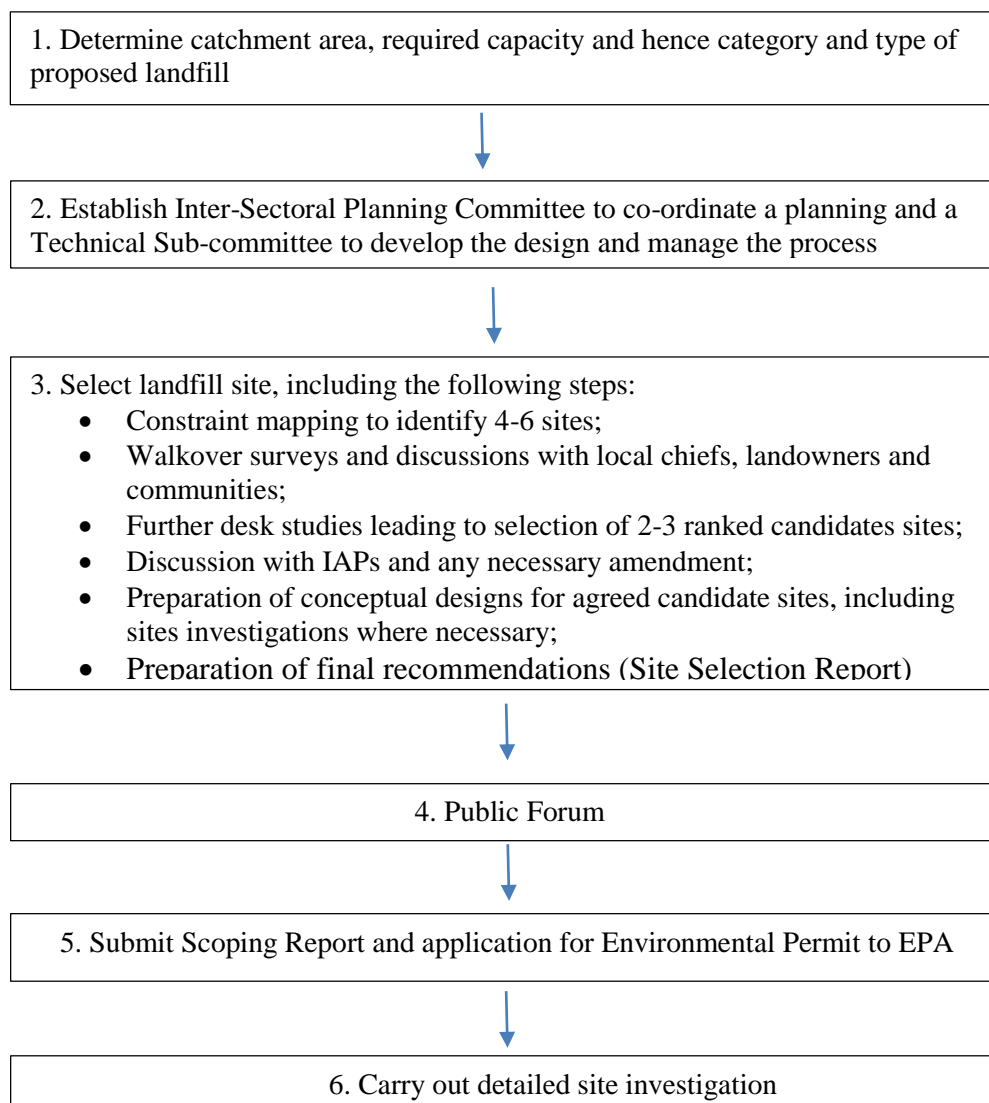
activities; soliciting opinions and perceptions from concerned citizens on the landfill development and promoting public consciousness of their role as waste generators (EPA, 2002).

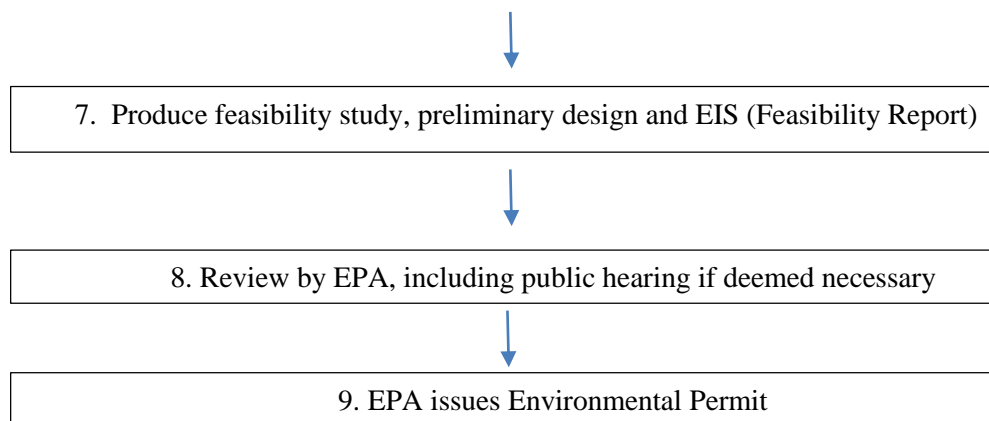
These provisions suggest that EPA as a regulatory body values the inputs of stakeholders in the solid waste decision-making process. However, from these provisions, it appears that the level of participation stops at the degree of tokenism (Arnstein, 1969). This means that the process of participation falls short of the highest level of participation, which is described as 'citizen power'. At the level of citizen power, there is the element of partnership, delegated power and finally citizen control. Stakeholders are expected to understand and accept the information passed on to them by project proponents. However, it appears that the views or inputs of stakeholders are solicited merely to meet normative and instrumental requirements as was seen in the study by Arnstein (1969).

The advantages of public participation as spelt out in the EPA guideline include the increased likelihood of public approval for the final plans; provisions of useful information to decision-makers, especially regarding issues that are not easily quantified; assurance that all issues are fully and carefully considered and appropriate action taken; identification of requirements for affected communities; a safety value by providing a forum where criticisms can be aired; increased accountability by decision-makers; an effective mechanism for decision-makers to respond to issues beyond those of the immediate project; and an effective mechanism to encourage public reflection on their role as waste producers (EPA, 2002).

There are however some negative effects that can be experienced if public participation is not properly conducted. These negative effects include, potential for confusion on the issue if too many new elements are introduced; the possibility that false information may be disseminated by unknowledgeable participants; added cost to the project; the possibility that the effort will not involve the appropriate people, or that the citizens will not develop an interest in the project until it is too late for changes to be initiated (EPA, 2002).

Figure 3.1 Landfill Site Selection Process





Source: EPA (2002) Ghana Landfill Guidelines.

Figure 3.1 illustrates the processes a solid waste landfill project must go through as spelt out by EPA of Ghana. Public fora and public hearings have been identified as key components in the landfill site selection process.

3.5 Conclusion

This chapter reviewed documents relevant in the discussion of public participation in solid waste management. It looked at the institutional and regulatory frameworks in the management of solid waste from the Ghanaian perspective.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.0 Introduction

This chapter discusses the research design, the sources of data and methods that were used in the collection of data for the study. It also identifies the target population for the study, the sample size and frame, sampling technique, ethical considerations, research instruments used and how data obtained from the field were analysed. Finally, the experiences from the field as well as the limitations of the study are reported.

4.1 Research Design

Research designs basically involve plans and procedures used in conducting a research, spanning through broad assumptions and narrowing down to detailed methods of data collection and analysis (Creswell, 2013). The research approach adopted for the research was a qualitative case study. The reason for this approach aside several other approaches, such as grounded theory research, ethnography and action research, was that it enabled the answering of ‘why’ and ‘how’ questions as far as the study of public participation in solid waste landfill management is concerned (Cohen and Manion, 1995). It was necessary to use in-depth investigation and to also rely on data from a variety of sources, as it helped in this research (Baxter and Jack, 2008; Yin, 2009). This research used the GaSM as a case study.

The study was an exploratory in nature and used a qualitative research approach. According to Williams (2000), qualitative research helps to interpret the meanings provided by respondents in a particular social contexts, rather than quantifying, explaining or establishing a causal relationship. The reason for using the qualitative method was to allow for more questioning and interaction. Additionally, the qualitative method was used in order to know the reasons why certain phenomenon is existent, as well as to make meaning of participants' opinions of what happens in reality. In order to ascertain a great deal of information, focus group discussions (FGDs) were held and face-to-face interviews were also conducted with the aid of an interview guide. An assessment of public participation in the solid waste landfill management decision-making process was done to attain a detailed understanding of the process and elements contributing to its success or otherwise.

4.2 Sources of Data

The research relied on both primary and secondary data sources. The primary data were gathered through face-to-face interviews and FGDs. The targeted respondents included local residents living around the landfill sites within the GaSM, officials at EPA of Ghana, chiefs, Assembly Members, Unit Committee Members and officials at GaSMA.

The category of interviewees included officials from statutory agencies and non-statutory agencies. The interview took a face-to-face form to allow for probing. Also, the face-to-face interviews were used as a method to gather primary data. This method was to allow for the collection of data that were not just based on facts, but also the emotions, feelings and the experiences of the interviewees (Denscombe, 2002).

Secondary data were obtained through review of literature, peer review journals, policy guidelines, books, and websites of statutory agencies involved in the management of waste. Hammersley and Atkinson (2007) pointed out that documents do not only provide one with information about a situation under study but, further proceed to stimulate analytical ideas. It was for this reason that a wide range of sources of data were relied upon for the study in order to facilitate analytical thinking.

4.3 Sampling Technique

The sampling technique used in identifying respondents for the interview was a purposive sampling method. This technique was used to ensure that the respondents sampled were directly involved in public meetings and hearings exercises and thus, could provide relevant information with respect to the study (Yin, 2009). Field visits were made to EPA, Waste Management Department of AMA, the GaSM as well as the Assembly in order to contact respondents for the study.

A copy of an introductory letter attached as appendix E, was sent to the registry of the EPA on the Friday, 13th February, 2015 as part of the process in gaining permission to conduct interviews. In order to ensure quicker and favourable response, phone calls were made as follow-ups on the introductory letter on a daily basis. The agency finally granted permission for interviews with respondents on the Monday, 23rd February, 2015, after carefully examining the content of the introductory letter. Respondents from the Built Environment and the Environmental Assessment and Audit Division of the EPA were engaged in a face-to-face interview. Respondents with the Municipal Environmental Health Office, the Municipal Waste Management Office and the Development Planning Office all from the GaSMA were contacted for the face-to-face interview.

