

UNIVERSITY OF GHANA

**ANALYSIS OF SANITATION PROMOTION STRATEGIES OF
KANESHIE MARKET COMPLEX, ACCRA**

BY

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**THIS THESIS/DISSERTATION IS SUBMITTED TO THE
UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILMENT
OF THE REQUIREMENT FOR THE AWARD OF MPhil HEALTH
SERVICES MANAGEMENT DEGREE**

JULY, 2015

DECLARATION

I do hereby declare that this work is the result of my own research and has not been presented by anyone for any academic award in this or any other university. All references used in the work have been fully acknowledged.

I bear sole responsibility for any shortcomings.

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YVONNE AKOSUA ODURO

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CERTIFICATION

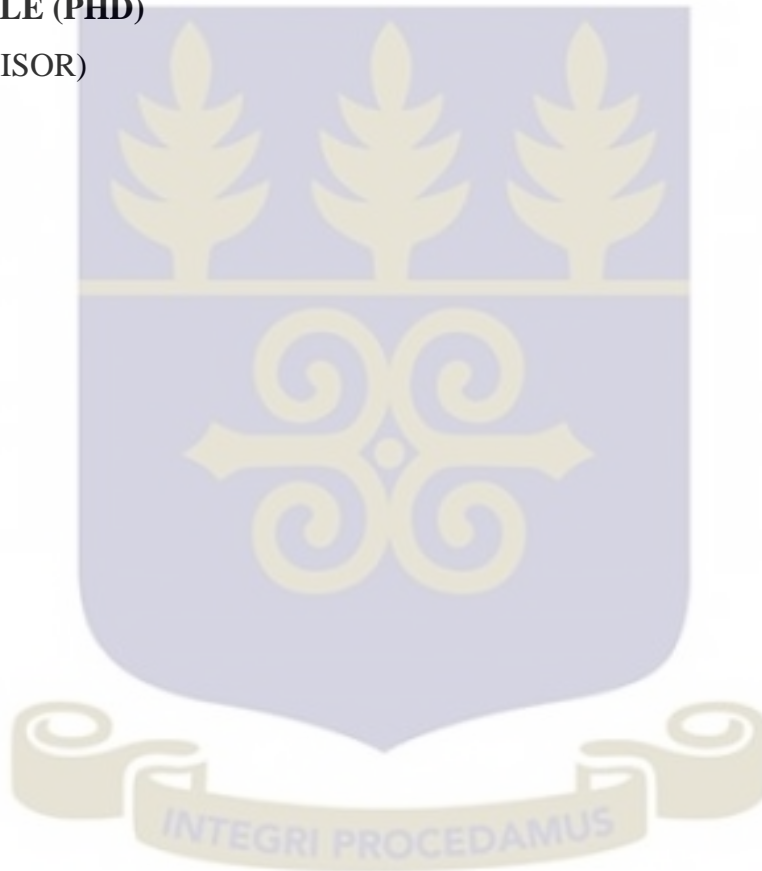
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J. N. BAWOLE (PHD)
(SUPERVISOR)

DATE



DEDICATION

To Anthony Yaw Oduro and Joana Hassan. You made it happen.



ACKNOWLEDGEMENT

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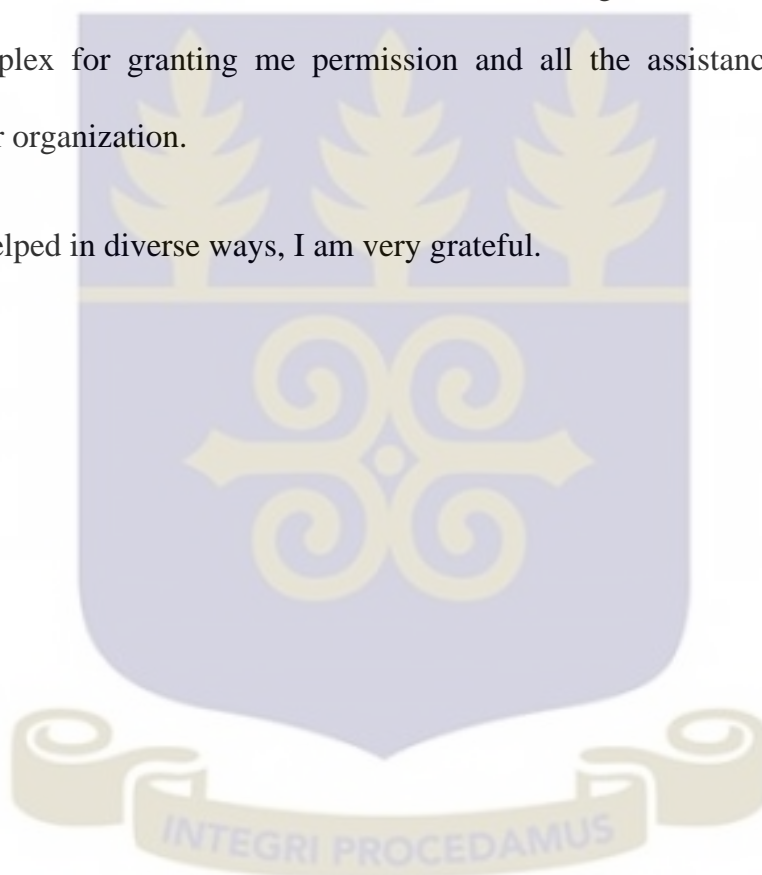


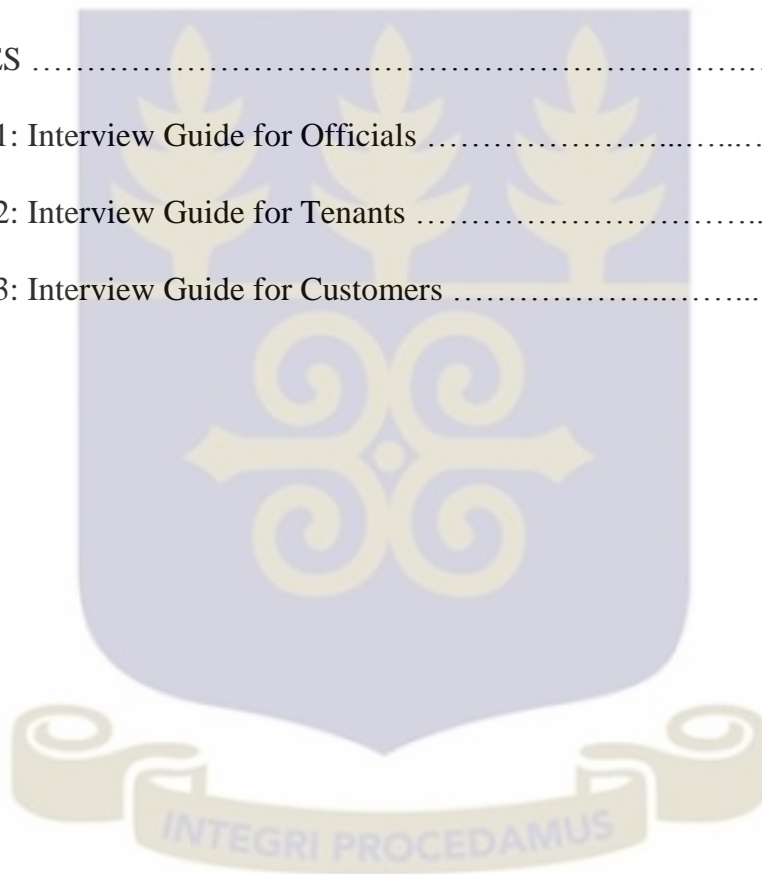
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LIST OF ABBREVIATIONS

AMA	Accra Metropolitan Assembly
BCC	Behaviour Change Communication
BOF	Biodegradable Organic Fraction
CBO	Community-Based Organisations
CHC	Community Health Clubs
CLTS	Community-Led Total Sanitation
DANIDA	Danish International Development Agency
EHP	Environmental Health Project
GNA	Ghana News Agency
HIF	Hygiene Improvement Framework
I/NGOs	International/Non-Governmental Organisations
LMICs	Low and Middle Income Countries
MCI	Millennium Cities Initiative
MDAs	Ministries, Departments and Agencies
MDGs	Millennium Development Goals
MFAD	Ministry of Foreign Affairs, Denmark
MINT	Materials in Transition
MLGRD	Ministry of Local Government and Rural Development
MMDAs	Metropolitan, Municipal and District Assemblies
MVP	Millennium Villages Project
MWRWH	Ministry of Water Resources Works and Housing
NESSAP	National Environmental Sanitation Strategy Action Plan
PHAST	Participatory Hygiene and Sanitation Tran

SYND	Strategic Youth Network Development
UNDP	United Nations Development Programme
UNICEF	United Nations Children’s Fund
USAID	United State Agency for International Development
VERC	Village Education Resource Center
WASH	Water, Sanitation and Hygiene
WBG	World Bank Group
WEEE	Waste Electrical Electronic Equipment
WES	Water and Environmental Sanitation
WHO	World Health Organisations
WSP	Water and Sanitation Program
WSP	Water and Sanitation Program
WSSCC	Water Supply and Sanitation Collaborative Council



ABSTRACT

This study sought to investigate the sanitation promotion strategies in the Kaneshie Market Complex. It looked at actual activities, access to water and sanitation hardware and participation of stakeholders in promoting sanitation. The qualitative study design was used for the study. A total of fifty people made up of ten officials, twenty tenants and twenty customers were purposively selected to respond to a number of questions on sanitation in the market. Interview guides were therefore prepared and interviews were conducted. Responses were later grouped under main topics in line with the objectives and research questions.

The study revealed mostly preventive strategies with several activities targeted at promoting sanitation in the market. The activities include sweeping, washing of floors, organization of clean-up exercises, spraying and fumigation, use of sanctions and punishments. There are also several sources of water, toilet facilities and other sanitation promotion hardware. In terms of stakeholder participation, those with responsible roles in sanitation promotion are doing quite well. However, their works are fraught with challenges in areas of staffing, financing, population growth, attitude and behavioural problems as well as power crisis. The major drawback in sanitation in the market is waste collection which is under the prerogative of the Accra Metropolitan Assembly (AMA) and inability of the service providers to meet their demand has (A become a source of worry to the management of the market.

It is therefore suggested that the market expands its infrastructural base to absorb the growing population of traders in order to increase its control in sanitation. In addition, management must look at other technologies in waste management that can draw organisations who need the residues as raw materials, and also use the water and improved sanitation facilities to recover cost of sanitation promotion.

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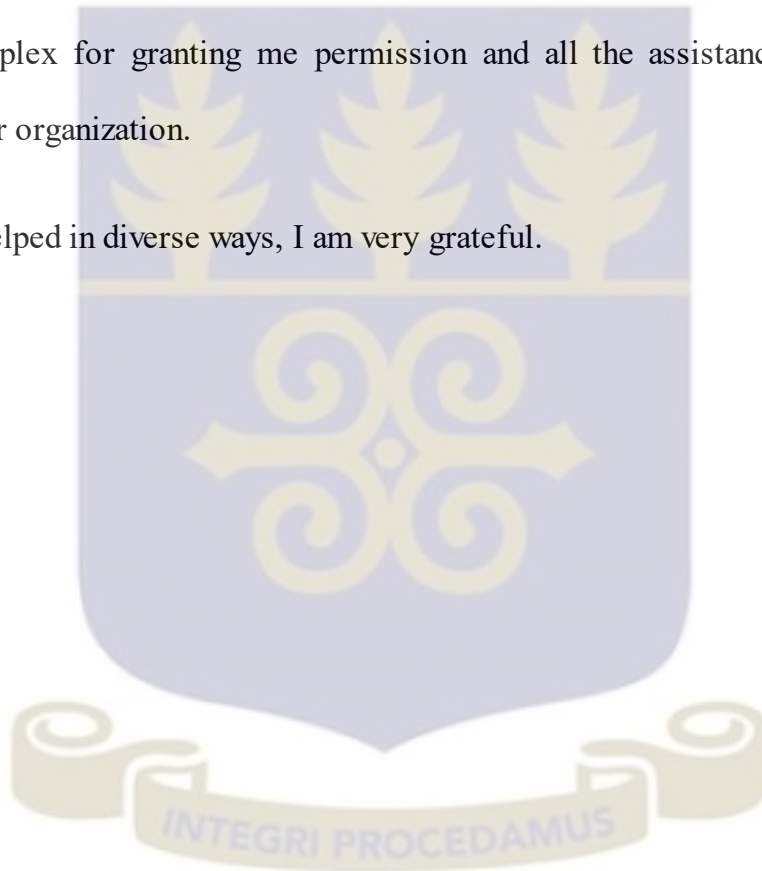