In order to purposefully sample out FGDs participants from the various landfill hosting communities, a criterion was developed. Residents who had stayed around selected landfill sites for over five (5) years were contacted. The reason being that for a resident to have stayed in the landfill hosting community for a minimum of Five (5) years, that person may have had some experiences related to the management of the solid waste landfill project. Moreover, landfills are constructed with the view that they should have a life span of not less than five (5) years. The participants of the FGDs who served as respondents included youths, market women, resident's association members and petty traders. These persons were engaged in the FGD to either give a confirmation or otherwise of what was gathered from the interviews held with the Assembly Members, chiefs, and officials from EPA, AMA and the GaSMA.

4.3.1 Target Sample

Targeted samples for the study included respondents residing in landfill hosting communities, respondents from EPA headquarters, officials from the GaSMA and Assembly Members as well as a Unit Committee Member who represent the interests of the ordinary local citizen. The study targeted respondents from the Built Environment Department and the Environmental Assessment and Audit Division of the EPA. The respondents from these divisions are solely in charge of granting permits and organising public hearings respectively, after processes have been followed. Thus, it was prudent to rely on them for valid responses. Projects for which these divisions grant permits and public hearings include the siting of landfills, gas and fuel filling stations and hospitality spots.

Respondents from Municipal Environmental Health Office, the Municipal Waste Office and the Development Planning Office were contacted. By law, these officials are responsible for the landfill sites located within their jurisdiction. The selected landfill sites included, the Oblogo 1 and 2 landfill sites, Oblogo new landfill site, Stanley Owusu landfill site in the Gbawe community and the Sarbah landfill sites in the Djarman community. Data were gathered from traditional rulers, Assembly Members and a Unit Committee Member through face-to-face interviews. The representative of the paramount chief of Gbawe as well as the sub-chiefs from Djarman and Oblogo constituted respondents from the traditional leadership.

Table 4.1 Participants Selected for Face-to-face Interview.

Position of Participants	Institutions or Location
Principal Programmes Officer with the Environmental Assessment & Audit Division	Environmental Protection Agency (EPA), Headquarters
Programmes Officer with Built Environment Department	Environmental Protection Agency (EPA), Headquarters
Assistant Programmes Officer with Built Environment Department	Environmental Protection Agency (EPA), Headquarters
An official of Waste Management Department AMA	Waste Management Department, AMA
Assistant Development Planning Officer	Ga South Municipal Assembly
Municipal Environmental Health Officer	Ga South Municipal Assembly
Municipal Waste Management Officer	Ga South Municipal Assembly
Assembly Member for Gbawe Electoral Area	Ga South Municipality
Assembly Member for Djarman Electoral Area	Ga South Municipality
Assembly Member for Oblogo Electoral Area	Ga South Municipality
Unit Committee Member for Gbawe Electoral Area	Ga South Municipality
Traditional Leaders (chiefs)	Gbawe, Djarman and Oblogo

Source: Author's own construct (2015).

Above is a tabular representation of participants selected for face-to-face interview from the various institutions or communities.

4.3.2 Sample Size and Frame

The study obtained a total number of fourteen (14) respondents and conducted three (3) FGDs. Three (3) respondents were contacted from each of the following institutions, namely; EPA and GaSMA. One (1) respondent was contacted for a face-to-face interview at the Waste Management Department, AMA.

In all, a total of three (3) chiefs were engaged in a face-to-face interview from Gbawe, Djarman and Oblogo communities. Three (3) Assembly Members and one (1) Unit Committee Member serving as local government representatives for the local citizens in the selected communities were also engaged in a face-to-face interview.

Table 4.2 Sample size of respondents in face-to-face interviews

Respondents	Sample Size
EPA	3
GaSMA	3
AMA	1
Chiefs	3
Assembly Members	3
Unit Committee Member	1
Total Number of Respondents	14

Source: Author's own construct (2015).

The table above presents a summary of the category of respondents engaged in the face-to-face interview as well as the total number of persons involved.

According to Krueger and Casey (2009) a FGD comprises five (5) to ten (10) participants who are engaged by a skilled interviewer to share ideas and perceptions on a phenomenon in a relaxed atmosphere. In like manner, three (3) FGDs comprising five (5) persons each, making a sum of fifteen (15) respondents were engaged in a relaxed interactive discussion. These respondents represent a sample of local residents of the study area. The instrument employed for data collection in the FGDs were open-ended questions with the aid of an interview guide which has been attached as appendix B. All three (3) FGDs lasted sixty (60) minutes each.

4.4 Data Gathering Instruments

Creswell (2013) explained that FGDs are used in qualitative research so as to provide group meanings and understanding of a phenomenon of study. Face-to-face interviews were conducted as they granted the opportunity of stimulating expressive responses from the respondent related to the objective of the study. These expressive responses are not merely words, but also experiences, feelings, emotions and actions (Denscombe, 2002; Talmy, 2010). Again, the purpose for the face-to-face interview was to allow for first-hand primary data collection which were obtained in audio format using an audio recorder. Interview sessions at AMA, EPA and GaSMA lasted for a maximum of forty-five (45) minutes.

4.5 Data Analysis Procedure

The data obtained were first transcribed and carefully summarised without losing the very essential components. Using qualitative methods, the data were analysed by grouping results from interviews into descriptions and themes and supported with relevant literature and theories (Huberman and Miles, 2002). Some respondents were uncomfortable having their voices recorded. Nevertheless, such data were written down as interviews were being conducted and were analysed in the same manner as the audio recorded data.

According to Hatch (2002:148) data analysis is “a systematic search for meaning from a pad of information and data.” This means that the data gathered from the field must be carefully examined to identify meanings in order to communicate useful ideas to the reader. In getting this done, data gathered went through the process of data description, data analysis and finally, data interpretation.

The process of description included providing the context of action as well as the intentions of the actor. The described data were categorised under themes and supported with the necessary literature. The data went beyond a simple description since describing the data is only a stepping stone for data analysis. By so doing the data were carefully examined by identifying important themes and patterns after a comparison was done between what existed in theory and what happened on the field. The process finally ended with an interpretation of the findings of the study.

4.6 Research Limitation

The study was a qualitative research and thus one limitation was the inherent inability to generalise the findings (Osuala, 2007). In any research process, especially for qualitative studies, generalisation of the findings is limited. Firstly, because the research context matters and has an influence on the findings of the study. The study gathered data from the selected communities in the GaSM of the Greater Accra Region of Ghana.

Another limitation was that some respondents were not comfortable having their responses recorded, even though several efforts to convince them of commitment to ethical standards. As a result, their responses to the questions raised were written down and this slowed down the process and extended the time used in conducting the interviews.

4.7 Pre-testing of Instrument

The questions raised in the interview guide were pre-tested prior to the actual data collection. This was done to provide necessary information on whether a revision of the interview questions was to be considered so as to avoid ambiguous, misleading or confusing questions.

Pre-testing was embarked upon using staff at the Built Environment of the EPA and some members of the Gbawe community. The purpose for pre-testing was to enhance the reliability and also make replication of the study possible. It also enhances the validity of the study thus, ensuring accuracy of the study.

4.8 Ethical Consideration

Fraenkel and Wallen (2000) suggested that researchers should assure key informants that data provided for any study will be treated with the highest confidentiality. They explained that as much as possible, the names of subjects should not be disclosed, in order to protect the privacy of the respondents.

As part of the process of exhibiting the highest level of ethical consideration, an introductory letter attached as appendix E, was obtained from the Department of Public Administration and Health Services Management. The introductory letter was presented to EPA, the Waste Management Department of AMA and the GaSMA. Also, individual respondents were assured of their anonymity.

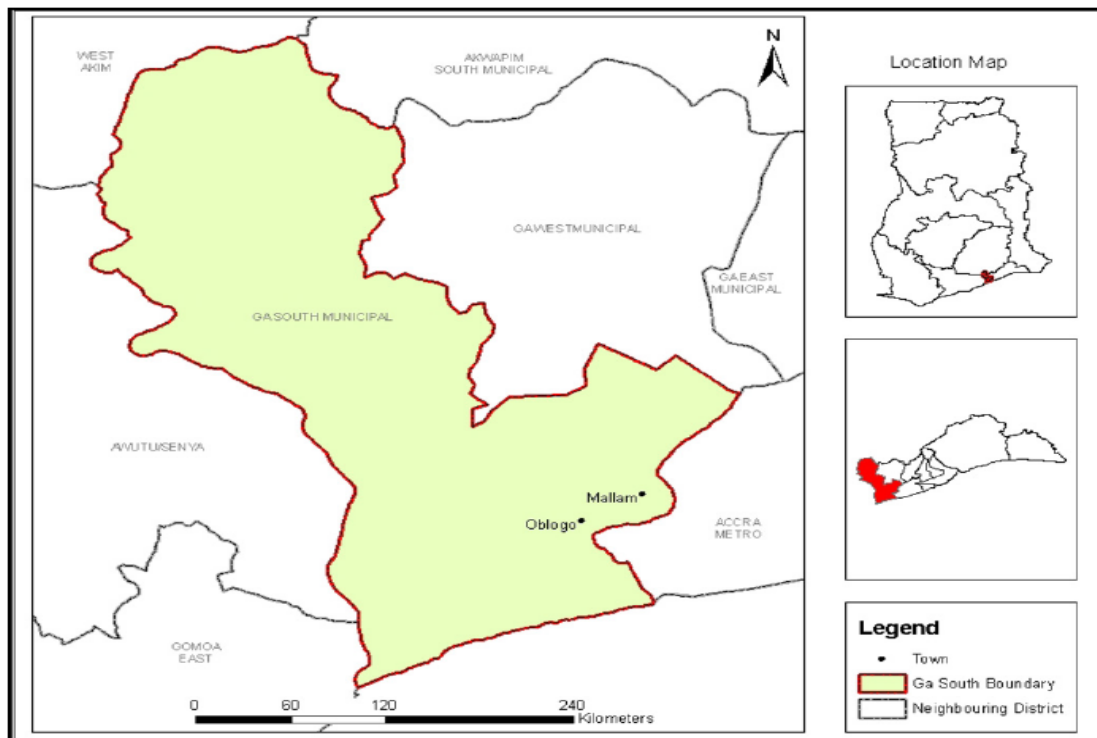
In order to have the consent of the respondents, permission was sought from them before recording the interviews session held with them. Although almost all respondents gave their consent of having their voices recorded in the interview, they were quick to give a notification anytime they had to say something off-record, due to the sensitive nature of the information they were providing.

Some respondents would not provide accurate information of certain questions during the interview but waited till the interview was over in order to properly answer the questions. Most of these respondents were very willing to offer responses that facilitated the understanding of the complex nature of the situation in relation to public participation in solid waste management. However, one respondent at EPA was uncomfortable with the audio recording and asked that the interview session will not be audio recorded because of the sensitive nature of the matter being discussed.

4.9 Profile of Ga South Municipal Area

GaSMA is part of the four (4) newly established districts in the Greater Accra Region in the year 2007. The Municipal Assembly's capital is Weija. It lies within the latitude $5^{\circ}48\text{North}$ $5^{\circ}29\text{North}$ and latitude $0^{\circ}8\text{West}$ and $0^{\circ}30\text{West}$. With an estimated total land area of 517.2sq and about 362 communities, it has an estimated population of about 485,634 with 237,558 males and 248,076 females as per the 2010 National Population and Housing Census (NPHC). The municipal area is bounded to the northeast by Akwapim South District, to the northwest by West Akim District, to the west by Awutu Efutu Senya District, to the east by Ga-West District, to the south-west by Gomoa District, while the Ablekuma North and South Sub- Metropolitan Assemblies share its south-eastern border. The Municipal Assembly has the Gulf of Guinea as its southern boundary. The municipality's office is located at the Weija Junction.

The municipality also has the Densu River as a natural resource from which the Weija Treatment Plant supplies about 60% of Greater Accra Region's consumable water. The municipality is made up of the Weija-Gbawe, Bortianor, Ngleshie Amanfrom and Obom-Domeabra constituencies. Christianity is the predominant religion in the municipality by observation. Islam is the next dominant religion with the traditional religion practised mainly in some parts of the rural and peri-urban parts of the municipality. The most widely spoken languages in the municipality are Ga followed by Twi and Ewe (GaSMA, 2010). The land tenure system is as follows: lands are mainly owned by families and traditional leaders or chiefs who have the sole responsibility to sell or lease out lands. Thus, to rightfully own a piece of land, one must consult these custodians of the land.

Figure 4.1 Map of the Study Area

Source: Adapted from Owusu et al. (2012:108). Map of Ga South Municipal Assembly showing some landfill sites.

The reason for choosing the GaSM as the study area was because proximity and accessibility was prime as the study was being conducted over a limited period of time. Also, researcher bias was involved in the choice of the study area. As a native of Accra and having been educated entirely there, there was much familiarity with the study area. There is also familiarity with massive public protests that occurred at Oblogo and Gbawe communities as a result of siting landfills in these communities. These reasons generated the desire to explore and gain further understanding of the phenomenon, looking at it from the theoretical and empirical point of view. Finally, because of the ability to speak the native language of the study area, it was an added advantage. It thus facilitated the articulation of views as well as created a relaxed atmosphere to interact with respondents considered for the study.

I. Sarbah Landfill Site

The Sarbah landfill site is located within the GaSM near Weija. Located North-West of Oblogo, this landfill was an alternative site identified by AMA after Oblogo 1 and 2 were closed in 2008 (Owusu et al., 2012). An environmental permit was issued in October 2009 spelling out operational conditions the AMA was to comply with. These included the construction of a leachate collection system and a sump, the management of methane gas, compacting, covering, spraying and fencing of the site. Waste from Accra West, Weija and Kasoa are dumped at Sarbah. The Sarbah landfill site upon field visit was capped. The area around the site was very clean and appears not to pose harm to human and animal life. After being in use for several years, the old quarry pit-turned landfill was capped by the Assembly. Among all the landfills that were visited, this was the only site that appeared to have followed the best practise of operating a landfill as spelt out by EPA.

II. Gbawe Landfill Site

The solid waste facility previously served as a stone quarry and converted into a landfill site in the year 2000. It is also in an area with conflicting land-uses. The landfill is sited close to a hospital. Siting of this landfill has resulted in negative effects on the general public. These negative effects are not properly mitigated and include flowing of leachate, noise from vehicles carrying waste, unhealthy odour emanating from decaying garbage, vermin infestation, mosquitoes, houseflies and scattering of garbage by birds. The landfill also produces large volumes of leachate that are released into the Densu wetland (Osei et al., 2011). As at the time of visit the landfill site was still in use and therefore was not capped.

III. Oblogo New Landfill Site

A field visit to the township of Oblogo revealed a place of solid waste disposal located very close to the Densu River. This place is one of those landfills that are officially not recognised by the Municipal Assembly. However, it is operated as landfill sites with private tricycle operators dumping refuse as they go about collecting fees from households for the services rendered. Apparently this landfill site at the time of visit was only two (2) weeks old. However, the site was filled up with large volumes of waste. Interestingly, this site unlike the other landfills was never a quarry pit. Rather, it was a bare land that the chief of Oblogo had identified and given it out to be used as a lorry station. However, the chief and elders of the land found it prudent to convince the natives of the land to turn the bare land into a lorry station since the community did not own one. The site manager at the landfill site explained that it was needful to dump rubbish on the ground as it was the cheapest form of material that can get the ground levelled.

CHAPTER FIVE

PUBLIC PARTICIPATION IN SOLID WASTE LANDFILL MANAGEMENT IN THE GA SOUTH MUNICIPALITY

5.0 Introduction

This chapter presents the results from the fieldwork undertaken for the purpose of the study. It discusses public participation in solid waste landfill management using data from the GaSM. It highlights the levels of participation in solid waste landfill management, the effects of the level of participation in solid waste landfill management, and presents the challenges of achieving public participation in solid waste landfill management in the study area.

5.1 Evidence of Public Participation in Solid Waste Landfill Management

5.1.1 GaSMA, EPA and AMA's Point of View

The qualitative data gathered from the various respondents considered for the study show very interesting findings. It was revealed from the Municipal Assembly's perspective that efforts are made to engage members of the public in decision-making through participatory activities such as public hearings and meetings. A question on whether the Municipal Assembly engages the public in participatory activities was posed to officials of GaSMA.

All three (3) respondents from the GaSMA who were engaged in face-to-face interviews provided similar responses. A respondent from the Municipal Waste Management Office in the GaSMA affirmed that:

We engaged the public last year, somewhere around November. At the time, there was going to be an engineered landfill sited in the Municipality. The public hearing involved all the stakeholders and the general public. The stakeholders who were invited included the people living in the community, the community leaders and most importantly, the Assembly Member and Unit Committee member for the electoral area where the landfill was to be sited.

The respondents were of the view that the Municipal Assembly followed the laid down procedure as spelt out in the Environmental Assessment Regulation (L. I. 1652) by EPA. Accordingly, EPA's legal instrument on the environment clearly points out that all undertakings including landfill siting and operation require an EIA prior to construction.

The responses gathered from the face-to-face interviews held with all three (3) respondents at the EPA suggest that the organisation has the responsibility of organising public hearing and meetings in conjunction with all MMDAs, including GaSMA and the AMA. This role is in line with the core functions and objectives of the organisation (EPA, 2014). However, all the responses from the EPA points to the fact that the GaSMA and the AMA do not adhere to the laid down structure of landfill management. One EPA official furiously pointed out that:

My dear, those people do not always follow the laid down procedure in landfill management. If those at the Assembly told you that they are consistent in organising public participation activities, it is not entirely true. When AMA is in need of lands, they first go to the chiefs. Huge sums of monies are paid to the chiefs and the land becomes AMA's. Don't you live in Accra and haven't you heard of the clashes between the people and AMA. In my view, the public is not adequately involved in the decision-making process.

The responses gathered from the EPA officials seem to suggest that EPA lacks the ability to ensure total compliance to the landfill guideline and the Environmental Assessment Review Regulations, 1999 (L.I. 1652). This situation raises a lot of concern in terms of the collaboration that exists between the two government agencies

that is AMA and EPA, as well as the collaboration that exists between the AMA and the traditional authorities. As has been identified, the AMA does not cautiously follow the laid down procedure and poorly encourages public participation in landfill siting and management process. Owusu et al. (2012) attributed AMA's less conscious effort in engaging the public to the view that chiefs were accorded so much power to make decisions about land use. As a result of this, chiefs neglect their own people by not consulting them before landfills are sited.

At the Waste Management Department of the AMA, the respondent's view on public participation was quite interesting, as it confirmed the earlier responses made by the officials at the EPA. An official of Waste Management Department averred that:

If AMA is to follow the L.I. to acquire permit for landfill operation...The process can last for as long as two years and we cannot wait for that long. We consult the people through their chiefs, lobby and pay the royalties to acquire the lands. So why will we have to perform a public hearing when the piece of land is already ours. You are in Accra, and you know how the waste situation is like. It demands fast action, not a long bureaucratic procedure where one waits forever.

The view raised by this respondent first and foremost points to the fact that, in as much as AMA may be willing to follow the laid down procedure when siting and operating landfill site, there are a number of hindrances. Some of these include, over-bureaucratisation in the process of acquiring EPA's permit. Also, as a result of urbanisation and increased population, the volumes of waste produced in the capital city demands that more lands be acquired for the purposes of solid waste disposal. This consequently results in what may be described as hasty and ad hoc measures in solid waste disposal.

Based on the responses gathered from the respondents from GaSMA, EPA and AMA, it can therefore be established that there are evidence of public participation in the municipality. However, the efforts made to achieve public participation is not satisfactory as participation in solid waste landfill management can be described as elusive on the part of the local government authorities.

5.1.2 Perception of the Public

The chiefs, Assembly Members, Unit Committee Member and local citizens gave their varied opinions on the issue of public participation in landfill management decision-making process. The findings from the study suggested that chiefs or traditional rulers possess a great level of influence in decision-making. In Ghana, chiefs, clans and family heads are the custodians of the lands (Oteng- Ababio, 2014; Owusu et al, 2012; Ahenkan, 2013). All the traditional leaders from Gbawe, Oblogo and Djarman who were engaged in the face-to-face interviews were emphatic that they are regarded as the custodians of the lands, and for that matter they receive invitation from the municipality to attend public hearings and meetings anytime they were being organised.

Owusu et al. (2012) and Ahenkan et al. (2013) noted clearly that traditional leaders and family heads are the custodians of lands and so that accords them with so much influence in landfill siting and management decision-making process. This is also consistent with the findings of this study. This finding was however not reported in the works of other authors from the developed countries (Font and Navarro, 2012; Damme and Marleen, 2011; Stewart and Sinclair, 2007). This is because, the developed countries have mayors instead of chieftaincy system. In answering a

question raised about his involvement in decision-making, one of the chiefs had this to say:

I have been part of public hearings a number of times concerning issues of solid waste management. From time to time, the people at the Municipal Assembly call on me to be part of the public hearings.

This points out that traditional rulers are invited to discussions which bother on sanitation and they are involved in the decision-making that demands their inputs. Their recognition implies that they can exercise some appreciable level of influence because they are the custodians of the lands. It can therefore be established that it is only the chiefs who can confidently attest to the fact that their participation in the public hearings and meetings has a lot of influence in the decision-making process.

Three (3) FGDs held with the respondents who were classified as ordinary citizens noted that public participatory activities are embarked upon within the municipality. The general view of the respondents was that the Municipal Assembly uses an information van all the time to invite the public for hearings and meetings. They confirmed that key figures such as opinion leaders, chiefs and residents association members are formally invited through letters.