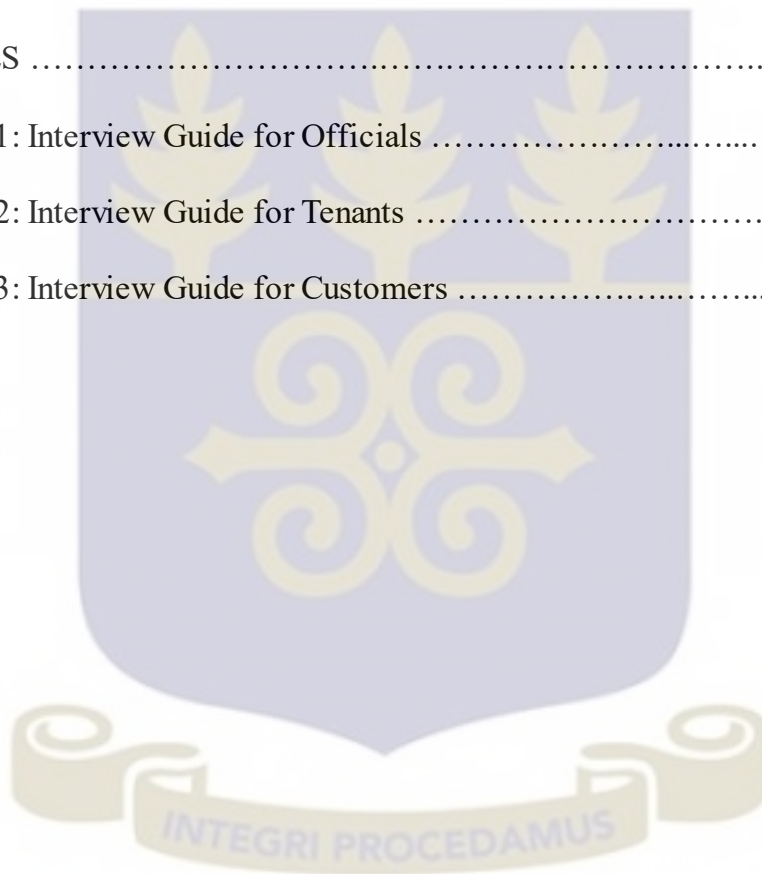
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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Since the year 2000, the world now has a global agenda from which countries can draw knowledge and experience. Known as the Millennium Development Goals (MDGs), eight goals have been set with specific targets to help accelerate the development of many countries all over the world, especially Low and Middle Income Countries (LMICs). Of the eight goals, Goal 7 is aimed at ensuring environmental sustainability. One of the targets is to half, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation (WHO, 2006).

The WHO Sanitation Promotion Handbook (1998, p.2) explains sanitation as “interventions to reduce people’s exposure to diseases by providing a clean environment in which to live; measures to break the cycle of disease. This usually includes disposing of or hygienic management of human and animal excreta, refuse, and wastewater, the control of disease vectors and the provision of washing facilities for personal and domestic hygiene. Sanitation involves both behaviours and facilities which work together to form a hygienic environment”. Countries are therefore encouraged to integrate these targets into their development policies and programmes.

According to the Millennium Development Goal Report (2013), gains in sanitation have been impressive but not good enough because poor sanitation can affect health, economic and social development. It further estimated that 70% of people in the urban areas lack access to sanitation even though urban sanitation is a priority. Water, sanitation and hygiene (WASH) are among the powerful drivers of human development as it affects quality of life

at many levels, including improved health and economic status (UNICEF/WHO, 2006). ‘There is growing awareness among public health practitioners that, until proper hygiene is consistently practiced, both at home and in the community as a whole, the desired impact of improved water and sanitation infrastructure in terms of community health benefits cannot be realized’ (WASH BCC, 2011). It is estimated that about 2.5 million children lose their lives through diarrhea diseases that could have been simply prevented by good sanitation (UNICEF/WHO, 2009). However, effective hygiene and sanitation promotion is a major challenge for many low-income countries (Rheinlander, Samuelson, Dalsgaard & Konradsen, 2010). The World Bank Group (2008) estimates annual economic losses to the tune of \$260 billion in developing countries due to poor sanitation and water supply.

When sanitation improves, people’s livelihood and health or well-being will become better thereby enhancing economic productivity of the masses (Kumie & Ali, 2005). It is therefore important that sanitation is treated as a major sector which encourages research, innovation and development as well as professionalism (Patanayak, Poulos, Yang & Patil, 2009). There is also the need for the development of strategies that can improve the sanitation delivery systems which in themselves must be collaborative in nature because sanitation promotion is a collective responsibility (Allison, 2002). This is particularly important for Ghana because a lot of attention has been placed on hygiene promotion.

However, ever since sanitation became known to improve health, many of the developed countries have developed and continue to develop effective sanitation strategies - basic, on-site, food, environmental and ecological - for the various populations (Harvey, 2008). The same cannot be said of many developing and underdeveloped countries (Hossain, & Howard, 2014; Green, de Week, & Suarez, 2013; Mallick, 2010).

Adopting a new resolution, the UN General Assembly urged UN Member States and relevant stakeholders to encourage behavioural change and the implementation of policies to increase access to sanitation among the poor, along with a call to end the practice of open-air defecation, which it deemed "extremely harmful" to public health (WHO, 2013). All 189 nations are, at all levels, to ensure the achievability of this goal by formulating and implementing policies on sanitation to eradicate the bad practices that have high rippling effects on even the achievement of the other goals. This has become especially urgent for developing countries like Ghana, where 'development' appears to precede planning (UNICEF/WHO, 2006).

In achieving the MDGs which have become a universal development agenda, many institutions have set out to contribute their quotas in diverse ways. Among them is the Millennium Cities Initiative (MCI), a project of the Earth Institute, Columbia University, New York, which was founded in 2006 by world-renowned development economist Jeffrey D. Sachs as the urban counterpart to the Earth Institute's Millennium Villages Project.

The Millennium Cities Initiative was established to help select, under-resourced municipalities across sub-Saharan Africa to eradicate soaring urban poverty and attain the Millennium Development Goals (MDGs). MCI assists the "Millennium Cities" - generally regional capitals near to the sites of the Millennium Villages Project (MVP), MCI's sister integrated rural development effort - in identifying critical gaps in realizing the MDGs, as well as the financing, programme and partners capable of filling them. MCI's extensive network of partners around the world - including investors, philanthropists and entrepreneurs; non-profits and corporations; and governmental and multilateral institutions - joins MCI in the belief that, for the first time, our generation has the opportunity to complete an urban transformation across Africa and beyond (Columbia University, 2013).

1.2 Research Problem

Inadequate sanitation is a major cause of diseases world-wide and improving sanitation is known to have a significant beneficial impact on health both in households and across communities. One area which needs good sanitation is the market. Extant research has examined several issues related to sanitation in different countries including participation of communities (Sansom, 2011; Hadi, 2000). Ghana as a nation also has its share of research in sanitation (Enu, 2013), (Thrift, 2007), (Jenkins & Scott, 2007) and (Whittington, Lauria, Choe & Hughes, 1993). Although these studies have exposed scholars to aspects of sanitation, they are handicapped in the area of sanitation in markets; that is, a notable gap in the discourse is the markets.

Municipal authorities are often responsible for sanitation management in most cities, especially waste management (Guerrero, Maas and Hogland, 2012). The Accra Metropolitan Assembly (AMA), the body responsible for all markets in the Accra Metropolis, has adjudged the Kaneshie Market as one of the best in its last market assessment report in 2008. This assertion is in comparison with markets that have poor infrastructure and sanitation. This is likely to give management a false image and may cause complacency in development efforts. An empirical research is therefore needed to accentuate the fact that the Kaneshie Market can be described as best in its own capacity rather than in comparison to poorly managed markets. There is also the need to know the ingredients of best practices in sanitation that can be found in the Kaneshie Market.

Also, sanitation management problems usually arise in areas where people gather. One area where large groups of people converge is the market. It is also home to products for human consumption and therefore a central or convergent point for people from all walks of life. Because most markets in Ghana happen to be the first port of call for many travellers, at all

times, it has teeming numbers of people. For many people seeking greener pastures, these markets become home perpetually until they can secure alternative accommodation. Media reports over the years have maintained gloomy sanitation practices of markets in Accra but extant empirical literature has been silent on this. There seems to be some neglect of markets which form a major point in the food chain.

When it comes to sanitation related issues, there are numerous policies, frameworks, guidelines and legislative instruments by both the Government of Ghana and world bodies such as the Ministry of Water Resources, Works and Housing (2011); Ministry of Local Government and Rural Development (2010); Environmental Sanitation Policy (1999); United Nations Children's Fund (UNICEF) (2005); and others which offer valuable insight into the roles and responsibilities of all stakeholders, including all those directly involved in the activities of markets. Success in sanitation therefore is directly related to stakeholder involvement. In line with this, it is important to ascertain to what extent stakeholder participation has contributed to the assertions made by the AMA (that the Kaneshie Market is one of the best markets in Accra in its 2008 Market Assessment Report).

One important aspect of sanitation promotion is the provision of sanitation hardware. For open markets or trading centres of foods and other consumables, there is high risk of contamination (Anandappa, 2013). Extant research has shown that from the farm to the home, there are likely routes of contamination. It is therefore necessary to be sanitation conscious, especially in handling consumables (Bartram and Cairncross, 2010). However, all that is available on markets in Ghana come from media reportage: for example, Bentil (2007), GNA (2014) and Jafaru (2014).

Sanitation literature often ends up as an exposition on a single aspect of sanitation such as solid waste management, storm-water management among others. "The focus on all the

components of environmental sanitation at this time is justified as there is the need to do more than narrowly promoting hygiene and improved latrines (or toilets) alone" (NESSAP, 2010, 20).

This thesis therefore looks at sanitation in the markets in a holistic manner, taking into consideration all the components of environmental sanitation that are likely to be seen in markets.

1.3 Research objective

The study seeks to

- i. Find out the strategies for promoting sanitation at the Kaneshie Market Complex.
- ii. Investigate access to water and sanitation hardware at the Kaneshie Market Complex,
- iii. Assess the level of participation of the stakeholders in promoting sanitation in the market.

1.4 Research questions

- i. Does the Kaneshie Market Complex have specific strategies for promoting sanitation?
- ii. Do people at the Kaneshie Market Complex have access to water and sanitation hardware?
- iii. What is the level of participation of stakeholders in sanitation promotion in the Kaneshie Market Complex?

1.5 Significance of the Study

Poor sanitation poses a lot of health risks and can negatively affect economic and social development (Patanayak et al., 2009). Currently in Ghana, it is one of the most pressing issues when it comes to urbanization and public places where large populations gather (Fried, n.d). With concerned authorities frantically looking for what works best, a study in this area can have many implications. This study has major implications for sanitation policy

formulation for the development of effective sanitation strategies for markets in the ever-growing city of Accra.

It will also present or make visible the possible steps or measures that can help improve sanitation in the Kaneshie Market in particular. The research considers the study organization in its own capacity, but it will also help all markets in general. It will also contribute to knowledge in the field of sanitation and academia as it will present new dimensions to sanitation research in public health domain.

1.6 Scope of the study

The study was conducted in the Kaneshie Market Complex, Accra. The main issue was about sanitation promotion strategies. Therefore, the study looked at specific strategies that the market was using to promote sanitation. The evidence was investigated from the points of the provision of sanitation hardware, sanitation promotion activities and the participation of stakeholders in promoting sanitation at the market. These were the dimensions captured in the objectives, the research questions and the conceptual framework of the study.

1.7 Definition of terms

Sanitation

“Interventions to reduce people’s exposure to diseases by providing a clean environment in which to live; measures to break the cycle of disease. This usually includes disposing of or hygienic management of human and animal excreta, refuse, and wastewater, the control of disease vectors and the provision of washing facilities for personal and domestic hygiene. Sanitation involves both behaviours and facilities which work together to form a hygienic environment” (Sanitation Promotion, 2008, p.2).

Sanitation hardware

Physical articles or items used in sanitation and hygiene promotion such as soap, garbage collectors, dust bins etc.

Promotion

“Promotion involves all the things one must do to raise or advance a cause, raise the profile and status of the cause, further the growth and expansion of the cause, and to further its popularity. Promotion, in the public health sense of the word, also involves providing the enabling mechanisms to others so that they may take up the cause armed with effective tools” (Sanitation Promotion, 2008, p.2).

Strategy

An elaborate and systematic plan of action including several activities aimed at achieving certain goals.

1.8 Chapter disposition

The study has five chapters in all. The first Chapter contains the introduction to the entire work. It has the background of the study, the research problem, research objectives, research questions, and a brief review of literature. In addition, it also covers the significance of the study, the research approach, scope of the study, definition of terms, chapter disposition and chapter conclusion.

Chapter Two basically discusses several issues in existing literature. It includes a chapter introduction, a review of theoretical literature, a review of empirical literature, a conceptual framework and chapter conclusion. This is followed by Chapter three which is the methodology. It explains the research approach, the research design, the sources of data, sampling - population of the study, sampling technique, sample size, frame and the unit of

analysis. It also looks at the limitations, instrumentation, the data gathering procedure, mode and instruments for data analysis, ethical concerns and the chapter conclusion.

Chapter four is data analysis and discussion of findings. It introduces and analyses the data. It also discusses the findings and further evaluates the research questions. This is followed by the final chapter which comprises the summary of findings, conclusion and recommendations. This chapter ends with lessons for policy implementation and further research.