The responses from the officials at the GaSMA also corroborate the assertion of the Assembly Member that they do hold public hearings. This view was also shared by the community chiefs and Unit Committee Member. Unfortunately, EPA holds a contrary position to the various viewpoints shared. The respondents at EPA argues that although there is some form of public participation, the manner in which the local government authorities organised public participatory activities was not satisfactory:

As for me I won't say I am pleased with the manner in which the public is involved in the decision-making process. The people are not alerted on time and this makes it difficult for them to make any meaningful inputs during the

decision-making process. So even though they are part of the process, they are slightly disadvantaged.

Whereas GaSMA, AMA and the chiefs are of the view that there is adequate participation, the EPA, Assembly Members, Unit Committee Member and the local citizens are of the view that participation is merely not genuinely embarked upon.

5.2 Level of Public Participation at the Planning Stage

Decision-making on solid waste management goes through some stages. These are planning, implementation and the evaluation stages which are needed to respond to the demands of a sound and a healthy society. The decisions made at each stage of decision-making apply also to solid waste landfill management. The guideline on landfill management places much emphasis on public participation at the planning stages of a landfill project. It is at the planning stage that an EIA is conducted prior to the implementation of the project. The EPA's EIA guideline details how these decisions should be made.

Per EPA's regulations, the EIA is an important exercise undertaken anytime a structural project is to be embarked upon. The responses from the field however presented varied views from all the respondents. The respondents from AMA and GaSMA provided views which suggest that efforts are made to engage the public at the planning stages of decision-making. However, the responses from the Assembly Members, Unit Committee Member and the ordinary citizens suggested otherwise. One Assembly Member lamented over the deceptive nature of his involvement at the planning stages of general decision making:

They make it look like we matter in the planning process...do you know that, the project at BulEmli was even implemented without my inputs. In fact, I came to the realisation that the Chief and the Municipal Assembly supported the project long before I was even invited to the public hearing. Apparently they

had received their share of huge compensation packages...all I had to contribute at the meeting was to appeal to the Assembly to properly line the pit and spray the site regularly.

This response of the Assembly Member, suggests that even though the Assembly invited her over to be part of the decision-making process at the planning stage, the atmosphere at the meeting suggests that there was no room for any logical decisions and constructive inputs as well as remedies. She supported this view by explaining that there was a deliberate attempt on the part of the AMA and the GaSMA to relegate her views to the background. Additionally, she noted that a prior negotiation had been made behind closed doors between the chiefs and the AMA. In her opinion, similar to what was shared by all the Assembly Members, the impression created is that the process of participation is merely symbolic. This form of participation can be likened to what White (1996) described as nominal participation which simply seeks to fulfil legitimate requirements and for the purpose of merely displaying that participation takes place in the process of solid waste landfill management decision-making process.

All the ordinary citizens who were engaged in the FGDs noted that the Municipality has been embarking on public hearings and meetings. They were however quick to remark that they are always represented by their local representatives. In their opinion, going to public hearing programmes was a waste of time. One respondent who mentioned that she was disinterested in participation at the planning stages of decision-making noted that:

We've been hearing about the public meetings the Assembly has been organising. But most of us have never attended any. When our Assembly Member represents us, she doesn't inform us about the outcome of the meeting. Before we realise, the AMA waste trucks come here to dump refuse. The only time they involve us is when they want us to be part of clean up exercises and communal labour.

The responses gathered from the FGDs point to the fact that the level of participation on the part of the ordinary citizen is very low and minimal. The study revealed that majority of the local citizens were comfortable to have their views represented by the Assembly Members, even though they were displeased that they hardly receive feedback on the decisions that were arrived at in such meetings. For those who would have wished that they directly participated, they were either limited by time or had to meet other pressing needs related to earning a living.

On their part, the chiefs revealed that they are engaged by the AMA and the GaSMA during the planning stage of landfill sites. According to the chief of Djarman:

In the past, the AMA came to me for help. I offered them assistance by allowing one of the old quarry pits to be used as landfills. Besides, I am the custodian of all the lands in this community and the Municipal Assembly cannot embark on any project without my consent.

The response from the chief points out that his involvement in the decision-making process is key if lands will be released for the purposes of landfill sites. The involvement of the chiefs go beyond consultation to efforts aimed at consensus building, through collaboration with the local government authorities in the case of constructing landfills.

All the officials who were engaged in face-to-face interview at the EPA, AMA and the GaSMA affirmed that the involvement of the public in decision-making at the planning stage was very necessary. The Municipal Environmental Health Officer from GaSMA like the others averred that:

The involvement of the public at the planning stage of decision-making is very crucial...their inputs are needed for the success of the project...we call on all the stakeholders, comprising the Residents' Association Members, the Assembly Members, the Traditional Rulers, and the local people too. If the public is ignored during the decision-making process, it may result in unfortunate situations.

The response given by the Municipal Environmental Health Officer affirms what Turner (2014) claims that the involvement of the public must be substantive and must begin from the planning stages of project development. In general, the level of public participation at the planning stage of decision-making is characterised by informing, giving advice, making of negotiations and joint collaboration between the Municipal Assembly and the chiefs. Public participation involving the ordinary citizen takes the form of giving of advice and informing the public of new developments during durbars and traditional festivals. This form of public participation can be likened to what Arnstein (1969) described as ‘manipulation and therapy.’ The study revealed that the influence of the ordinary citizens in decision-making is almost non-existent at the planning stage. It was revealed that the reason for this situation can partly be traced to the fact that the ordinary citizens are represented by their Assembly Members and Unit Committee Members.

On the other hand, the chiefs and their elders have a lot of influence at the planning stages of the decision-making process. The reason is because they are the holders of ‘power and resources’ and therefore easily facilitate the acquisition of lands for the purposes of solid waste disposal. It was revealed that there is a high level of collaboration among the chiefs, the AMA and the GaSMA. The level of participation among these parties can be likened to what Arnstein (1969) described as ‘partnership’.

5.3 The Level of Public Participation at the Implementation Stage

5.3.1 The Engagement of Members of the Public in Service Delivery

The findings from the field revealed that there is not much participation from the local government representatives as well as the chiefs at the implementation stages.

Interestingly, the responses gathered from respondents in the FGDs showed that the participation of the ordinary citizens at this stage was rather significant due to the fact that the municipality engages their services by employing them to work at the landfill sites. According to similar comments that were made by participants in the FGD at Gbawe, a revelation was made which noted that:

We These people will be very wicked if they had given employment to outsiders. may not have the highest form of education, but at least, we can collect money and collect scraps when the trucks come to offload waste. We have kids and wives to take care of. If they do not employ us, how can we take care of our families?

The remarks made indicates that ordinary citizens are engaged in managing landfills at the implementation stage. It also shows that the ordinary citizen are heavily expectant and dependent on the Municipal Assembly to gainfully employ their services. From the view point of the Municipal Assembly, the contribution of the public at the implementation stage is very significant as it serves as a means for managing resources efficiently and effectively.

In responding to an interview, one of the officials at the Municipal Assembly shared a similar but an in-depth view on the engagement of the public in implementing decisions on landfills. According to him, the Assembly hires the services of the unemployed youth. He had this to say:

We do well to employ the services of the people when the project is to be implemented. Most of the youths are unemployed and they are the most preferred target. The nature of the work also demands a lot of physical energy and so their involvement is key at this stage of project implementation.

White (1996) described the form of participation that maximises the opportunity of relying on the services of the beneficiaries as ‘instrumental’ participation. This is because such form of participation engages the local people through the provision of labour to guarantee their commitment to the project. She further explained that this

form of participation is cost-efficient. Similar to what was found in the literature, it was gathered that the participation of the citizens in landfill management helps to ensure that policies are implemented effectively with minimal hindrances (White, 1996; Neshkova and Guo, 2011).

5.3.2 The Involvement of Citizens in Communal Labour

The responses from the ordinary citizens suggest that apart from being employed to work at the landfill site as managers, waste sorters and scavengers, another way by which they are involved at the implementation stage is through communal exercises. Participants in the focus group averred that:

The Assembly sometimes calls on us when they want us to be part of clean up exercises and communal labour.

The guideline on landfill management and the Environmental Assessment Review Regulation 1999 (L. I. 1652) of the EPA did not place so much emphasis on the need for public participation at the post-implementation stages of decision-making. However, it was revealed from the study that residents, especially the unemployed youths, look forward to gaining employment from the Municipal Assembly, once a project is granted social acceptance by the public.

5.4 The Level of Public Participation at the Post-implementation Stage

The study revealed that GaSMA occasionally invites the public to public hearings and meetings with the aim of evaluating the Assembly's performance. The evaluation is done in order to assess the extent to which actual performance has conformed to the stated goals set by the Assembly. During such gatherings, issues of solid waste landfill management are discussed. The findings revealed that such meetings offer the chiefs, Unit Committee Members, Assembly Members and ordinary citizens the

opportunity to ask questions and make inputs on issues that focus on solid waste management. The Assembly Member for the Oblogo electoral area pointed out that:

When we attend the meetings we evaluate our performance as an Assembly, and make inputs. It is sometimes discouraging to see that the inputs we make are not valued as they don't reflect in the final output of projects.

The remarks made by the Assembly Member portray the view that he is quite sceptical about the evaluation process. In his opinion, less consideration is given to the views of the Assembly Members and to other stakeholders during project evaluation meetings. As such, inputs are not reflected in the final outcome of decisions. However, it was discovered that the contributions of the Assembly Members and the public comparably receive much consideration at the planning stages of a project than it does at the evaluation stages. This was found to be so because no legal obligation binds the Municipal Assembly to incorporate the views made by the public during the evaluation stage of decision-making. The Environmental Assessment Regulation (L. I. 1652) by the EPA is silent on the need to incorporate the inputs made by the public at the evaluation stages of decision-making (EPA, 2002). As was found out from the study, EPA clearly points out the need for project proponents to gather site-specific information from the public when planning to site landfills in residential areas. To this end, the Municipal Assembly ignores the quality of inputs that come from the public during public review meetings.

5.5 Effects of the Level of Public Participation

In order to gain a deeper and better understanding about the effects of the public's level of participation in solid waste landfill management, questions tailored along this line were asked to solicit the views of respondents. An official of EPA shared his

perspectives that speak volume of local support and acceptance from the community in order that the project becomes a success. He asserted that:

If members of the public are taken by surprise or are partially involved, they will vandalise the project. The public must be involved at the inception stage in the decision-making. If success must be guaranteed, feedback mechanisms should be in place so that there is dialogue, consensus and compromise where necessary. A very good participatory process should allow for transparency, accountability, legitimacy and finally, the sustainability of the project.

Similar to his assertions, other respondents also noted that the extent to which the public is involved in decision-making has either positive or negative effects on the process of solid waste landfill management. It was understood from the study that appropriate public participation at the planning stage largely promotes positive effects, such that there is public acceptance, ownership and support of the project. The response provided by the EPA official is in sync with what White (1996:7) noted in her study that "...the involvement of the local people in implementation is not enough. For a fully participatory project, they should also take part in management and decision-making."

5.5.1 Legitimacy, Public Ownership of Project and Trust

The responses gathered from the FGDs and the face-to-face interviews point to the fact that the officials from the AMA and GaSMA see public participation as a necessary requirement which must be embarked upon in order to authenticate and provide a feeling of inclusiveness to the public. Respondents engaged in the in-depth interviews from both AMA and GaSMA noted that without the participation of the public in decision-making, EPA will not grant permit for the landfill project to proceed. Explaining further, respondents noted that anything short of a public hearing

in landfill siting can be deemed as void, as it breaches the Environmental Assessment Regulation (L. I. 1652) by the EPA. Additionally, they asserted that such a project would also not receive the needed social or popular acceptance when the public is left out in decision-making. Similar to the responses of other respondents, an official from the GaSMA noted that:

You know that the EPA grants permits only when their requirements are met to the latter. This makes public hearing a key component in the process of selecting and siting of landfills. If the public is not consulted, EPA will regard the process as invalid. The simplest way to gain legitimacy is to get the public on board. That way they feel involved and you win their trust and support also.

There is a clear indication from the response of the official that the Municipal Assembly involves the public in decision-making, in order to satisfy the legal requirements of EPA and to gain the public's acceptance of projects embarked upon. This form of participation can be likened to what White (1996), describes as 'nominal participation', which seeks to meet legitimate purposes on the part of the project proponent and also grant a feeling of 'inclusiveness' to the public during decision-making process.

Interestingly, the study revealed that the public expressed mistrust towards the officials at the Municipal Assembly, despite the fact that the Assembly pointed out that efforts are made to ensure public participation in decision-making. It was discovered from the study that the public feels the AMA and GaSMA officials are not transparent enough. In order to understand why the public does not trust the AMA and GaSMA, probing questions were asked. Respondents engaged in the FGDs explained that they often receive very short notices of public hearings and fora that centre on the management of landfill management. Similar to what other participants pointed out, one respondent from the FGD held at Oblogo noted that:

I am entitled to attend public hearings and meetings as a resident association member. But on countless occasions, notices reach me very late. I don't see how I can make meaningful contributions at such a meeting when I receive such short notices.

Wang (2007:267) noted in his study that “an old device for minimizing the effect of public hearing is to provide minimum public notice and to schedule the hearings at inconvenient times or locations.” Similar to the assertion by Wang, the public shares the opinion that this negative manipulative tactic is used by the AMA and the GaSMA for the fear of the fact that the project will be opposed by the public when they attend the public hearings and meetings. This situation results in the public’s lack of trust in the activities and operations of the AMA and GaSMA.

5.5.2 Efficient Use of Resources

In addition to authenticating and giving the public a sense of inclusion in the decision-making process, another effect of public participation is the efficient utilization or the potential risk of wasting resources. The study established that the level of public participation in decision-making process provides GaSMA the opportunity to access site-specific information. In effect, this leads to the minimisation of the potential risk of wasting resources when projects are implemented. Subsequently, cost-efficiency is ensured as GaSMA is able to receive feedback from the public as to whether the project will receive public acceptance or not, and whether it is worth channelling capital in the said project. In the focus group discussion at Gbawe, one of the respondents stated that:

Some few years back, they came to construct drainage in this community but they didn't even consult us. Before we realised, they had brought the contractor to start work. Some few days after the construction, we experienced

the worst flood ever after a heavy down pour. I'm sure if they had approached us, we will would have mentioned to them that this place was water-logged.

Respondents explained that when their views are solicited before landfill projects are implemented, unnecessary waste of financial, time and material resources will be avoided to a large extent. In effect, the Assembly's budget will be focused on more pressing needs. This was also confirmed by Neshkova and Guo (2011:267) that "citizen's input provides administrators with valuable site-specific information and contributes to more efficient and effective public programs."

In a similar explanation, the AMA official at the Waste Department pointed out that:

...We would have incurred so much cost travelling several kilometres outside Accra to go and dump refuse, if we had not gotten the consent of the people to acquire their lands. For instance, before we embarked on the project at Oblogo, we met with the chief, elders and the citizens to engage them in decision-making.

The statement from the respondent in the FGDs and the AMA official confirms the finding that engaging the public in decision-making helps to cut down unnecessary cost and promotes efficiency and effectiveness (Neshkova and Guo, 2011). In cases where the public perceives that the actions of the GaSMA or AMA have not been transparent enough, they boycott and vandalise the project as was reported in the study by Owusu et al. (2012) and Ahenkan et al. (2013).

The lesson learnt from this finding points to the fact that consulting and collaborating with the public ensures cost-efficiency. This happens only if the participation of the public goes beyond being 'informed' about the project and extends to the point of seeking site-specific information from the public. Based on the responses gathered from the study, it was found that the GaSMA attested to the view that cost is minimised when the public is satisfied with the process of participation. The GaSMA

recognises public participation as the means through which entrusted financial resources can be effectively and efficiently utilised.

5.5.3 Sustainability, Conflict Reduction and Improved Relationship

It was also discovered from the study that the public's level of participation in solid waste landfill management, to some extent, ensures project sustainability. Many of the respondents pointed out that the reason for which they give their support to any public project is because such projects compensate or provide them with some form of benefits. It was also found that landfill projects that have been sustained over the years were those that were implemented by the AMA after meeting the demands of compensation packages placed before them by the public. To support this claim, the AMA official noted that:

The landfill at Mallam wouldn't have lasted for as much as ten years. We consulted the Chief and the Elders as well as some influential members of the public who were part of the Committee set up for acquiring lands. During the public hearing, the members of the public requested for a market, a health post and a tarred road. We tried our best to provide them with the market and the health post and they in turn also gave us their support.

When the public participates, there is the opportunity for dialogue and consensus building. It is at this point that the public is able to gain some form of leverage. As was noted by White (1996) the public is able to gain leverage when they have a 'voice' in the decision-making process. As was found from the field, AMA has been able to ensure sustainability of some of landfill projects within the municipality, by reason of the fact that they reach consensus with the public. It was also evident that sustainable landfill projects were those that gave room for dialogue, consensus building and allowed the public to gain some level of leverage.

The study further revealed that there has been an instance when harmony between the public and AMA was secured by placing representatives of the community on committees to be part of the planning, implementation and post-implementation stages of landfill siting. Additionally, it was also established that the public always expresses an interest in gaining employment opportunities. Since most of the youths are unemployed, they hope that they will be given preference over outsiders in terms of employment opportunities by the GaSMA. For most of the landfill sites that were visited, it was observed that the workers at the site comprised the youths and also indigenes of the community. A point to support the engagement of the public in managing landfill sites was made by the AMA official who noted that:

...these people lack employment and so before you can convince them, you must assure them of their share of the cake. If not so, forget about your project. We put some of them on our waste management and land acquisition committee so they can convince others and lobby on our behalf when it becomes necessary.

The lesson learnt from this finding points to the fact that public participation should not fall short of dialogue and compensation packages for landfill hosting communities. Gathering from the responses of the study, it was found that AMA is able to ensure project sustainability by ensuring representative participation, which makes room for the public to gain some benefits. In the case of Mallam, asphalt road leading to the landfill site was constructed to reduce the amount of dust created by the waste trucks. In addition, a community hospital and a market place were constructed. According to the AMA official, majority of the inhabitants of Mallam community felt compensated and so supported the landfill project and its operation in the community.

5.5.4 Empowerment

Responses gathered from the study revealed that the GaSM has not yet reached the transformative form of participation (White, 1996) or the level of ‘citizen power’

(Arnstein, 1969). White's study noted that transformative participation makes a difference that is able to produce empowerment for both parties to a project. Her study further pointed out that when the public is in the helm of affairs then one can say that transformative participation exists. The study found that the public has not yet built capacity to be independent of local government services in waste management service delivery.

It was however noted that the GaSMA partners with privately owned waste management companies to provide municipal solid waste services. The interviews gathered from the field revealed that at the moment, the public depends on the local government as well as the private sector to provide solid waste management services. Thus, the public does not have total control in the management of solid waste. In view of this, empowerment of the public in the situation of GaSMA can be described as economic empowerment since there is the opportunity for the job creation and earning of a living as a result of the private sector involvement in solid waste landfill waste management.

Despite the fact that the public is not in the helm of affairs, projects can be negatively affected by them when there is perceived exclusion of the public in solid waste decision-making. It was also discovered from the study that almost all the landfill sites within the municipality had a history of public opposition which were spearheaded by the youths in the various communities.

It was also discovered that there is some level of cooperation between the chiefs and the AMA, thus making the acquisition of lands for landfill purposes a much easier process. This cordial relationship between AMA and the chiefs raises tensions in the

community. Owusu et al. (2012) pointed out that the public, especially the youths, express anger and frustration towards the chiefs and elders as their role in giving out lands for landfills purposes were not transparent enough. This finding also confirms the view of one of the respondents who mentioned that the chiefs exercised some level of power-play over their subjects and consequently did not see the need to solicit views from the public when making landfill decisions. Similar to the comments raised by other participants in the focus group discussion, one respondent in the focus group discussion furiously noted that:

When you have leaders who do not value their subjects, the consequences are that there won't be progress. Rather corruption and money squandering become the order of the day. There is nothing to show for the royalties that have been paid to the chiefs in this municipality.

The lesson learnt from this finding is that there is the need for transparency and accountability not only from the AMA and GaSMA, but also on the part of the traditional leaders who are recognised as the custodians of lands.

5.6 Challenges Involved in Achieving Public Participation.

The responses gathered from the in-depth interviews and FGDs presented a lot of concerns which hinder public participation in solid waste landfill management in the GaSM. The study identifies the chiefs, Unit Committee Members, Assembly Members, EPA, AMA and the citizens as the major actors involved in decision making and therefore asked them questions on the challenges encountered in public participation. This section of the study brings to fore the issues and how they affect the realization of participation of the public. The identified challenges include mistrust of AMA and GaSMA, ineffective communication, deficient collaboration and ad-hoc measures in planning. The rest are political interference which leads to

non-compliance of legal provision, public apathy, transparency issues and financial constraint.

5.6.1 Trust, Partisan Politics and Involvement in Public Participation

The study identified the issue of trust on the side of AMA and GaSMA as an impediment that hinders effective collaboration. First on the side of the ordinary citizens and some Assembly Members, the concern raised was that as the inputs from previous meetings did not lead to any progress, there is no incentive to be part of further deliberations. Some members of the FGDs, especially the youths, noted that there is no reason to be part of decisions that only stays on paper. They further explained that if participation is anything to go by, then their involvement is just for meeting legitimate requirements. This is because they cannot see participation at play as they perceive that the officials at the Municipal Assembly circulate letters to ‘cronies’ they believe matter. As was earlier noted, AMA discusses issues about acquisition and negotiations of lands for the purposes of landfill site with the chiefs. The chiefs in turn release lands without consulting the citizens. Similar to the concerns raised by one Assembly Member, some members of the FGDs also noted that:

The issue of who participates to me is very political. It is either they (AMA and GaSMA) invite you late or they don't value the inputs you make at the public hearing.