1.9 Conclusion

Sanitation and hygiene matter everywhere and every time because they contribute highly to healthy living, economic development, social dignity and general environmental protection (WBG, 2015). It is for these reasons that all stakeholders must be actively involved in promoting sanitation. In addition, there is the need for innovations to accelerate and sustain the strategies that are put in place towards promoting sanitation. However, this cannot be done without constant research into the area in all places where the absence or inadequate sanitation can be detrimental to people's wellbeing and their environment.

Many policy documents have provided guides from which practitioners can draw knowledge and can develop technologies as well as effective and efficient innovative ideas. Now, much is left for organisations to centre these findings on their individual experiences and needs.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter is devoted to the already existing works on sanitation. It looks at the concept of sanitation and related issues in urban sanitation, documented sanitation promotion strategies, Ghana's environmental sanitation situation, stakeholders in sanitation promotion and sanitation in market. Further, the chapter also covers theories and models dealing with sanitation including the Improved Behavioural Model for Water Sanitation and Hygiene IBM- WASH (Dreibelbis et al, 2010), Sanitation for All (SAN ALL) (UNICEF, 2000), and the Hygiene Improvement Framework (EHP and partners, 2004) which focus how sanitation promotion must be considered at different levels.

2.2 The concept of sanitation

Sanitation can be defined as the 'adoption of measures to eliminate unhealthy elements especially with regard to dirt and infections' (Shastri, Raval & Mapuskar, 2010). Since the Sanitation Revolution of the nineteenth century, according to UNEP (2005), there is a growing body of knowledge demonstrating the fact that causes and pressures of any of today's environmental problems can be traced back, directly or indirectly, to the lifestyles, choices, values and behaviours of local communities (Daramola, 2012). This therefore calls for a holistic approach of participation in finding solutions thereby establishing the fact that all stakeholders have a role to play in the different processes of environmental sanitation, both in terms of subsidiarity of decision-making processes and sustainability of environmental services in the community (UNEP, 2005).

Currently, of the world's 7 billion people, some 2.6 billion people still lack access to improved sanitation, two-thirds of whom live in Asia and sub-Saharan Africa (WHO, 2006). And so, there is the need to shift away from simply providing centrally planned infrastructure to approaches that can help create and serve people's motivation to improve their own sanitation (WHO/UNICEF, 2013). This is because in developing countries, unimproved sanitation facilities have become the main cause of widespread and serious health problems. However, improvements in these services show few health benefits unless they are coupled with improved hygiene behaviour (Masangwi et al; 2010; Tsinda et al; 2013).

With poor sanitation, poor hygiene, and poor water supply systems still responsible for about 50% of the consequences of childhood and maternal underweight, there appears a link between the two: an exposure to one condition may increase the vulnerability of the affected person to the other (Mara, Lane, Scott & Trouba, 2010). Therefore, there is the need to develop innovative approaches and integrate them into social institutions such as schools, markets and health facilities (Rheingans, Dreibelbis & Freeman, 2006).

Also, epidemiological investigations have indicated that even in the absence of latrines that have been the concentration of sanitation strategies, diarrhoeal morbidity can be reduced considerably with the adoption of improved hygiene behaviour (WHO, 1999). Meanwhile, it has been observed that many national data and progress reports on the Millennium Development Goals (MDGs) target on sanitation have focused mostly on access at household levels without reference to access at public places like bus stations, schools and markets in urban areas even though these places are peculiar settings and temporary abode which inhabit people in transit or working for their livelihood (Adenuji & Afolabi, 2010).

Urban sanitation is much more complex, mainly because of higher population densities, less-coherent community structures, and opportunities for open defecation (Mara et al; 2010).

Urban sanitation must extend beyond the household acquisition of a toilet to a systems-based approach that covers the removal, transport, and safe treatment or disposal of excreta (Mara et al; A 2010). In addition, even though WASH (water, sanitation and hygiene) is a single sector, there has been little progress in achieving access to sanitation because there has been more concentration on water and hygiene (Loevinsohn, Guerrero & Gregorio, 1995).

2.3 Urban sanitation

Egun (2011) posits that urban authorities are faced with many problems which they seem incapable of managing or dealing with. Most of these problems often accompany urbanization and one of the areas where they face a challenge is waste management. Waste is generated from residential, commercial, institutional and industrial sources and consists of paper, plastic, glass, cloth, metal and organic materials (Gangwar, Deepali & Gangwar, 2012). Urban centres face several sanitation problems including Waste Electrical and Electronic Equipment (WEEE), Biodegradable Organic Fraction (BOF) which constitutes the largest proportion of solid waste, wastewater, faecal sludge among others (MLGRD, 2010).

The rate at which waste generates and accumulates is fast becoming a major environmental health problem in developing countries (Shastri et al; 2010). Indeed, sanitation is a complex issue that is linked not only to health but to social and economic development as well (Daramola, 2012). That makes it an 'essential service' (Environmental Sanitation Policy, Revised, 2010). Even though there are several approaches, they are mostly geared towards rural sanitation. Much must therefore be done with regard to urban sanitation which is plagued with many challenges (DFID, 2009).

In many countries, the collection and disposal of waste is seen solely as the responsibility of the government or the municipal assembly which are unable to execute this successfully due to several difficulties including financial constraints, low level of organizational skills, inadequate staffing among others (Global Waste Management Report, 2007). This is compounded by the majority of the populace who do not consider themselves as sharing in the responsibility of waste collection and disposal (Onibokun, 1999). Meanwhile, lack of sanitation or failure to execute sanitation strategies does not only threaten the health of the people but a threat and a burden to the environment itself (Samanta and Wijk, 2013). Sanitation in urban areas has become a basic necessity for improvement of the quality of life as well as the enhancement of efficiency of the people in their endeavours (Shastri et al./2010). The complex nature of urban sanitation calls for facilities and services that are cost effective and sustainable. Before these are chosen, there must be proper assessment of local (financial, technical and institutional) capacities as well as site-specific considerations in design, construction and operation of systems (GNSHMP, 2011).

Although many governments in collaboration with other stakeholders are making considerable efforts in tackling waste-related problems, many major gaps still exist to be filled making developing countries face uphill challenges to properly manage their waste. Most efforts are now being targeted at reducing the final volumes as well as generating sufficient funds for waste management (Ram, Reddy, Rao & Reddy, 2004). This problem has arisen because of the fact that sanitation has received less attention than water and hygiene even though they have always been seen as a single concept (Harvey, 2008). According to the UNDP Human Development Report (2006), even though sanitation is improving worldwide, same cannot be said of sub-Saharan Africa.

Therefore, there is the need to work towards the communities' understanding of the problem in order to encourage their collective participation. This can lead to the collective transition of local residents from victims to agents of change (Daramola, 2012). Konteh (2008) argues that, among other things, low income countries are unable to address their urban sanitation challenges due to policy weaknesses. Other challenges include inadequate data that must direct the provision of services (Konteh, 2008).

2.4 Sanitation promotion strategies

In promoting sanitation therefore several strategies have been developed by different groups and countries aimed at achieving the Millennium Development Goals. These strategies have varied over time with improvements as the years go by (Government of Nepal Sanitation and Hygiene Master Plan, 2011). This wide range of innovative approaches has been applied in low-income countries. Even though some have shown that peoples demand and interest in sanitation is low, the truth is that many people would want to have sanitation facilities but often cannot afford the cost of what is being offered them. Therefore, there is the need for a change in the way sanitation provision is dealt with; the product must be affordable and appropriate (Cairncross, 2010).

Documented strategies include a wide range of innovative approaches which have been applied in low-income countries, including participatory initiatives such as the Participatory Hygiene and Sanitation Transformation tool (PHAST), Community-Led-Total-Sanitation (CLTS) and Community Health Clubs (CHCs). School-based and child-friendly hygiene and sanitation programmes are also widely used in low-income settings (Jenkins and Scott, 2007). Similarly, social marketing approaches, such as promotion of handwashing with soap and using marketing approaches to selling sanitation, are gaining popularity (World Bank EHP, 2005). CLTSs are aimed at promoting self-respect and not merely promoting standards

or health issues (Harvey and Mukosha, 2008). This is to give sanitation a different approach other than what professionals in the sector have concentrated on over the years as termed as “intellectual constipation” (Karr & Pasteur, 2005).

After evaluating works on different approaches all over the world, the World Bank Water and Sanitation Programme (2005) discovered that many of the strategies severely lacked rigorous evaluations and intervention trials. They further analyzed three strategies: PHAST which uses a participatory approach or methodology to whip up active participation of those who must benefit from the development process, CHCs which comprises health education and community mobilization, aims at enabling people to improve their own hygiene practices and Happy Healthy and Hygienic/ Programme Saniya which targeted risk factors identified for attention in hygiene promotion (Curtis & Kanki, 1998).

2.5 Ghana’s Environmental Sanitation Situation

As already indicated, epidemiological investigations have indicated that even in the absence of latrines that have been the concentration of sanitation strategies, diarrhoeal morbidity can be reduced considerably with the adoption of improved hygiene behaviour (WHO, 1999). According to NESSAP (2010), there is limited report on the sanitation in totality from all over the nation. Even though WASH (water, sanitation and hygiene) is a single sector, there has been little progress in achieving access to sanitation because there has been more concentration on water and hygiene (Loevinsohn et al; 2004).

Many Metropolitan, Municipal and District Assemblies (MMDAs) who are directly tasked with the responsibility of sanitation are plagued with problems such as “poor planning for waste management programmes, inadequate equipment and operational funds to support waste management activities, inadequate sites and facilities for waste management operations, inadequate skills and capacity of waste management staff, negative habits,

uncoordinated attitudes and the apathy of the general public towards the environment” (Atuahene, 2010, p.49). There are other barriers such as neglect of consumer preferences, lack of political will, inappropriate approaches and low prestige and recognition for sanitation workers (WHO Sanitation Promotion Handbook, 1998, p. 11-12).

On a general note, the sanitation situation in most parts of Ghana can best be described as a crisis. “It is as shocking as AIDS, as debilitating as Malaria, and as solvable as Polio. Simply meeting the sanitation target by 2015 could avert 391 million cases of diarrhea a year (and with them the loss of years of schooling, and years of productive and social life)” (Evans et al; 2004), further projecting for any nation \$63 billion every year in economic gains simply by meeting the targets of the MDG on sanitation. Even though the cost of doing so may be high, the benefits can actually dwarf the cost (Hutton, Haller & Bartram, 2007).

Markets are very important public places that demand a lot of attention when it comes to sanitation. The already available challenges are further being compounded by rapid population levels which result in generation of large amounts of waste and stress on available sanitation hardware (Minghua et al; 2009). No matter the challenges, the effect of poor sanitation is enough to make it worth paying attention to.

In Ghana for instance, a lot of attention has been devoted to policy formulation and regulatory frameworks towards promoting sanitation (Fried, n.d). Between 1991 and 2010, there have been twelve policy documents, waste management and environmental guidelines, and legislative instruments that include issues on sanitation. They include the National Environmental Policy, 1991; Local Government Act, 1993 (Act 462); Environmental Protection Agency Act, 1994 (Act 490); Water Resources Commission Act, 1996 (Act 522); National Building Regulations, 1996 (LI 1630) and National Environmental Quality Guidelines (1998). The rest are Environmental Sanitation Policy, 1999; Environmental

Assessment Regulations, 1999 (LI 1652); Landfill Guidelines (2002); Guidelines for the Management of Health Care and Veterinary Waste in Ghana (2002); Revised Environmental Sanitation Policy, 2007 and Environmental Sanitation Policy, Revised, 2010. (Environmental Sanitation Policy, Revised, 2010).

In these documents, specific actions that must be taken as well as specific roles have been assigned to all stakeholders such as the state, the municipal assemblies, communities, NGOs, individuals, Ministry of Health, educational institutions, the private sector, research institutions among others. Even though policy on environmental sanitation abounds, failure is the norm for urban sanitation infrastructure in Ghana (Murray and Drechsel, 2012). This coupled with other challenges have had wrong bearings on the implementation of successful programmes (WHO Sanitation Promotion Handbook, 1998, p. 13).

“Ghana is a typical ... sub-saharan African country facing significant sanitation challenges” (Amoah et al, 2007). In 2010, the Environmental Health and Sanitation Directorate of Ministry of Local Government and Rural Development developed a document known as National Environmental Sanitation Strategy and Action Plan (NESSAP). It referred to the waste generated as ‘Materials in Transition’ (MINT). MINTing is aimed at creating awareness for the change of sanitation-behaviour; changing people’s attitudes towards all types of wastes as a life-style. MINTing looks at the potential of waste management in the creation of jobs as well as the reduction of cost in waste management (NESSAP, 2010). NESSAP therefore covers all components of environmental sanitation. It is to guide all actors in the various sectors such as the Ministries, Departments and Agencies (MDAs), Metropolitan, Municipal and District Assemblies (MMDAs), NGOs, development partners, traditional authorities and even the media.

MINTing is the underlying philosophy for creating awareness for change of attitude towards the handling and disposal of all types of waste by demonstrating that there is value in all the components of wastes. *MINTing* will create “green collar” jobs and has the potential to reduce MMDAs cost for waste management.

With the philosophy of MINT therefore, waste is simply not discarded. Value is added at the various stages of its transition till it gets to its last end. However, the Strategic Youth Network for Development (SYND), a youth-led NGO advocating for sustainable environment in the areas of Climate Change, Biodiversity, Land Degradation and Water & Sanitation, contend that the policy does not make provision for the active involvement of young people in the processes even though the youth constitute the largest segment influencing the sanitation situation in Ghana (Strategic Youth Network for Development (SYND), 2013).

That notwithstanding, the SYND considers the issue of environmental sanitation as affecting every part of human development such as the economy, culture, health, employment among others. It further calls on all stakeholders to help in successful implementation of the policy.

This is further corroborated by CHF International, Ghana (2010), in its analysis of the value chain of solid waste management as a programme for Youth Engagement in Service delivery (YES) programme in Accra. Waste management presents employment opportunities for young people (Thieme, 2010).

Of the many concerns raised in the Environmental Sanitation Policy, Revised, 2010), is the sanitation situation in markets placing the responsibilities on Metro/Municipal Environmental Health Departments who among other responsibilities must ensure food and water hygiene comprising market sanitation, food establishments, meat and fish hygiene,

livestock and poultry management, control of fresh vegetables and water quality control (Environmental Sanitation Policy, Revised, 2010, p.39). The policy categorically stated that ‘District Assemblies shall ensure the availability of suitable and hygienic market facilities. The private sector shall be encouraged to build and manage such facilities. Provision for the handling, display and preservation of meat, fish and other perishable foods shall be such as to prevent contamination and decomposition. District assemblies shall make bye-laws allowing for the development of markets by the private sector and providing for their control,’ (p. 39). It therefore encourages capacity development, information education and communication, legislation and regulation, sustainable financing and cost recovery, levels of service, research and development and monitoring and evaluation as key to sanitation promotion by the Assemblies (NESSAP, 2010, p. 49). This is indicative of the collaborative nature in sanitation promotion meaning that the various stakeholders play their role with the deserving urgency (Rheinlander et al, 2010).

2.6 Stakeholders in sanitation promotion

Stakeholders are important in sanitation promotion. “Stakeholders must play a central role in setting up priorities and objectives of water and sanitation initiatives in order to ensure relevance and appropriateness” (Lienert J, Schnetzer F. & Ingold K, 2013). In Ghana, the development of NESSAP is an example of the work of many stakeholders. They include Regional Coordinating Councils, Ministry of Women and Children (MOWAC), Environmental Protection Agency (EPA), Ministry of Health (MoH), Ministry of Education (MoE) among others. “The key players in environmental health/hygiene education in Ghana are the MoH, the MLGRD and the MoE” (NESSAP, 2010)

Stakeholders in sanitation promotion are numerous and may vary from country to country. For example, the Government of Nepal developed a sanitation and hygiene master plan in

2011. Many stakeholders were involved in the project. There were six government ministries of physical planning and works, health and population, local development, women, children and social welfare, education and sports and finance. In addition, there were NGOs (Non-governmental Organisations, community committees, the Red Cross, sanitation agencies, regional, district village development committees, and municipal level WASH coordinating committees, local government bodies, schools child clubs among others. This is to ensure total participation and also to be able to develop a comprehensive plan that can cover the whole nation (Lienert, Schenetzler & Ingold, 2013).

Other global or international agencies working in the sanitation sector include UNICEF, USAID, the World Bank, and the Water Supply and Sanitation Collaborative Council (WSSCC). The U.S. Agency for International Development (USAID) works as an independent agency of the U.S. government and provides development, humanitarian and economic assistance to many countries around the world. The USAID has worked extensively in areas of environmental health and has been supporting the Environmental Health Project (EHP) since 1994. The United Nations Children's Fund (UNICEF) promotes child survival through its Environment and Sanitation (WES) Programme UNICEF is working in more than ninety countries supporting efforts to accelerate access to basic water and sanitation services and improve hygiene behavior. The Water Supply and Sanitation Collaborative Council (WSSCC) was mandated by a 1990 UN Resolution to accelerate progress towards safe water, sanitation and hygiene for all. (The WBEHP and partners, 2004, p.v-vi).

Currently working in 33 countries, WSSCC continues to put WASH issues on the global agenda through the management of three main programme of activity: advocacy & communications, thematic working groups and national/regional plans of action. The Water

and Sanitation Program (WSP) is an international partnership with a mission to alleviate poverty by helping the poor gain sustained access to improved water and sanitation services. It is administered by the World Bank and forms partnerships to effect the regulatory and structural changes needed for broad sector reform and to develop innovative solutions for planning and implementing sustainable investments (WSSCC, 2010).

2.6.1 Government

The World Bank (2005) defines the role of government in hygiene and sanitation promotion and this involves the formulation of sanitation policies that are critical to creating an enabling environment that will further encourage and support increased access to sanitation facilities.

After studying the impact of national sanitation policies and the effectiveness of programmes to improve hygiene and sanitation coverage, the World Bank (2005) developed a list of policy “ingredients” which are taken to be necessary conditions for adequate policies to allow appropriate enabling environments. National and local government agencies are therefore seen as most important stakeholders (Guerrero, Maas & Hoggans, 2012).

The ingredients are political will as evident in areas such as political statements, responsibilities of institutions, resource allocation and projects among others. The next ingredient is acceptance of policies by stakeholders. It is believed that if the relevance of government policies are widely accepted by stakeholders, there is the possibility of better promotion and sustainability. Stakeholders’ obligations and responsibilities must be clearly backed by law (Whittington et al., 1993). Other ingredients include appropriate population targeting, adequate and appropriate levels of service, health considerations, the environment, financing options, and clear distinctions in institutional roles and responsibilities (The World Bank, 2005).

2.6.2 The Health Sector

There is a positive relationship between ill-health and poor water supply, sanitation and hygiene and this has been a major concern of public health (Bartram and Cairncross, 2010). This makes sanitation promotion one of the most important roles the health sector can play in environmental health planning. This is because the health systems work towards behaviour change in preventing diarrhoeal diseases. The sector which has a wide area of contact between professionals and the people in many ways, can give persistent messages which can help emphasize the need for collective responsibility towards the prevention of environmental health risks (Sanitation and Hygiene Master Plan, 2011).

In Ghana for instance, the Ministry of Health often collaborates with the Health Education Unit of the Ghana Health Service to educate the public on health through products such as visual and audio-visual materials, campaigns, adverts among others (MLGRD, 2010). In addition, they can play an important role in advocacy and leadership because politicians and the general public listen to doctors. That gives the medical profession the responsibility of speaking out on all important health issues, including sanitation (Duncan et al, 2010).

2.6.3 I/NGOs, community based organisations (CBOs) and civil society groups

I/NGOs and CBOs play catalytic roles in promoting sanitation activities at policy formulation, implementation and monitoring levels by offering support such as financial and materials for hygiene and sanitation promotion. They have potentials in community mobilization, volunteerism and raising awareness on sanitation issues (Sanitation and Hygiene Master Plan, 2014). Examples include the Community-Led Total Sanitation (CLTS), introduced in Bangladesh in the year 2000 by Dr. Kamal Karr, Village Education Resource Centre (VERC) and Water Aid Bangladesh (Samson, 2011). Stakeholders also have the ability to gather resources for advocacy as well as the ability to design technical

support for training to fill the knowledge gap, help in developing monitoring frameworks among others (Mehta and Knapp, 2004).

In Ghana, I/NGOs have become a part of sanitation programmes especially at the district levels where they offer technical assistance (Welle, 2011). The coalition of NGOs in Water and Sanitation (CONIWAS) has always directly worked towards various issues at district, regional and national levels (Ainuson, 2009).

2.6.4 The Private Sector

The private sector includes companies that produce or can produce products that have the ability to help promote sanitation - sanitation hardware producers. Through public-private partnerships, they can be encouraged to localize facilities to fit local demand (Rheinlander et al; 2011). This could take the form of sanitation marketing where marketing principles are used to promote sanitation. It is possible for the private sector to identify and create demand for sanitation and in turn, generate more income (Bramley & Breslin, 2010). They further explained that entrepreneurs can develop relationships with both households and institutions to realize opportunities that are available for sanitation.

Also, economic crisis have led to the near collapse of state capacities hence the need for private sector participation in sanitation promotion. In 1999, the Government of Ghana “envisaged that all environmental services (waste management, cleansing and sanitation) will be provided either on a full cost-recovery basis by private companies or by service providers under public contracts” (Crook & Aryee, 2006).

2.7 Sanitation in markets

“Markets” refer to shopping centres which often accommodate several retail businesses. They may also be referred to as retail outlets. These centres vary across the various

continents. In the developed world, shopping centres are often large malls where people desire to visit (Chu, 2009). In Ghana, markets are the main places where retail activities take place. Very few reviewed literature is available on the general sanitation situation in shopping centres.

In Ghana there are more open markets than malls. Just like most Sub-Saharan Africa, rapid urbanization has often rendered infrastructure for sanitation poor or inappropriate; unable to meet the demand for sanitation (Amoah, Dreschel, Abaidoo & Henseler 2007). Several studies in markets in Ghana have shown levels of contamination of bacteria on eggs sold in markets (Ansah, Dzoagbe, Teye, Adday & Danquah, 2006), milk and cheese items (raw and fried) sold in markets (Iddrisu, 2007), and beef (Adzitey, Teye, Gifty & Adday, 2010), all in the Tamale metropolis. However, much of the reports on sanitation in markets are those presented by the print and electronic media with varying but gloomy reports which show low coverage: only 31 % of markets in Accra have a drainage system, 26% have toilet facilities and 34% are connected to pipe-borne water (Nyanteng, 1998).

Having reported on the sanitation conditions in Accra's markets, Bentil (2007) describes several markets as sitting on 'time bombs'. Of the "London Market" in Accra, she wrote: "Currently, the market has turned into a sprawling meat shop with huge flies hovering around the beef and mutton meant for sale. The drains remain choked and stinky with uncollected garbage with buzzing flies that welcome people into the markets" (Bentil, 2007). The several unhygienic practices such as sitting of eating areas by major drains filled with garbage, washing of carcass in dirty water while standing in the same water, cutting meat on the bare floor among others are major causes of food contamination (Soriyi, Agbogli & Dogdem, 2008). Meanwhile, the "London Market" is not too far away from the offices of the

Accra Metropolitan Assembly who has the responsibility of promoting sanitation in such places (Bentil, 2007).

Traders in Accra markets display wares in filthy environments so freely without considering the fact that handling of food in a hygienic manner contributes to the quality of the food (Soriyi et al; 2008). In an instance, the traders at Agboghloshie, one of the biggest markets in the Accra, were reported to have again dirtied their market and its surroundings to an extent that one cannot believe that it was nine months ago that the Accra Metropolitan Assembly (AMA) spent an estimated 05 billion to clean the market and rid it of all illegal structures and unsanitary conditions. “Areas along the main road, which was tarred during the February 2007 exercise to be used by customer’s as a parking lot, have forcefully been taken over by the traders who display their wares, including tomatoes, onion, pepper and other food items, beside the stinking choked gutters, much to the chagrin of some shoppers who patronise the market” (Bentil, 2007).

This is in sharp contrast to the dictates of the many environmental policies that spell out the individual responsibilities in sanitation services delivery. It is the responsibility of each and every individual to ensure sanitation wherever he finds himself -home, work and public places. This is to be done through cleaning one’s immediate environment or the property they occupy as well as drains and places considered access ways (Environmental Sanitation Policy, 1999, pp.5-6). For example, in dealing with the sale of meat in the market, there must be periodic screening of both butchers and sellers; sales points must be thoroughly and constantly cleaned; there must be standardized operating methods such as how to display products and sterilization of tools among others (Adzitey et al., 2010).

2.8 Dealing with sanitation in public places

Sanitation promotion has led to the development of decision making models, theoretical models (and explanatory frameworks (Dreibelbis et al., 2013) mainly because the success of any interventions depend enormously on a combination of structural, behavioural, individual as well as community components (Parker et al, 2012). One of such models is the Integrated Behavioural Model for Water, Sanitation and Hygiene (IBM-WASH) which “facilitates the process of developing interventions that operate beyond the individual and household levels; interventions that operate at the structural level with the capacity to reach largest sections of the population, but are also highly cost effective” (Sweat et al., 2006). IBM-WASH was developed from a study of already existing models and frameworks for behavioural change and the maintenance of such changes (Parker et al., 2012). It was found that most of the existing models were targeted at individuals and sought to understand the behavioural factors without much consideration for larger structures within which the individual finds himself as indicated in earlier works by McLeroy, Bibeau, Stecker & Glanz (1988). There were also indications that, there have been either weak or virtually lack of measurement instruments to rigorously measure and monitor the programs at all levels (Sweat et al., 2006).

Developed from a pilot study in Bangladesh by the International Centre for Diarrheal Disease Research (ICDDR), the IBM-WASH has three dimensions consisting of contextual, psychosocial and technological dimensions which are all interactive in nature (Dreibelbis et al., 2006). The contextual dimension concerns the individual and his environment or setting that influences change in behavior that might eventually lead to the adoption of new technologies; the psychosocial which combines behavioural, social and psychological attributes in influencing desirable behavioural outcomes and new technologies; and technological dimensions that consider the appropriateness of new technologies that have

influenced their adoption (Janz and Becker, 1984; Bandura, 1989; and Wood, Foster and Kols, 2012).