It was discovered that the public does not trust the process of participation as it exhibits some form of discrimination. Concerns raised by the public showed that this has the tendency to mar the efforts of development and also undermines the patterns

of inclusion in solid waste landfill decision-making. As has been observed by respondents, the communities that have the landfills boast of able persons who can provide meaningful contributions when making landfill decisions. The respondents however noted that these people have not been formally invited to the Municipal Assembly's public meetings for their inputs to be incorporated into decision making.

Another area of mistrust towards AMA and GaSMA has to do with the time that public meetings and hearings take place. Many of the learned people identified within the community who are believed could make constructive inputs are not always around during the time for public meetings. They pointed out that many of the people brought as representatives on the decision table are loyal to the government in power, as they are viewed as people who cannot criticize the ideas and resolutions made at public hearings. This practice is however contrary to the provisions of the Local Government Act (1993), Act 462, which spells out that the activities of the Municipal Assembly are strictly non-partisan.

The discussions with the focus group participants revealed that AMA and GaSMA try to paint a picture of representative democracy, when in actual fact the ordinary citizens feel distant from the decision making process of solid waste landfill management. The thoughts shared by these respondents were that almost everyone who contributes on the decision-making floors and even at the planning stage should either be a well-established businessman or a person in a gainful employment. One market woman in the FGD argued that:

The Authorities see the employed people as knowledgeable and our decisions do not matter.

It was revealed that this is becoming more of a norm and has an effect on the quality of inputs that are brought to the decision-making table. As was noted by the market woman, some citizens are not regarded because of their economic circumstances and they are not called to give their opinion about the things that have to be discussed.

5.6.2 Ineffective Communication between the Participants in Development

The study emphasises the relevance of information flow, the quality of information and the need to get all key stakeholders involved in landfill decision-making. It is believed that when information flows effectively, policy and practice would be shaped appropriately. The study identified ineffective communication between Assembly Members and the citizens as one major hindrance to public participation. There is poor relay of information from the Assembly Members to their citizens. One Assembly Member averred that:

When we decide on issues that affect the people, it is expected that the information will be passed on to them. The people lack the information they need and it creates unnecessary chaos in the Assembly most times.

The study established that the Assembly Members leave the local people they represent in the dark about development and deliberations that involve them. The failure on their part in communicating decisions reached at the public hearings and meetings defeat the general purpose of decentralisation as enshrined in the Local Government Act (1993),

Act 462, which seeks to promote grassroots participation in development. This inability to timely relay information to the citizens becomes the foundation for misunderstanding on issues of development related to siting of landfills. The study revealed that even though financial constraint was provided as an excuse for not relaying information to the citizen, it was also established that some Assembly

Members feared losing their power in subsequent elections. It further came to bear that some of these Assembly Members feared being put under pressure by the citizens to reject decision made about landfill sites. A confirmatory remark was made by one of the Assembly Members who remarked that:

The people react negatively as soon as they hear of anything with regards to landfill. Even when the solid waste facility is an engineered landfill they will oppose and I might lose my vote.

The remarks by the Assembly Member make it clear that the challenge with how information flow to the local people, is to a large extent, a deliberate attempt to retain power and also to avoid ‘unnecessary’ pressure from citizens. Similar to the findings of Ahenkan et al. (2013) and Owusu et al. (2012) the study also noted that ineffective flow of information impedes public participation.

5.6.3 Institutional Deficiency in Collaboration

Evidence gathered from the field identified weak institutional collaboration as one of the key challenges in achieving public participation in solid waste landfill management. An official with the Environmental Assessment Unit of the EPA had this to say:

There is a problem with collaboration. We need the necessary support from the AMA and other MMDAs. It becomes difficult to achieve the expected end results of a safe and pollution-free environment when the needed support is not strong.

Similar comments were made by all the respondents who were contacted at the EPA office. It was noted that when EPA as a regulatory institution tries its best to ensure that the environment is protected, AMA tends not to be supportive. Another respondent from EPA also pointed out that:

Whether we like it or not these AMA guys will always break the laws, because they know they have the support of the government.

The concern raised by the EPA official about weak collaboration was confirmed by the respondent from the AMA office who stated that:

... if AMA urgently needs the land, why can't we convince the chiefs and compensate them to release a wasted land (quarry pit) that cannot serve any good purpose apart from being used as landfill.

5.6.4 Ad-hoc Planning and Manning of Landfills

It was discovered from the study that the measures taken in acquiring the lands, planning for the commencement of the projects, as well as responding to the challenges of a solid waste in GaSM are largely ad-hoc in nature. The study revealed that even if the communities do not rubber stamp their initiatives, AMA would still go ahead and commence the projects. According to an AMA respondent, the entire process involved in following EPA's regulations for land acquisition could last for as long as close to two (2) years which is time-consuming.

Based on the observation from the landfill sites and the remarks from most respondents, it was discovered that GaSMA faces difficulties in the management of the landfills. This confirms the findings of Oteng-Ababio (2014) who noted that Accra landfill sites are not properly managed. The findings establish the fact that AMA is still struggling with the management of landfills, as some of the landfills that ought to be fenced were not fenced at the time of field visit, with leachate flowing into residential homes.

5.6.5 Political Interference and Non-Compliance with Legal Provisions

Findings from the study also identified non-compliance with legal provisions as one of the main challenges in achieving effective public participation in solid waste

landfill management. In agreement to what all the other respondents pointed out as a challenge, one respondent from EPA averred that:

We are often confronted with the challenge of honouring and obeying political instructions. Out of political expediency, the government of the day chooses to violate environmental laws. For instance, AMA sometimes does not hold any public hearing and the next moment it becomes a challenge for us as an institution to penalise them because the government is behind their actions.

Furthermore, the study also revealed that it is difficult to bring legal sanctions against AMA as a punitive measure because, very often, their actions are influenced by the ruling government. Sharing in the concerns raised by other officials, one respondent from EPA noted that:

Have you even witnessed one government agency killing another government agency before? It is difficult, but we try. For example, we sent AMA to court for polluting the sea. At least you know of the lavender hill issue, don't you?

The study is of the view that the issue of political interference hampers legislative compliance, especially, when the government is behind the violation. Hence, this makes the role of the EPA very challenging.

5.6.6 Public Apathy

In addition, the study discovered issues of public apathy as one of the challenges that confront the realization of effective public participation. In the words of one of the respondents at EPA:

Some of them don't care, but they tend to care when the project is implemented and it appears not to be in their favour.

The study also revealed public apathy as another challenge in achieving public participation in solid waste landfill management from the view point of the Municipal

Assembly. This was a concern that was noted by all the respondents in the Municipal Assembly. In the words of one respondent from GaSMA he noted that:

Most of the people in this municipality do not like attending the public hearings and fora. The only time you will see them is when they want to express their displeasure or disapprove of a project.

Emerging evidence from the findings depicts a picture of public opposition and poor information flow which has been identified earlier. This goes on to confirm the finding made by Turner (2014) who noted that citizens tend to be apathetic as a result of the way public hearings were structured. He identified that the public felt their interests were not being met at such gatherings as they were characterised by little time for dialogue and lengthy presentations from the officials of GaSMA and AMA. At the end, the members of the public express frustration. Similar to the finding by Turner (2014), this study could narrow down the source of the apathy to a calculated attempt made by AMA and GaSMA to hinder the active engagement of citizens in decisions that concern them. Evidence confirms that some members of the public are side-lined politically. Hence, there is no motivation for their representation and inclusion, because of the view that they are against the incumbent government.

5.6.7 Accountability and Transparency

The study also indicates lack of transparency and accountability as some of the reasons that cripple the levels of public participation in the municipality. This concern was expressed by all the Assembly Members who were engaged in the in-depth-interviews. They further explained that when transparency and accountability are lacking they are unable to make meaningful contributions at meetings. Gathering from their responses, it came out clear that issues about revenue generated from waste

collection and landfill site management in the Assembly are shrouded in secrecy. The Oblogo Assembly Member averred that:

The processes in the Assembly is often not straight forward. Can you believe that as an Assembly Member, I am mostly not informed and even if I am fortunate to have any information about any developmental issue, it is very late?

It was observed that there was lack of transparency. The Assembly Members who are the local legislators, cannot tell exactly the transparent nature around which contractual arrangements are done and also, how revenues are disbursed. The findings also revealed that there are inadequate efforts towards social accountability fora in the Municipality. This revelation confirms a similar finding that notes lack of transparency and access as a hindrance in the governance system of budgetary process (Ahenkan et al., 2013).

In another vein, deficiencies of accountable governance on the side of the Assembly Members were justified on the grounds of finance. A former Assembly Member of Gbawe noted in an interview that:

...Even though the best thing to do is to give the citizens feedback on whatever decisions were made on their behalf, I can't do it, especially when my work as an Assembly Member is almost like a voluntary one.

The official at the Waste Management Department of AMA expressed a concern that there has not been adequate openness between the chiefs and the members of the citizens. He pointed out that this has created difficulty between the AMA and the public in the past. Such that when contracted workers are about to dump waste at the landfill site they are attacked and opposed by the public. This finding is similar to what Oteng-Ababio (2014) noted in his study about AMA officials and drivers of waste truck coming under the attack of the public. On the other hand, the respondents

in the FGDs also shared the view that there has not been any development in the communities despite the fact that royalties are paid to the chiefs. An official from EPA remarked that:

The public appreciates it if participatory processes will be a little transparent and if they could demand for accountability. But achieving that is very difficult sometimes, especially if you don't share the same knowledge or experience of what you are doing with the local people. For instance, there are some developmental issues that you may be discussing with the public yet the public may not be abreast with it...It is likely that the public would not take part in activities that they perceive would pose threats to them at the end of the day.

The EPA believes that when the public participates in monitoring of the landfills it could be possible for them to learn some useful lessons that would help to make a case for future siting of landfills.

5.6.8 Financial Constraint

The officials of Waste Management Department of the AMA and EPA explained that there was the need for the public to pay some token amount for the wastes that they generate, which end up at the landfill sites. The findings indicate that some members of the public are reluctant in paying for the solid waste service delivery provided to them by the Municipal Assembly. This was identified to have a link with earlier challenges identified as apathy, mistrust and ineffective communication with the public. The AMA official averred that:

Some members in the communities don't subscribe to the waste services delivery provided by us. Instead, they prefer to dump the rubbish by the roadside. We have bye laws that make it compulsory for every home to own dustbins. Our contracted workers go round to collect the rubbish at a fee. What we mostly experience is that some members of the public either dump the rubbish by the road side or hope that it rains so that they dump the rubbish in the drains.