The model also suggested five levels of application, including societal or structural level which deals with policy and regulation, leadership, finance and distribution. Level two is the community which deals with issues concerning availability of and access to resources in the physical environment, shared values, social integration and maintenance of products (McLeroy et al., 1988). Level three is the interpersonal/household level which espouses roles and responsibilities, sharing of access and norms while level four which is the individual, is related to issues such as education and age, status, gender, perceives threats and cost of products (Jenkins and Scott, 2010). Level five is habitual. It considers the favourability of the environment for habits to be formed and how easily and effectively the generated products can be used (Wood et al., 2012).

Another approach worth noting is the “Rights Approach” in Sanitation for All (SANALL) by UNICEF (2000) which sees sanitation as promoting human rights and dignity, thereby describing lack of sanitation as “a public health disaster” (UNICEF (SANALL), 2000, p. 1). This is needed for children, girls and women who sometimes had to wait till it is dark to free their bowels in communities without such facilities, the sick and elderly, and the society as a whole. The discomforts brought to these people may also come along with serious illnesses (Mara, 2008). SANALL believes that heightened personal dignity and national pride are two of the many benefits of good sanitation (Songco, 2002).

SANALL also identifies what works — “political will and strong government role, promoting behaviour change, reaching school children, giving families a choice, community planning and management and cost sharing,” and what doesn’t - “giving sanitation low priority, narrow focus on technology, ignoring the family as a whole, a ‘one-system fits all’

approach, a top-down approach, and limited access to funds and credit” (UNICEF, 2000, p. 10-11; Mara, 2008).

For policy makers, SANALL suggests eight steps. Step one suggests making sanitation a priority by formulating policies that bring together the works of various agencies as well as empowering the local authorities to develop plans that will work for them best (Songco, 2002). Step two promotes building alliances with civil society groups, the media and private sector to promote the demand for sanitation services at the grassroots (Tayler, Parkinson and Colin, 2003). Step three is developing plans and strategies that will ensure community involvement while step four is to encourage and promote basic hygienic ways of preventing disease transmission (UNICEF, 2000). Step five is to pay close attention to the needs of girls, women and children while step six is to prioritize sanitation programmes in schools in order to promote desirable life-long behavior change as well as a hygienic living environment (Mara, 2008). Step seven is to provide quick alternative access to sanitation during disasters and crises while step eight encourages gathering of information and information sharing on the challenges and successes which can be encouraged through effective monitoring and research (Tayler, Parkinson and Colin, 2003).

In dealing with public sanitation needs in order to prevent diarrheal diseases therefore, there must be preventing measures in place (Chin, 2000). There is the need for “a more flexible approach to policy infrastructure, technical infrastructure and cost recovery in urban sanitation interventions” (McFarlane, 2008). Also, WHO (2015) Factsheets 3.14 clearly describes sanitation in public places such as those concerning long-distance bus and railway stations, ships and ports, cordon sanitaries, markets and schools (WHO Factsheets, 2015, p. 93-97). With the world struggling to keep pace with sanitation efforts, the need for developing methods that work best for specific need is also increasing (McConville, 2008).

Clearly, dealing with sanitation in public places must be holistic and participatory in order to promote sustainability. This has also led to several approaches that may be considered in planning water and sanitation programmes. These approaches have been used as frameworks by several agencies in the sanitation promotion processes. They include the Strategic Choice Approach (Friend, 1992); Open Planning of Sanitation Systems (Ridderstolpe, 2000); Logical Framework Approach (LFA) (Ortegren, 2004) and Sanitation 21 (IWA, 2006). These frameworks are mostly geared towards planning and show basically steps that must be followed in strategic planning towards sanitation improvement projects.

The first of the recommended steps is problem identification to determine the current or prevailing situations and therefore, employs the use of some strategic tools such as PEST and SWOT analysis (Ortegren, 2004). The next step involves the defining of objectives and the expected outcomes that are desired. (IWA, 2006). Next, to determine how to achieve the objectives, and so, a series of options must be considered as well as the available technologies that can possibly be sustained. From the available options comes the next step of process selection that must eventually lead to the action plan of the project (Ortegren, 2004). This is closely followed by monitoring and evaluation to guide to success as well as help correct the shortfalls in the action plan (IWA, 2006).

One of the most comprehensive frameworks for fighting diarrhoeal diseases which are a result of bad sanitation is the Hygiene Improvement Framework (The WB EHP and partners, 2004). The framework has three main dimensions or components. The first is improving access to water and sanitation hardware. Its indicators include a water supply system, improved sanitation and household technologies. Water supply looks at the issues of provision of water in terms of quality and quantity to help reduce the risk of contamination of food (Howard & Bartram, 2003). Improved sanitation is the second indicator. It involves

the provision of facilities to dispose of human excreta in ways that safeguard the environment and public health. Some disposal techniques include the use of various kinds of latrines, septic tanks, and water-borne toilets. The third indicator, household technologies concerns the ability of individual homes and facilities to provide those items needed in promoting healthy practices such as soap or local substitutes for hand washing, chlorine, filters, hygienic and efficient water storage containers, potties for young children among others (The WBEHP and partners, 2004, p 11).

The second component is hygiene promotion. Its first indicator is communication aimed at raising awareness about hygiene facilities as well as practices. It also helps to share information among the targeted group towards the promotion of behavior change. The traditional media, music, song and dance, community drama, literacy materials, leaflets, posters, pamphlets, videos, and home visits are examples of communication channels. (Nunoo, Osman & Nanedo, 2009). Typical venues include community gatherings, health centers, schools, daycare and nutrition centers, and the household (Pinfold, 1999). This makes it important to train health workers, teachers, and community agents in hygiene promotion skills. The second indicator is social mobilization. It is a process of obtaining and maintaining the involvement of various groups and sectors of the community in the control of disease (Nandha & Krishnamoorthy, 2007). This may involve encouraging a community group to design and implement a campaign such as increasing the use of soap for hand washing or to promote the proper use and maintenance of sanitation facilities.

Others include social marketing which employs marketing principles such as partnerships with producers of hygiene promotion items to contribute to hygiene promotion; community participation which involves the community (ethnic, religious groups, women, children etc) in the design, implementation and monitoring of strategies aimed at behavior change; and

advocacy which seeks to encourage people such as donors, program managers, and community representatives to advocate for improved hygiene behaviors and for interventions that support these behaviors to governmental and nongovernmental stakeholders (The WBEHP and partners, 2004, p.12-13)

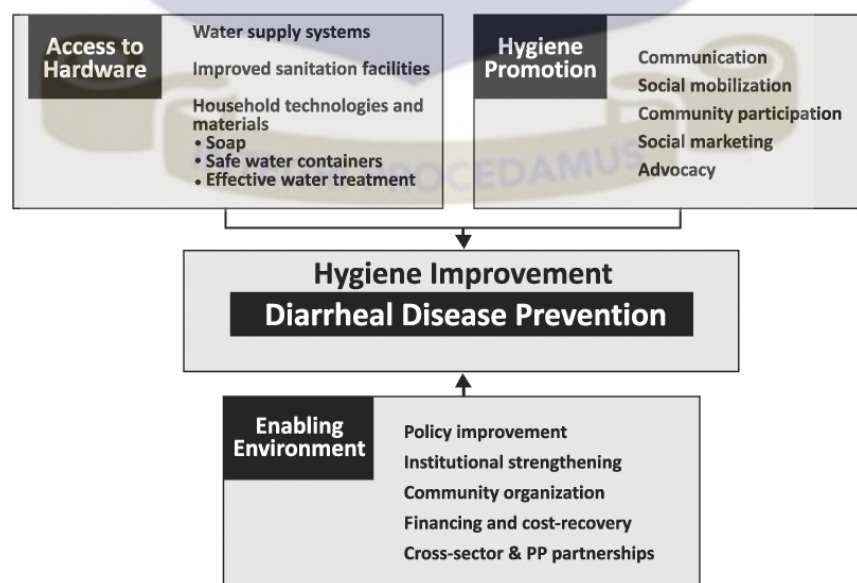
The third component is strengthening the enabling environment. This may take place at the community, municipal, regional, or national levels and may take the forms of policy improvement, institutional strengthening, community organisations and financing partnerships (Dreibelbis, Winch & Leontsini, 2013). Policy improvement assesses the adequacy of national policies, identifies gaps and recommends and builds consensus on developing more effective policies. Institutional strengthening is aimed at helping institutions to clearly define their roles and responsibilities as well as improve their capacity in leadership, systems and procedures, technical competence, and training their staff so they can work effectively (Cairncross, 2010).

Next is promoting community involvement. This involves getting the community people to become committed to maintaining the systems put in place. It is believed that when community members have done the “work” and when they have committed their own time, effort, and resources to establishing improved water and sanitation systems, they are more committed to following up on and safeguarding their investments. Financing and cost-recovery addresses the issue of cost. This is to promote financial viability in order to secure financing for projects (Bartram et al, 2005). Cross-sector and public-private partnerships involve bringing together several entities, both public and private who would work together using their core competencies through interagency committees, steering committees, and task forces among others (The WBEHP and partners, 2004, p. 15-16).

Originally, this framework was developed to promote ways of developing better programmes of preventing childhood diarrhea or diarrhoeal diseases - one of the top three killer diseases in developing countries - and thus a reduction in child mortality (Sanitation and Hygiene Promotion Programming Guidance, 2005). With about 4 billion episodes of diarrhoea-related diseases annually, mainly attributed to three major environmental causes including poor hygiene, poor sanitation and contaminated food and water, an approach is needed to successfully respond to all three conditions comprehensively (Bartram et al., 2005).

The framework identifies pathways to contamination as well as blocking those pathways with specific strategies. These strategies in the framework seek to help strengthen each country's learning process, their programming and their ability to develop policies, rather than to simply provide these countries direct services (The WBEHP and partners, 2004, p.5). The framework is therefore a comprehensive approach to preventing diarrhoea in terms of access to the necessary hardware or technologies, promoting healthy behaviors, and support for long-term sustainability.

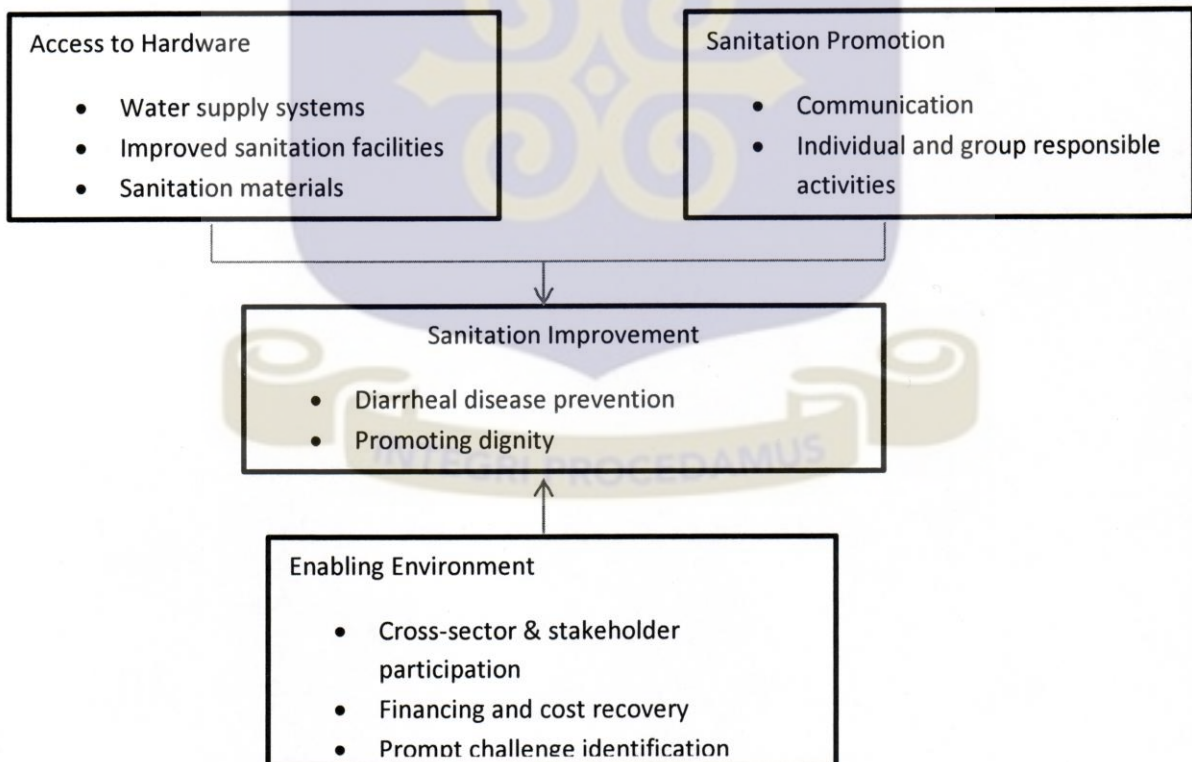
Fig. 2.1: The Hygiene Improvement Framework



Source: EHP and Partners (2004, P.9)

However, this study considers promoting sanitation not only as a means of disease prevention but sees the availability of good sanitation infrastructure and practices as dignifying as well. “The lack of access to sanitation and the means of good hygiene is an assault against human dignity” (Tratschin, 2011). Once an organization takes it upon itself to manage a facility where people gather consistently, there is the need to make sure that the people are provided with a conducive environment for trading: buying and selling in dignifying ways. There must therefore be a framework purposely for promoting sanitation in public places such as markets. The researcher therefore modified the hygiene improvement framework to be used for the study. This is known as the Sanitation Promotion Framework to be used in promoting urban sanitation in public places such as markets.