Responses from the FGDs revealed that the prices charged per household is deemed very expensive. This explains why some members of the public are unwilling to patronise the waste services delivery. It was noted that the fees per household ranges

from fifteen Ghana cedis (GH¢15) to twenty-five Ghana cedis (GH¢25) per month, and this was confirmed by both the citizens and the GaSMA. This further supports the point made earlier that the public is apathetic towards the officials of AMA and GaSMA, since they hardly make it to public hearings and thus, feel excluded in the final decisions about the agreed fee charges for waste services delivery. Consequently, the low patronage on the side of the public, creates financial burden for the AMA and GaSMA in the management of the landfills.

5.7 Conclusion

The chapter presented and discussed the findings gathered from the field. It answered the research questions by making meanings from the responses provided by respondents. Thus, answers to the questions on the public's level of participation in solid waste landfill management, the effects of the level of participation of the public and the challenges involved in achieving public participation in solid waste landfill management were discussed and analysed with supporting literature.

CHAPTER SIX

SUMMARY, RECOMMENDATIONS AND CONCLUSION

6.0 Introduction

This final chapter provides a summary of the study, makes recommendations and finally presents a conclusion on the research. The chapter contains four main sections. The first section presents an overview of the research problem and methodology adopted for the study. The second presents a summary and evaluation of research objectives. Recommendations are provided to EPA, the MLG&RD, AMA, GaSMA, and citizens. The final section concludes and suggests areas for future research.

6.1 Overview of Research Problem and Methodology

Although advocacy is made for public participation in environmental decision-making, not much is known about how the views and inputs of local citizen are able

to influence decision-making at the local level. Per the provisions of EPA in the Environmental Assessment Regulations, 1999 (L. I. 1652), it may be said that efforts have been made to include the public in decision-making processes. It is however undisputed that there is still room for improvement, since not much is seen with the influence of the public's input in decision-making. Extant literature discusses the importance of public participation in environmental policy. Although there are studies in the area of public participation, there exists great disparity in terms of studies that focused on the developed world as compared to the developing world (Stewart and Sinclair, 2007; Font. and Navarro, 2012; Yackee, 2013; Kaur and Lodhia, 2014). This study focused attention on public participation in solid waste landfill management from the context of the developing world using GaSMA of the Greater Accra Region of Ghana.

Existing literature has not paid much attention to the study of the level and effects of public participation in solid waste landfill management. There was therefore the need to contribute to literature by filling this gap. The study used the stakeholder theory, the model on the ladder of participation by Arnstein (1969) and the model on the interest of participation by White (1996). The study relied on these theoretical frameworks to meet the specified objectives of the study.

In order to achieve the research objectives, the study employed qualitative research methods. Respondents were purposively sampled. Three (3) respondents each from EPA and GaSMA were engaged in face-to-face interviews. One (1) respondent from the Waste Management Department of AMA and three (3) traditional leaders were also engaged in a face-to-face interview as well as a total of four (4) local government representatives. In addition to the interviews, three (3) FGDs comprising five (5)

participants each, were held with participants from the Djarman, Gbawe and Oblogo communities.

6.2 Summary and Evaluation of Research Objectives

This section summarises the findings made by the study. It presents the findings based on each of the specific objective that was set in the first chapter of the study. The first sub-section presents a summary of the first specific objective. The next focuses on the second specific objective. The third specific objective is presented in the final sub-section.

6.2.1 The Level of Public Participation in Solid Waste Landfill Management in the Ga South Municipal Assembly.

The study found that the level of public participation in GaSM is mainly at the level of ‘non-participation’ and ‘degree of tokenism’ in all stages of decision-making of solid waste landfills is concerned. Although the ideal situation of participation should result in empowering the public, the study found out that public participation in GaSM is done to meet legitimate requirements, ensure sustainability and efficiency of solid waste facilities. As such, the public’s contributions at public hearings are unable to influence the final decision-making process. It was revealed from the study that the highest level of public participation at the planning stages was that of degrees of tokenism. Similar to the study by Arnstein (1969), the public participation took the form of receiving information from local authorities, consultations with the chiefs and

elders of the communities and appeasing the public with the provision of hospitals and market places.

EIA takes place during the planning stages of decision-making. It is at this stage that the public is provided the opportunity to be part of the decision-making process. However, the study revealed that the public is mostly educated, informed and convinced by the Municipal Assembly of the need to convert old quarry pits into landfills sites as a result of the fact that the pits are threats to human and animal life. The study operationalized the term 'public' to mean the ordinary citizens, chiefs, Assembly Members and Unit Committee Members. Quite interestingly, it was observed from the study that the chiefs, serving in their capacities as the custodians of the land, had greater influence in the decision-making process. Their level of participation can be likened to partnership. Unlike the chiefs, the citizens appear not to have any influence in the decision-making process. Thus, their participation can be likened to non-participation. The Assembly Members and the Unit Committee Member, were observed to be participating at the level of 'degrees of tokenism' as their level of participation is representational.

The level of public participation at the landfill project implementation stage can be likened to what White (1996) described as the instrumental participation. At this stage of decision-making process, the participation of the public was identified as their engagement in communal labour. Another means by which the public, especially the ordinary citizens participated was through their contract of employment by the local government authority to provide solid waste service delivery. Most of these contracted workers act as landfill site managers and waste collectors.

At the post-implementation stages of decision-making, the public participated through an organised meeting called the public review of projects. This level of participation at this stage can be likened to the representative participation and degrees of tokenism as described by White (1996) and Arnstein (1969) respectively. It was revealed from the study that at the public review of projects, members of the public were provided the platform to evaluate and also provide inputs that should be factored into on-going projects. The study found that although suggestions are made by the public, such suggestions are unable to influence the decision that is finally made as such decisions are relegated to the background.

6.2.2 Effects of the Level of Participation in Solid Waste Landfill Management

It was found from the study that sustainability, gaining leverage and efficiency were the main effects of the level of participation in the management of solid waste landfill management. In addition to these effects, mistrust of authorities, conflicts, public acceptance and ownership of landfill facilities were also identified as other effects that may result from the public's level of participation. From the study, it was observed that the public ensures the sustainability of a project and gives its social acceptance when they perceive that their inputs are able to influence the decision-making process. Sustainability is ensured when the public is able to obtain leverage and add their voice to the decision-making process.

Also, it was revealed that when the participation of the public is instrumental, it ensures efficiency. Thus, participation serves as a means to minimise unnecessary waste of material and financial resources. However, the study discovered that when

the public perceives that participation is lacking in the decision-making process of AMA and GaSMA there is mistrust of the local government and the public opposes the implementation of landfill projects.

6.2.3 The Challenges Involved in Achieving Public Participation in Solid Waste Landfill Management

The study identified the challenges in achieving public participation to include public mistrust of local government officials, ineffective communication between the public and the Municipal Assembly, institutional deficiency in collaboration, political interference, weak accountability and transparency and public apathy. These challenges were identified as factors that negatively impacted public participation in solid waste landfill management in the GaSM. To some extent, these challenges were identified as the explanation for previous conflicts and mismanagement of the solid waste landfill sites that were recorded within the municipality in the past.

6.3 Recommendations

Based on the experiences and the findings from the study, the following recommendations have been provided with the hope that they will receive the needed consideration. The recommendations have been provided for policymakers, including, central government, regional government and the local government as well as government institutions and private bodies that have a role to play in solid waste landfill management.

A key recommendation stemming from this study calls for active collaboration between the educational unit of the EPA and the National Commission for Civic Education (NCCE), to take up the duty of educating the public on their rights and

responsibilities. Through such an arrangement, it is believed that there will be less public apathy in the future. As was shown from the study, some members of the public are apathetic and disinterested because they are less informed about issues of the environment and solid waste landfill management in particular. EPA as a regulatory body in achieving her mandate of ensuring a safe and healthy environment, suggested that a lot of education and awareness creation must be the focus of the government. This recommendation is provided because it is targeted at the largest stakeholder group, the public, as far as landfill siting and management is concerned. There is therefore the need to get the public fully interested and abreast with issues about their rights and responsibilities, as far as the protection of the environment is concerned.

Secondly, it is recommended that efforts should be made by GaSMA and AMA toward increasing transparency and accountability in all public participatory processes. In order to achieve this, a conducive environment must be created by the central, regional and local governments, in order to allow CSOs within the municipality champion the course of promoting transparency and accountability. The study therefore suggests that all stakeholders, including CSOs, demand and hold the GaSMA and the AMA responsible and accountable for all the resources that are entrusted into their hands. Citizens can demand accountability and transparency only when there is openness in the processes of the AMA and the GaSMA.

Furthermore, based on the findings from the study, it is recommended that there should be clear lines of operation and proper definition of roles between the AMA and GaSMA. As was revealed from the study, AMA transcends her limits of operations by deciding to site landfills within the GaSM without adequately involving the officials

of GaSMA and members of the public. This situation results from inadequate collaboration among the chiefs, AMA and GaSMA. Central government, through the MLG&RD could consider drawing clear lines of jurisdictional boundaries and enforce the established modus operandi for landfill management within the municipality.

Finally, the study recommends that the guideline on landfill management by the EPA be elevated to a legal status. When this is done, the legal document can act as a tool for monitoring and sanctioning acts that go contrary to its provisions. This will help in ensuring strict adherence to rules and regulations in the operation of landfills. The study therefore recommends the levels of participation of the public be clearly emphasised and also be given legal backing in the guideline. As it stands now, the guideline only uses moral suasion by appealing to the conscience of the public to participate in solid waste landfill management, without attaching sanctions to the provisions of the guideline.

6.4 Conclusion

This research focused on public participation in solid waste landfill management from the developing world perspective, using GaSMA as a case study. Public participation is seen as an exercise embarked upon by the bureaucrats to solicit views from the public in order to promote democratic decision-making in all public projects, programmes and policies (Neshkova and Guo, 2011). As an essential tool in democratic decision-making processes, it ensures transparency and accountability, public acceptance of project and reduces conflicts to a large extent (Owusu et al., 2012). The study established that the level of participation of the public is not satisfactory, as their inputs do not influence the decisions made by the GaSMA and

the AMA. Based on the findings of the study, recommendations have been provided for consideration by policy makers, government institutions and civic organisations.

6.5 Areas for Further Research

Although this research has thoroughly been conducted in the subject area, it is suggested that future studies could focus on the role of public participatory mechanisms in enhancing effective public participation in solid waste landfill management.

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APPENDICES

APPENDIX A: INTERVIEW GUIDE FOR ENVIRONMENTAL PROTECTION AGENCY OFFICIALS

Dear Respondent,

I am a student from the University of Ghana Business School, pursuing a Master of Philosophy in Public Administration. I am in my final year and as part of the University's requirement for the programme, I have to conduct a research. I therefore wish to conduct a study into public participation in solid waste landfill management in the Ga South Municipality of the Greater Accra Region of Ghana. I humbly request that you allow me to ask you some questions which will help me gain better understanding into the area of study. Please be assured that the information you provide will be treated with the highest level of confidentiality and will be anonymously used for the purposes of the research report.