Fig. 2.2: The Sanitation Promotion Framework



Source: Researcher’s own source. A modification of the hygiene improvement framework.

This framework shares in some components of the Hygiene Improvement Framework. This one is purposely suggested to study sanitation in a public place such as the market. The additions include Individual and group responsible activities and prompt challenge identification combined with others to promote not only sanitation but human dignity as well. Individuals and groups are needed to promote sanitation. “Effective sanitation cannot be effectively delivered by outside agencies” (Lopez, Mathers, Ezzati, Jamison & Murray, 2006). Sanitation promotion must not be limited to simply stimulating demand but actual activities as well. Therefore, there is the need for those involved to have specific activities that they must engage in this regard. It is also necessary, among other things, for challenges to be identified and managed so they do not develop into full blown problems.

2.9 Conclusion

Literature reviewed in this chapter has helped in bringing out the fact that sanitation is as essential as food and water and plays a major role in health promotion. It is as much an individual business as it is a collective business. The success of promoting sanitation is therefore dependent both on individual attitude and behaviours as well as communal activities and behavior. Over the years, attention has been paid to poor communities and on the provision of water and improved sanitation and hygiene behavior. However, one area that is in need of attention is public places and institutions where people gather in large numbers with high demand for sanitation services. This area therefore needs attention from all stakeholders as well as academia.

Other relevant issues from the review is the current sanitation situation of markets in Accra especially and the need for improved strategies that must extend beyond the household. Also considered is urban sanitation in general terms which seems to running beyond the pace of promoters despite the numerous sanitation policy documents that are developed by

government and other agencies. There cannot be desired improvements without the active participation of relevant stakeholders who must recognize and play their roles as needed. In addition to these is how issues of sanitation should be approached in order to provide as well as some documented sanitation promotion strategies. These led to the development of a new framework purposely for sanitation in markets to prevent diarrheal diseases and promote the dignity of the people as well.



CHAPTER THREE

METHODOLOGY

3.1 Introduction

The general objective of the study was to identify the sanitation promotion strategies of Kaneshie Market Complex in Accra. This chapter therefore is devoted to explaining the processes and procedures that were employed in accessing the required information; in other words, the methodology of the researcher's work that led to the findings. The chapter therefore, looks at the organization under study, the research paradigm and the study design. It further explains the sampling technique, the sampling size, the unit of analysis or sampling frame. In addition, it also considers the instruments to be used in data collection and the management of the data collected and the rationale for selecting such an approach.

3.2 The research paradigm

The research paradigm used for this study was the interpretivism approach. It has two assumptions: relativist ontology and transactional or subjectivist epistemology. "Relativist ontology - assumes that reality as we know it is constructed inter-subjectively through the meanings and understandings developed socially and exponentially. Transactional or subjectivist epistemology - assumes that we cannot separate ourselves from what we know. The investigator and the object of investigation are linked such that who we are and how we understand the world is a central part of how we understand ourselves, others and the world"(Cohen & Crabtree, 2006, p. 59). It is of the view that in order to truly understand a phenomenon, the whole must be examined. This helps the researcher and prevents the study from missing important aspects that must lead to a comprehensive understanding of the whole (Neill, 2006). Considering an aspect of sanitation in Kaneshie Market may present other views than what they people consider as a whole. In the same way, walking through

the area may give a view that may be totally different from what is actually the case. The area usually referred to as “Kaneshie Market” is not the same as the “Kaneshie Market” that falls under the Accra Markets Company Ltd. Interpretivism enabled the researcher to gain full understanding of the issues in the market.

Interpretivism was therefore chosen because it has the potential to help the researcher gain understanding and deep insight through discovery of multiple meanings. These meanings can further enhance the understanding of the whole situation and not just parts in all its complexities. Without any statistical procedures, this approach can produce findings that can be considered trustworthy and honest (Strauss & Corbin, 1990). This is important for the study because it provided precise information as the respondents intended it.

Also, “interpretive researchers assume that access to reality (given or socially constructed) is only through social constructions such as language, consciousness, shared meanings, and instruments” (Myers, 2008, p.38). “Interpretivism proposes that there are multiple realities, not single realities of phenomena, and that these realities can differ across time and place” (Neill, 2006). For this reason, in interpretivism study, the researcher focuses on meaning and may depend on multiple methods to help study the different aspects of the same issue (Collins, 2010, p.38). This was possible through thorough observation apart from the in-depth interviews that were conducted during the study at Kaneshie Market and resulted in ability of the researcher to probe some information provided by tenants and officials especially.

Even though the approach is subjective in nature with the likelihood of researcher bias due to the researcher viewpoint and values that may impact the studies, Interpretivism does generate primary data that is high in validity. Indeed, in studying human experiences, it is impossible not to be subjective in totality. The ultimate aim studying about the sanitation

situation of Kaneshie Market is to offer a perspective of the situation and provide well-written research report that reflects the researcher's ability to illustrate or describe the corresponding phenomenon. Sanitation issues at the Kaneshie Market are very important to the health of the many people that use the market and so this approach helped the researcher to clearly describe the real issues concerning sanitation in the market.

3.3 Research design

The research design for the study is qualitative research design. "One of the greatest strengths of the qualitative approach is the richness and depth of explorations and descriptions" (Myers, 2008). With a qualitative research design, the researcher is part of the study itself and must be flexible enough to follow up on observed leads and take on-the-spot decisions (Manicas & Secord, 1982). This is because qualitative research tries to study, understand and interpret things in their natural environments (Denzin & Lincoln, 2011, p.3). This approach is appropriate for the study because it helped the researcher to clearly understand the respondents needs as well as their concerns from their points of view. There was also the flexibility to make some changes in the research process to address new dimensions that were originally overlooked by the researcher.

The case study, an example of qualitative design, was used for the study. This approach was selected because the study organization's activities are continuous processes and therefore will be "bounded or described within certain parameters, such as specific place and time" (Cresswell, 2013, p. 98). According to Stake (1995), case studies are useful when the researcher wishes to understand an issue, a problem or something that is of concern. Since the Kaneshie Market has constantly been judged in relation to other markets, the case study helped the researcher to understand the issues concerning the market by its own terms. Therefore, the case study provided an in-depth understanding of the case in question. With

this method, the researcher was able to probe further based on the answers from respondents. Also, this design allowed the use of few pictures as forms of data collected (WSP, 2012).

The study used the case study design by Yin, (2004). This design consists of three basic steps. Step 1 concerns defining the case after having completed an initial review of literature. Step 2 helps to determine whether to use a single case study or a set of several studies. The single case study “will force you to devote careful attention to that case” (Yin, 2004, p.5). This was particularly useful for the Kaneshie Market study since there was no comparison with other markets involved. Step 3 helped to determine whether to follow an existing theoretical perspective where the researcher would seek to test a hypothesis, or simply discover things from the scratch. These options gave the researcher the opportunity to choose what to do based on the research questions; that is not to follow any existing theories of sanitation in markets in order to avoid the limitations that might have arisen with such an approach.

3.4 Sources of data

Both primary and secondary data were used in completing this research so as to improve the reliability of the study. The primary source of data is the respondents as they gave first-hand information concerning questions raised about Kaneshie Market Complex through interviews. This was through the interviews that were conducted. There were also direct observations by the researcher. The information that was gathered from these constituted the primary data. These provided data for triangulation.

The other source of data is the secondary source. Secondary data refers to already available information that the researcher falls on to help identify gaps as well as support the need for further research. Those used for this study included documents from the Accra Markets Company Ltd. which contained information about the market. Others were published peer-

reviewed articles and newspapers articles. These sources are often rich in information and can help direct the researcher on a fruitful path.

3.5 Sampling

3.5.1 Population of study

The population of the study was the Kaneshie Market Complex. It was made up of all areas that fall under the management of the Accra Markets Company which is responsible for managing the market. The Accra Markets Limited is the company responsible for the management of the Kaneshie Market Complex and the Kaneshie Car Park. It was incorporated in 1972 under the Companies Code 1963 (Act 179). It is a Private Limited Liability Company and operates under Legislative Instrument 1043 of 1975. The market was commissioned in 1979. It's vision is 'to strive to be a pace-setter in the provision of modern markets, offering quality goods and excellent services thereby attracting large patronage and high reputation beyond the expectation of our clientele and stakeholders.'

In terms of organization, the Board of Directors oversees the setting of policy and guidelines for effective running through the Managing Director and his assistant, heads of functional departments and various supervisors. The market was selected because it has been described positively in several regards by the Accra Metropolitan Assembly. In 2008 for instance, AMA Markets Assessment Report indicated that of the thirty (30) markets under its jurisdiction, the Kaneshie Market had first level infrastructure. The reports described the general conditions of the markets as 'perfect' and encouraged that management of the infrastructure should make sure that the place is always in very good condition.

There are three main floors comprising the ground floor purposely designed for food and agricultural products, the first floor which is for items such as provisions, utensils and rubber

products. The second floor is devoted to clothing and other materials. The market has about 10000 tenants and receives about 10000 customers and commuters daily.

In addition to this, the market is also divided into groups according to likeness of activities. All fish sellers belong to one group headed by a queen. Same can be said of those selling different kinds of products, the various drivers' unions among others. The various heads help with the organization of their members and also seek members' welfare by informing management about their needs, suggestions and grievances.

3.5.2 Sample size

In all, a total of 50 respondents were selected for the study. First, ten (10) officials of the Accra Markets Company were selected for interviews. They were made up of the general manager of the company, the head of the sanitation unit and one supervisor from the company. Others were ordinary staff of the market including cleaners, toll collectors and security men and women. The general manager was selected because of his oversight responsibility for the whole market as the person who must see to the general implementation of company policies. The head of the

sanitation unit was also interviewed since she is directly involved in the sanitation situations in the market. Interviewing the supervisor as well as general workers was also necessary because it gave an indication of the knowledge base of employees on policies which affect their duties and actual activities. Kaneshie Market is being managed privately. Therefore, the onus lies on management to provide an enabling environment for sanitation promotion.

In addition, twenty (20) tenants were also selected purposively. These are people who work in the market throughout the day and the week. It is the place where they make a living. Interviewing them enabled the researcher to understand the situations at the market from

their point of view on hygiene and sanitation practices. It also helped to ascertain claims that were made by management towards sanitation. The researcher therefore selected those whose experiences and activities demand high observance of hygiene and sanitation. Even though individuals were selected, the closeness of the stalls were such that other tenants took part freely in the interview process as they shared and verified information from one another when probed. In addition, the presence of other tenants throughout the interviews helped the tenants to also attend to customers who called at their shops. Those given priority included cooked food sellers, meat, fish and live birds traders, grinders and vegetable sellers.

Also, twenty (20) customers were also selected purposively. This was to make sure that those interviewed have had contacts ranging from several years to few years and can describe changes over the years and first time observations respectively. Customers are very important stakeholders in the market. Customers of Kaneshie Market may have many reasons for choosing the market over others. It is also possible that they had some sanitation needs while they visit the market. Initial contact with the customers in the market proved quite difficult. The researcher therefore selected fifteen (15) customers who were already known to the researcher who granted interviews in their homes rather than the market where they often go to buy or shop. Interviewing them also helped explain the sanitation situation at the market. Three customers granted interviews as they drove home from the market. Only two customers were interviewed in the market. Here also, several people in the various homes joined in the interviews.

3.5.3 Sampling technique

For qualitative data, purposive sampling was employed. It is a non-probability sampling technique. Neuman (2007) explained that it is often used when a researcher tackles unique cases that require in-depth information. Kaneshie market was purposively selected since it is

considered the best of the markets in Accra by AMA. The purposive sampling was used for all respondents. This is because the researcher already had in mind a predetermined or specific group from which all respondents were selected.

3.6 Limitations of the study

The following are some limitations that occurred:

1. There was the concern initially of the possibility of respondents not giving the right information or withholding important pieces of information, especially those that may implicate them in duties or simply put a “collective ‘mantra’” (Yin, 2004, p. 11). This was more related to the officials and workers interviewed. Generally, they gave information that promoted a good image of the market. This was overcome by the researcher through the use of observations before the actual interview. The researcher visited many places of interest and sought views to gather information before interviewing the officials. Therefore, there was a lot of probing to make sure that the right information was given.
2. The inability to cover all the groups and associations the market. The market has over thirty groups that may have various sanitation needs. Time limitations did not allow the researcher to select respondents from all the groups. Based on the research objectives and questions, the researcher selected respondents whose activities demanded the use of the sanitation infrastructure the most and have the greatest risk if those facilities did not exist.
3. Issues concerning the generalization of the research findings. In order to generalize the findings, the researcher did not prevent the respondents, especially the customers, from comparing situations in the Kaneshie Market to other markets.

3.7 Instrumentation

This refers to how or by what means data was gathered. The main instrument for data collection was in-depth interview. Many qualitative research articles make use of interviews (Silverman, 2005, p. 238-9) According to Noaks & Wincup (2004), open-ended interviews are flexible, help to build rapport and promote active listening. It was therefore chosen for the study in accordance with the qualitative method of research. With this instrument, it was possible for the researcher to have access to unrestricted information and also probe further issues that need further probing and clarifications from respondents. Also, whenever new information was brought up by the respondents, there was an opportunity to delve further into it.

Apart from the fact that it saved time and was economical with resources, it helped to gain access to what happens directly in the field of study. For this reason an interview guide was composed to use as a guide so that the researcher would not be blown away from the objectives as well as the research questions in as much as new information could give positive information. This was chosen for the market study because an initial visit and requests revealed that respondents were not ready to write even if they could. Also, it created an interactive atmosphere and also did not take them away from their duties of serving customers.

Interview guides were therefore constructed taking into considerations the views of respondents on how they assess issues, what possible solutions they wished for identified challenges all from their own points of view.

3.8 Data gathering procedure

With interpretivism studies, interviews tend to be the most popular when it comes to primary data collection methods. According Yin (2004), qualitative data collection must be flexible

and carefully planned, well executed and appropriately controlled in order to gain respect as a researcher. After permission was sought from the management of the company, Accra Markets Company, the interviews were conducted. First, the officials and workers of the management company were interviewed. This was followed by that of tenants and lastly the customers. This happened over a period of two months within and outside the market. Before the actual interviews, the respondents consent were sought again to make sure of their personal willingness. Responses were handwritten. The process involved detailed interactions where some respondents had to refer to colleagues to make sure of the information being given.

Also, responsible data management is key to conducting research. It begins right with the planning of data until the final work is complete and reaches its destination. For this reason, many professional bodies, research journals and research institutions have set guidelines in data management. It is important for a researcher to maintain data integrity and so data was correctly described, especially those from interviews that can be traced to the respondents. Therefore, all data collected from the interviews were well typed, grouping responses on questions together and this enabled the researcher to have ease in analysis.

3.9 Mode and instruments for data analysis

Modes of data analysis in a qualitative study often provide various avenues for a number of opportunities to discern, examine, compare and contrast, as well as interpret meaningful themes or patterns that form the findings of the study. According to Miles and Huberman (1994), qualitative data can be analyzed in stages such as data reduction, data display, and conclusion drawing and verification.

The framework for qualitative data analysis by Miles and Huberman (1994) explains that at the reduction phase, data collected is simplified and transcribed for easy manageability. At

the display stage, data is put in appropriate themes to help the researcher in extrapolation. The display stage is also likely to expose new dimensions of the study. The conclusion drawing and verification stage provides the analysis special appeal in the sense that it is at this stage that the findings are critically analyzed vis-a-vis the research questions. Since data was collected from a single institution, an intra-case analysis was used.

For the study, data analysis was manually done. Even though the same interview guide was used, the interactions often produced new insights. The responses were initially well written down. They were later grouped under various relevant headings taking into consideration the research questions and conceptual framework. The broad headings include access to sanitation hardware to address the issue of what must be put in place to promote sanitation; sanitation promotion to help explain how people get to know what they must, can and cannot do; and the enabling environment which address the issue of the efforts that must be made to sustain sanitation promotion. These criteria formed the basics of sanitation promotion in this study.

3.10 Ethical considerations

According to Punch (2005), qualitative research makes researchers go closer and deeper into people's lives. This presents the need for ethical considerations. We must therefore consider the issues of informed consent (Mason, 2002 in Creswell, 2009, p. 188). The role of ethics in social research must not be underrated. It is important to observe due process throughout the study. First of all, an introductory letter from the Department of Public Administration and Health Services Management was sent to the study organization of the researcher's intent, hi addition, all respondents were assured of total confidentiality as well as the purpose for which the data were being collected; that is for academic purposes only.

3.11 Conclusion

The chapter has described the methodology of the research process which was not without challenges. There was the initial reluctance of respondents and occasional interruptions by others during the interview process, in some cases, respondents veered off completely into other areas they thought was more important to them. These notwithstanding, the process followed helped to manage the challenges appropriately.



CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter deals with the presentation, analyses and discussion of the findings of the study which is on the sanitation promotion strategies of Kaneshie Market Complex in Accra, Ghana (hereafter may be referred to as “the market”). The chapter gives a general view about what constitutes sanitation in the market. It further discusses the findings of the study in relation to the objectives, the conceptual framework and issues from the literature review which focus on access to water and sanitation hardware, sanitation promotion and enabling environment as important aspects of sanitation promotion in the market.

All respondents agreed that the Sanitation Promotion (2008) definition of sanitation completely captures how sanitation ought to be defined which includes breaking the cycle of disease by using interventions that can reduce the exposure of people to human and animal excreta, refuse and wastewater and disease vectors such as rats, mice and flies. The interventions must involve not only the provision of facilities but the exhibition of the right attitudes as well. They also agreed that human and animal excreta, refuse, wastewater disease vectors and personal hygiene have direct health implications if not effectively managed or controlled.

4.2 Strategies for promoting sanitation in the market

The first objective of the study was to find out the main strategies being employed to promote sanitation in the Kaneshie Market. Strategies refer to the systematic plan involving actual activities that are put in place with the aim of ensuring cleanliness of the market but ultimately preventing diseases. This plan has the components of sanitation promotion:

communication; individual and group responsible activities; regulations and monitoring. This buttresses the assertion by Mara et al., (2010) that the complexity of sanitation demands a clear analysis of the situation at hand and developing the required strategies that can help achieve success.

4.2.1 Communication

UNICEF (2008), states that “education and communication are important components in hygiene promotion” and for that matter sanitation promotion. It further explains that it is the right individuals to have knowledge on the relationships that exist between hygiene and sanitation behaviours and their health. Communication activities help promote awareness about facilities, sharing information among the targeted groups in order to promote behaviour change and also maintain people’s involvement in sanitation promotion (The WBEHP and partners, 2004). This is to ensure that people are knowledgeable about sanitation in general and appropriate behaviour that is required of them (Sanitation Promotion, 1998).

The Kaneshie Market uses communication and education as a strategy to promote sanitation among officials and tenants. There are constant educational programmes that are put in place for all the groups in the market. According to the environment manager,

“Just last week, I attended a workshop at the Food and Drugs Authority. I went with some of the Market Queens. When we came back, they gathered their members and educated them. “

In communication, the place and medium/channels must also be well selected (The WBEHP and J partners, 2004, p. 12) and therefore, trained personnel and agents who have the required skills are encouraged to take up the communication task. At the Kaneshie Market,

education programmes take the form of oral presentations and use of pictures where possible. This is normally done in the market. Whenever an education programme takes place outside the market, representatives are selected from the target group to attend. When they return, they must gather the members of the group for briefing. During such meetings, suggestions are given by members on the presentations as well as the situations at stake. A successful programme is not one in which people are simply instructed on what to do but one that promotes interaction to arrive at jointly found ways or solutions (Appleton, 2005).

Communication between management and tenants is very clear because all tenants are very aware of the rules concerning sanitation practices that affect the categories of business. Also, tenants are very comfortable with the opportunities or channels available to report issues directly to management in emergency situations especially. Education programmes are also organized for the people in the market by NGOs and other organizations. This may involve the use of celebrities in order to whip up the people's interest in the message at hand as is illustrated in Fig. 4.1 below.

Fig 4.1: Celebrity Joselyn Dumas on cholera education tour of Kaneshie Market



Source: www.ghanaweb.com

Such opportunities are the only ones that customers may chance upon and be part of but often, they do not stop to listen. A lot more is desired when it comes to communicating sanitation promotion to customers who are targeted at 10,000 each day according to management of the market. Even though there are some posters and signs directing people to various parts of the market as well as the activities of the market, these signs are mostly blocked by the display of traders' wares.

There are no posters on good hygiene and sanitation practices even in the washrooms. These are often the visible signs of how seriously sanitation is considered. Even though the market is often host to marketeers who use public address systems, sanitation education is totally absent from their "noise". The only sure source of information for customers is the tenants. One customer complained,

"I once went to Kaneshie Market and had a stomach upset. I quickly took a taxi home. I had just returned from London. At home, my neighbour told me I could have used the toilets at the market. I laughed. On my next visit, I decided to check out their washroom and I think they were very presentable. Now, I am not as afraid of contamination there as I used to think. "

Even though the washrooms are presentable, customers and other people who visit the market should be able to follow simple leads around. This is absent in Kaneshie Market.

4.2.2 Individual and group responsibilities

"Effective sanitation cannot be effectively delivered by outside agencies" (Lopez, Mathers, Ezzati, Jamison & Murray, 2006). Sanitation promotion must not be limited to simply stimulating demand but actual activities as well. Therefore, there is the need for those involved to have specific activities that they must engage in in this regard. Both management

and tenants have activities that they are responsible for. One of such is daily sweeping. All tenants are encouraged to sweep their stores and stalls, gather the rubbish and leave it in front of their space for collection by company workers. This begins at exactly 5:30pm when the market officially closes till morning. At 11: 00 pm, all vehicles are expected to leave the car park. The workers of the company together with those of AMA, work all night till 6:00am when the drivers come in to begin work.

Sweeping is one of the basic ways of promoting sanitation. It concerns the very surrounding of the market and ensuring this will prevent accumulation of refuse and other unwanted materials that may decay and cause further havoc. At the market, every tenant is responsible for sweeping his or her space. This is an indication that tenants are involved in maintaining sanitation in the market.

Fig 4.2: A well-swept section of the Kaneshie Market.



Source: From field work, 18th April, 2015.

Other activities include washing and scrubbing of market and essential areas such as the fish and meat rooms because of the sensitive nature of these places which cannot be done periodically. There is also weekly scrubbing of the lanes of the ground floor where

foodstuffs are sold. This is done every Sunday. During this period, the market is closed. On quarterly basis also, there is a call for all tenants to undertake general cleaning of their spaces. This takes whichever form that the company may suggest. General cleaning is compulsory for all tenants. The company provides tools that are needed as well as what must be done such as removing cobwebs and cleaning of rooftops. As explained by a tenant:

“During general cleaning, we come and scrub the floors and wash the tiles also. If you don’t come, you will be fined. They always easily identify those who don’t come because we clean our own spaces. If you cannot come, you make arrangements for cleaning of your space. “

In addition, the company conducts quarterly fumigation and periodic spraying as well as two-week disposal system of human excreta and clearing of wastewater ways. The market is often fumigated against rodents and other disease vectors. There is also periodic spraying in the fish and meat rooms to prevent too many flies in these areas but the fish sellers believe it is still not enough because there are still many flies in the fish room even though the situation is not as bad as what happens outside. The spraying is especially done with care in areas where food items are sold. Every two weeks, the septic tanks are dislodged and washed thoroughly. The market also has open, covered and underground drains for wastewater disposal. These are also cleaned every two weeks. The debris is collected and all sand removed to make way for the easy flow of wastewater. “Promoting hygiene and sanitary excreta/waste management practice/technology should be an important component of proactive public health development” (Cranfield University, 2013).

Proper excreta and wastewater management is the surest way of preventing the transmission of pathogens in the environment (Karr & Pasteur, 2005). With the World Health Organisation estimating 2.2 deaths annually due to sanitation, a public place like the market

under study should have appropriate mechanisms for excreta and waste management. According to Murray & Lopez (1996) and WHO (2013), 10% of people living in developing countries have intestinal worm infections that can be directly linked to improper waste and excreta management. The Kaneshie Market can be said to be on the right track with their responsible activities in this regard.

However, there must be attempts at getting everybody involved. Even customers must have a role in promoting sanitation in the market. Respondents agree that everybody has a role to play. According to a customer:

“The environment determines what you can or cannot do. Personally, I will not litter the main market because the place is visibly neat all the time.”

Several other customers supported this assertion with the explanation that it is the considerable neatness of the place that attracts them the most. Therefore, they will not destroy the efforts being made by the market.

4.3 Access to water and sanitation hardware

The second objective of the study was to investigate access to water and sanitation hardware.

This deals with water supply system, improved sanitation facilities (toilets) and household technologies. Water supply looks at the issues of provision of water in terms of quality and quantity to help reduce the risk of contamination of food. Improved sanitation is the second indicator. It involves the provision of facilities to dispose of human excreta in ways that safeguard the environment and public health. Some disposal techniques include the use of various kinds of latrines, septic tanks, and water-borne toilets. It also involves technologies that concern the ability of individuals, homes and facilities to provide those items needed from promoting healthy practices such as soap or local substitutes for hand washing,

chlorine, filters, hygienic and efficient water storage containers, potties for young children among others (The WBEHP and partners, p 11). Mention can also be made of garbage containers, brushes and other tools that can be used to promote sanitation.