Thank you very much for your willingness to cooperate.

Name of Interviewee.....

Day and Time of Interview.....

Position of Interviewee.....

1. What role does EPA play in the siting of solid waste facilities such as a landfill?
2. What provisions are in place to ensure that proponents of landfill projects adhere to the best practices suggested in the EPA guideline?
 - i) Was the Best Practice Landfill Guideline enforceable as a legal document as at 2002?
 - ii) What is the current status of the Landfill Guideline?
 - iii) What are the challenges encountered in following the guideline for landfill management?
3. What requirements must be met in the siting of landfills?
 - i) Is there any provision for public participation in the landfill siting process?
 - ii) How has the public responded to such processes in the past, has the public been reluctant or have they been supportive?
 - iii) What factors account for the success or failure of public participation processes?
4. What level of participation is encouraged in the EIA process for landfill siting?
 - i) What level of participation has EPA always encouraged?
 - ii) What factors influence the choice of the level of participation?
 - iii) How does EPA's choice of level of participation affect solid waste landfill site management?

5. Which participatory mechanism does EPA encourage project proponents to make use of in order to encourage public participation.
 - i) How effective is public hearing as a participatory mechanism
 - ii) How effective are public fora
 - iii) How is effective is a public notice
6. What are the challenges of public participation in solid waste landfill management? Probe. How has these been addressed? Is there any way you think this could be better done? How?
7. What are the achievements of EPA with regard to public participation in solid waste landfill management?
8. What measures should be put in place to improve upon public participation in the management of solid waste landfill sites?

APPENDIX B: INTERVIEW GUIDE FOR THE PUBLIC

Dear Respondent,

I am a student from the University of Ghana Business School, pursuing a Master of Philosophy in Public Administration. I am in my final year and as part of the University's requirement for the programme, I have to conduct a research. I therefore wish to conduct a study into public participation in solid waste landfill management in the Ga South Municipality of the Greater Accra Region of Ghana. I humbly request that you allow me to ask you some questions which will help me gain better understanding into the area of study. Please be assured that the information you provide will be treated with the highest level of confidentiality and will be anonymously used for the purposes of the research report.

Thank you very much for your willingness to cooperate.

Name of Interviewee.....

Day and Time of Interview.....

Position of Interviewee.....

1. What is your understanding of public participation?
 - (i) What examples of public participation can you give?
2. Have you ever been involved in any public hearing process in the past and which project's public hearing did you attend?
 - (i) How often do you attend public hearings?
3. Do you think the project proponent considered the inputs you made at the public hearing process? Why do you think they did or they did not?
4. Do you think you need to be involved in the decision-making (EIA) process for the siting of landfill?
 - i) What reason(s) will you give for your need to be included in the decision-making process?
5. In what ways do you think members of the community can be involved in landfill management decision-making process?
 - i) Would you want to be attending public hearing meetings and gatherings?
 - ii) What is your view on the need to be represented by a community leader in landfill management decision?
 - iii) What are the strengths of such an approach?
 - iv) Would you want to be on an advisory board in charge of making decision for solid waste management and landfill siting?
 - v) Why would you want to be part of the advisory board, is there any special reason?
6. How do the local government officials or project proponent organise public hearing?

- i) In your opinion, how would you expect public participation to be organised?
7. What stage do you think is appropriate for you to be involved in the landfill siting decision; is it at the planning, implementing or evaluation stage?
8. Do you approve of the siting of the landfill in this community?
 - i) In your opinion, were your inputs considered in the final decision?
 - ii) Why do you think your opinions were considered or otherwise?
9. What challenges do you encounter during public hearing processes?
 - i) Do you think this can lead to a good or poor performance in the delivery of waste management services?
10. Would you want to take part in any public hearing process in the future?
11. Are you satisfied with the decision of siting a landfill in your neighbourhood?
12. What are the reasons for your satisfaction or dissatisfaction?
13. Do you have any suggestion of where a landfill should be sited instead of this community?
14. Are you pleased with the way the landfill site is managed?
 - i) Do you think there is a better way of managing the site and how?

**APPENDIX C: INTERVIEW GUIDE FOR GA SOUTH MUNICIPAL
ASSEMBLY**

Dear Respondent,

I am a student from the University of Ghana Business School, pursuing a Master of Philosophy in Public Administration. I am in my final year and as part of the University's requirement for the programme, I have to conduct a research. I therefore wish to conduct a study into public participation in solid waste landfill management in the Ga South Municipality of the Greater Accra Region of Ghana. I humbly request that you allow me to ask you some questions which will help me gain better understanding into the area of study. Please be assured that the information you provide will be treated with the highest level of confidentiality and will be anonymously used for the purposes of the research report.

Thank you very much for your willingness to cooperate.

Name of Interviewee.....

Position of Interviewee.....

Day and Time of Interview.....

1. What is your understanding of public participation?
 - (i) What are the benefits of public participatory activities?
 - (ii) Do you know of any disadvantages of public participation?
2. Has the Municipality ever engaged the public in any public participatory activity in the past?
 - (i) When was the last public participatory activity organised in the Municipality?
 - (ii) Which type of public participatory activity was organised?
 - (iii) How was the public involved in the public participatory activity mentioned in (ii) above?
 - (iv) How would you describe the public's attendance?

- (v) What factors might have accounted for the number of people who were present?
3. Does the Municipality consider public hearing as one of the ways of involving the public in decision-making?
4. In your opinion was consideration given to the inputs of key stakeholders at the public hearing?
 - (i) On what basis would you say that the views of the public influenced the decision made on the solid waste landfill management?
5. Do you find it necessary to involve key stakeholders such as members of the community in the decision-making (EIA) process for the siting of landfill?
 - (i) Why do you deem the public's involvement necessary for landfill management decision-making?
6. In what ways can the public be involved in solid waste landfill management decision-making process?
7. How does the Municipality organise public hearing?
 - (i) What processes are involved?
8. What stage do you think is appropriate for members of the general public to be involved in the landfill siting decision; is it at the planning, implementing or evaluation stage?
9. Do you approve of the siting of the landfill in this community?
 - (i) Are members of the public pleased with the decision of having the landfill sited in this community?
 - (ii) How did the public react to the decision to site a landfill in this community?

- (iii) How has the Municipality built consensus in past public hearing processes?
10. What do you perceive might be the cause of conflict or public opposition to a landfill siting decision in the past?
 11. What challenges do you encounter during public hearing processes?
 - (i) What practical steps have been put in place to minimise these challenges?
 12. Do you anticipate massive public participation from the key stakeholders in any future public hearing process?
 13. Are you satisfied with the decision of having a landfill sited in this community?
 14. What are the reasons for your satisfaction or dissatisfaction?
 15. Do you have any suggestion of where a landfill should be sited instead of this community?
 16. Are you pleased with the way the landfill site is managed?

**APPENDIX D: INTERVIEW GUIDE FOR WASTE MANAGEMENT
DEPARTMENT, AMA**

Dear Respondent,

I am a student from the University of Ghana Business School, pursuing a Master of Philosophy in Public Administration. I am in my final year and as part of the University's requirement for the programme, I have to conduct a research. I therefore wish to conduct a study into public participation in solid waste landfill management in the Ga South Municipality of the Greater Accra Region of Ghana. I humbly request that you allow me to ask you some questions which will help me gain better understanding into the area of study. Please be assured that the information you provide will be treated with the highest level of confidentiality and will be anonymously used for the purposes of the research report.

Thank you very much for your willingness to cooperate.

Name of Interviewee.....

Position of Interviewee.....

Day and Time of Interview.....

1. What is your understanding of public participation?
 - (i) What are the benefits of public participatory activities?
 - (ii) Do you know of any disadvantages of public participation?
2. Has AMA ever engaged the public in any public participatory activity in the past?
 - (i) When was the last public participatory activity organised in the Municipality?
 - (ii) Which type of public participatory activity was organised?
 - (iii) How was the public involved in the public participatory activity mentioned in (ii) above?
 - (iv) How would you describe the public's attendance?

- (v) What factors might have accounted for the number of people who were present?
3. Does the Municipality consider public hearing as one of the ways of involving the public in decision-making?
4. In your opinion was consideration given to the inputs of key stakeholders at the public hearing?
 - (i) On what basis would you say that the views of the public influenced the decision made on the solid waste landfill management?
5. Do you find it necessary to involve key stakeholders such as members of the community in the decision-making (EIA) process for the siting of landfill?
 - (i) Why do you deem the public's involvement necessary for landfill management decision-making?
6. In what ways can the public be involved in solid waste landfill management decision-making process?
7. How does AMA organise public hearing?
 - (i) What processes are involved?
8. What stage do you think is appropriate for members of the general public to be involved in the landfill siting decision; is it at the planning, implementing or evaluation stage?
9. Do you approve of the siting of the landfill in residential areas?
 - (i) Are members of the public pleased with the decision of having the landfill sited in their community?
 - (ii) How did the public react to the decision to site a landfill in this community?
 - (iii) How has AMA built consensus in past public hearing processes?

10. What do you perceive might be the cause of conflict or public opposition to a landfill siting decision in the past?
11. What challenges do you encounter during public hearing processes?
 - (i) What practical steps have been put in place to minimise these challenges?
12. Do you anticipate massive public participation from the key stakeholders in any future public hearing process?
13. Are you satisfied with the decision of having a landfill sited in this community?
14. What are the reasons for your satisfaction or dissatisfaction?
15. Do you have any suggestion of where a landfill should be sited instead of this community?
16. Are you pleased with the way the landfill site is managed?

APPENDIX E: INTRODUCTORY LETTER

UNIVERSITY OF GHANA
BUSINESS SCHOOL
DEPARTMENT OF PUBLIC ADMINISTRATION
AND HEALTH SERVICES MANAGEMENT



PAHS/26

Ref. No.:

12th February, 2015

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION

The bearer of this note, Ms. Dinah Sackey is a final year student of the University of Ghana Business School, Legon, undertaking a course leading to the award of Master of Philosophy (MPhil) in Public Administration.

As part of the requirements of the programme, she has chosen to research on the topic: *Public Participation and Solid Waste Landfill Management: A study of Ga South and Ga East Municipality of Greater Accra Region.*

I would be most grateful if you would give her the necessary assistance to facilitate her data collection.

Thanks for your cooperation.

Yours faithfully,


Dr. Kwame Asamoah
Lecturer/Supervisor



COLLEGE OF HUMANITIES

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APPENDIX F: FIELD PHOTOS

The capped Sarbah landfill site



Source: Field photographs by author (2015).

A poorly managed landfill site in Gbawe Community



Source: Field photographs by author (2015).

Leachate Flowing from the Landfill Site



Source: Field photographs by author (2015).

A two-week old landfill site in Oblogo



Source: Field photographs by author (2015).