4.3.1 Water supply

For a public place in an urban area, water is indispensable especially in sanitation promotion. The Kaneshie Market experiences constant flow of water on daily basis. There are taps on all floors as well as in the areas where water is most needed. Several activities in the market involve the use of water. There are food vendors who cook in and around the market to feed tenants and customers. As a respondent explained:

“We all eat in the market. Even the office workers eat here. People who are travelling come here to eat before boarding their cars. In fact, we need water and we need good water.”

There are those who occasionally wash down in the bathrooms after work. Some people without permanent homes also take their bath in the market. Water is also needed in the over 50 water closet toilets in the market. For many people doing large-scale grinding of vegetables such as tomatoes, pepper and spices such as ginger, water is very essential. When they buy the things, they have to wash them before grinding. Vegetable sellers need water to wash the produce which come straight from the farm. Fish and meat sellers also need water as suggested by WHO Fact Sheet (2015).

One official explained thus:

“Because water is so essential to many activities in the market, there is constant flow of water. The company has also constructed a borehole that provides water when the water company does not provide water.”

There is water every day at all times.”

Even in handling vegetables, poor practices along the supply chain can cause detrimental challenges hence the need for water to wash fresh vegetables before sale. If markets have water for freshening of farm produce before sale, it will help prevent the soaking of these produce in rivers, a practice that causes serious health risks in most farming communities (Kutto et al., 2011).

As suggested by Adzitey et al., (2010), there must be rules concerning how food items should be handled. At the Kaneshie Market, food items are not supposed to be displayed on the ground but a few of the tenants do break the rules outside the main structure of the market. Even though there is water all the time, washing of vegetables is left to the discretion of the traders who deal in them. What is of concern is that, for those who grind in the market, there is no rule concerning the washing of vegetables before grinding. Some of the vegetables that go for immediate grinding are mostly almost spoilt. According one grinder:

“I don't like to eat from outside because the things people bring for grinding are always spoilt and some people do not even wash them.”

The people in the market need to be empowered on the reasons why they have been provided with water to enable them do the right things always.

4.3.2 Improved sanitation

Improved sanitation is essential in the fight against open defecation. Toilets and bathrooms are provided at various vantage points to facilitate personal cleanliness and hygiene. Bartram & Caimcross (2010) explained that, improved sanitation should be able to separate human faeces from human contact. The danger of unimproved sanitation cannot be underestimated. A market is a public place where large numbers of people handle and eat foods. Therefore, it

is a possible breeding point for infectious diarrheal diseases which include cholera, typhoid among others (WHO, 2013). Toilet facilities must therefore be separated from food as much as possible. They must have high levels of cleanliness.

Kaneshie Market has a total of 60 standard toilets and 16 bathrooms. All these toilets are water closets. They are divided into normal and executive toilets. However, when there is no light, they lock all the washrooms on the upper floors. Tenants have to go all the way down to even urinate. There are a lot of women in the market and some complain that they can neither hold urine for a long time nor go to the ground floor several times in a day. Some people have therefore resorted to urinating in rubber containers and bags. When tenants indulge in this practice, there is the possibility that they do not wash their hands afterwards and this can lead to contamination of food especially by food vendors in the market. Simple hand washing alone is able to prevent contamination so it is important that measures are put in place to prevent people from postponing the washing of hands after urinating or defecating. A look at the toilets however revealed some bad management practices that have reduced the number to those that are really available for use. As a respondent lamented:

“Some of the toilets in the male washroom, about four, have been spoilt for some time now. We have reported it over and over again but they have still not been repaired. They need more workers for the job.”

Even though tenants complained about management not responding quickly to fix damaged toilets, management believes tenants do not really understand the magnitude of the problems that need fixing and therefore want it done very quickly.

4.3.3 Sanitation materials

Sanitation materials involve technologies that concern the ability of individuals, homes and facilities to provide those items needed in promoting healthy practices such as soap or local substitutes for hand washing, chlorine, filters, hygienic and efficient water storage containers, potties for young children among others (The WBEHP and partners, 2004, p 11). WHO Fact Sheet (2015) enumerated a number of such materials for markets: “handwashing basins with soap and running water should be provided, both in toilets and near market stalls; refuse must be disposed safely. Bins with well-fitted lids or sacks are the most appropriate containers to stop flies and vermin being attracted. Refuse must be removed regularly, preferably daily, from the market to avoid a build-up,” (WHO Factsheet, 2015, p. 96).

At the Kaneshie Market, waste containers are placed in front of the market and inside the fish and meat rooms, and soap and toilet roll in all washrooms. Brooms and other equipment are provided by the company for clean-ups. But observations revealed that soap was not available all the time as should be the right practice. When quizzed further about the absence of soap in the washrooms and lack of rubbish containers at vantage points except the one in front of the market, the environment officer explained that:

“We used to provide smaller dustbins inside the market but we have had to stop over time because they were being used for dumping of urine and even faecal matter often tied in plastic bags. So now. the tenants are to keep their rubbish gathered in front of their stalls and stores. Our workers then go round and collect them. We have the same problems with soap in the washrooms. There is constant stealing and misuse of items such as detergents, toilet rolls and towels. The tenants also complain of carbonated soap even though we advised them that it contained better germ killing

ingredients than liquid soap. Meanwhile, if you put any of them there, they would steal them.”

The least said about refuse collection at the market, the better. For all respondents, everything is or seems to be working well except for collection of refuse which does not give the market a good image. AMA is directly responsible for waste collection. The company that must collect the waste is determined by AMA. This does not allow the management company to have total control. As to why the management company cannot ask for a change in the service provider, officials were reluctant to comment and rather suggested that the collectors are also having challenges of their own. The general impression on sanitation is varied based on the stead of respondents. The officials believe that sanitation in the market is good except for the removal of refuse that is not controlled by management of the market directly.

“We are doing very well with sanitation even though we can still do better. The market is always teeming with people. Most times, people do not see the work we are doing because there is always rubbish around. As we work, people create more work. People are sitting right by the drains all the time. If not for the work we do, the situation will be worse than what we see.”

The tenants and customers are however of the view that even though the company is working quite well, sanitation in the market is still not too good. As one explained:

“The inside is good but the outside is not so I cannot say that sanitation is good because a lot of the food items are sold outside. “

Another explained that:

“Sanitation outside is very bad. People sit in dirt to sell their things. People are selling cooked food near dirty and choked gutters and the gutters look the same every time I pass by them. A few times I have seen the culverts opened and contents poured on the streets but I think there must be a way of stopping people from trading in dirt.”

Fig 4.3: An overflow refuse container in Kaneshie Market



Source: From field work, 18th April, 2015.

4.4 Providing an enabling environment

Since the issue of sanitation goes beyond the very organization under study or any particular institution, enabling environment concerns the measures at various levels that must support efforts in improving sanitation. For the purposes of this study, the enabling environment includes cross-sector and stakeholder participation, financing and cost recovery. Management of Kaneshie Market considers the following among others as their stakeholders. They include government and its ministries, agencies and assemblies, shareholders, tenants, customers / clients, the Police, the Fire Service, the watchdog community, the health sector,

the various groups and associations within the market and the car parks and other companies that work closely with them. Several of the stakeholders do participate in sanitation promotion in the market.

4.4.1 . Cross-sectoral and stakeholder participation

Sanitation promotion has never been an individual business. Both the dangers of unimproved sanitation and the benefits of good sanitation affect various sectors of the community. Several people must play interconnected roles to promote sanitation. Therefore, everybody who has a part to play in sanitation is expected to play the role effectively. At the government level, there are numerous policies on environmental sanitation including National Environmental Policy, (1991); Local Government Act, 1993 (Act 462); Environmental Protection Agency Act, 1994 (Act 490); Water Resources Commission Act, 1996 (Act 522); National Building Regulations, 1996 (LI 1630); National Environmental Quality Guidelines (1998); Environmental Sanitation Policy (1999); Environmental Assessment Regulations, 1999 (LI 1652); Landfill Guidelines (2002); Guidelines for the Management of Health Care and Veterinary Waste in Ghana (2002); Revised Environmental Sanitation Policy (2007) and Environmental Sanitation Policy (Revised, 2010) (Environmental Sanitation Policy, 1999).

With all these sanitation policies and documents as well as those by international agencies and NGOs that suggest ways of promoting sanitation, the managing director however thinks that the company is ahead of many of the suggestions that are made in these documents.

“We already do the things in the sanitation documents and the suggestions that the AMA occasionally puts across. The AMA actually comes round for inspections and learns from what we do. “

He is supported by the environmental manager who indicated thus:

“The company considers what works best. We consider our needs but what we do is not different from those stated in the various policy documents or sanitation manuals. Segregation is not possible because there are no end line systems to work on them. If we segregate in the market but dump everything together again, then what will be the use. When the systems are put in place, we will comply. “

This was to further explain the fact that some document propose sorting of waste that the company wasn't doing. On how well they thought the company is able to execute its sanitation promotion, the managing director explained that management of the market believes that the environment department is one of the best. The challenge is always with collecting refuse. When AMA doesn't come to collect the refuse and it overflows and creates a mess, media people come and run reports that the market is not doing well. Even though they are not following any particular policy documents, the strategies being employed at the market appropriate technologies that work best for the sanitation needs of the market. The tenants are simply okay with the strategies in place and are rather looking to have improvements in other areas that seem to be delaying.

One of the major impacts of sanitation can be seen in its relation to public health and the health sector for that matter. According to Water Aid Report (2011), “global health institutions should acknowledge and address the impact of sanitation on the global disease burden, the contribution of improved sanitation to reducing that disease burden and the potential benefits for public health outcomes.” The report also enumerated other issues such as proper regulations, policies and guidelines for sanitation. In addition, governments in

developing countries must improve inter-sectorial coordinations by strengthening the regulatory frameworks that guide their activities and spell out their roles and responsibilities.

There is a positive relationship between ill-health and poor water supply, sanitation and hygiene and this has been a major concern of public health (Bartram & Cairncross, 2010).

This makes sanitation promotion one of the most important roles the health sector can play in environmental health planning. At the Kaneshie Market, the public health professionals occasionally educate the people. With the help of the health sector, some measures have been put in place. There are regulations for those handling food especially. No one is allowed to sell on the ground. All food items must be put on platforms. Those dealing in food are also screened of communicable diseases. Inspectors often go round to make sure that tenants are doing the right things. This is in line with the Fact Sheet (2015) requirement for regular education, encouragement and supervision for food handlers.

Community involvement is also important for sanitation promotion. It involves getting the community people to become committed to maintaining the systems put in place. It is believed that when community members have done the “work” and when they have committed their own time, effort, and resources to establishing improved water and sanitation systems, they are more committed to following up on and safeguarding their investments. (The WBEHP and partners, 2004, p. 15-16). At the market, the tenants and their various groups constitute the market community. This may extend to most of the education programmes that are facilitated by the associations. Whenever any information is to be disseminated, the market queens and the heads of the various associations are informed. They will also inform their members and gather them for whatever session is planned. Occasionally, certain groups such as churches and schools celebrating anniversaries would

also organize themselves and clean certain parts of the outside but the cleaning of the inside is exclusively done by staff of the company.

Both officials and tenants agree that participation in sanitation programmes at the market level is very high. There are sanctions for those who do not and leadership shows the example by also participating in the various programmes. However, there are certain concerns. Tenants do participate fully especially during market day celebrations even though they will only clean their space. They also never use their own materials so the company must provide everything; even brooms for the exercise. They think because they levies, all the things they need must be provided for them.

4.4.2 Financing and cost recovery

Financing has taken a central stage in the sanitation debate in most countries in sub-saharan Africa (Kariuki, 2011). In *Reaching the MDG Target for Sanitation in Africa - A Call for Realism* by DANIDA in 2010, a historical analysis of sanitation indicated that for most industrialized nations of today, funding for sanitation in the past was by governments, philanthropists and local industries. This was especially so for highly populated urban settlements. This was done to avert any devastating public health issues. In modern times, these nations now enforce sanitation promotion by legislation and have thereby achieved universal coverage (MFAD, 2010; p. 9 - 10). Despite the fact that sanitation has costs, it also has many benefits. A recent cost and benefit analysis of the provision of safe water and sanitation services for 2015 by the Swiss Tropical Institute indicated that for every US\$1 invested, there would be an economic return of between US\$3 and US\$34, depending on the region of analysis. For management of Kaneshie Market, promoting sanitation is very expensive with the highest budgetary allocation but this is worth the spend because as a customer explained:

“Of all the markets I have ever been to in Accra, I will continue to shop at Kaneshie Market. I have the option of two other markets but I always choose Kaneshie Market because they are very neat. The market is neat and the traders also wash their foodstuffs very well. The only thing is that their things are expensive.”

Another also explained that:

“At Kaneshie Market, I can buy things and put them straight into my fridge. As for some other markets, I wash until I get tired. You can buy vegetables, wash and grind right there in the market. If you even want washed ginger, you will get it.”

Yet another one explained:

“I once went to Kaneshie Market and had a stomach upset. I quickly took a taxi home. I had just returned from London. At home, my neighbor told me I could have used the toilets at the market. I laughed. On my next visit, I decided to check out their washroom and I think they are very presentable. Now, I am not as afraid of contamination there as I used to think.”

That last observation also shows that proper sanitation is a preventive intervention for diseases that are diarrhea related. A tenant at the market observed that:

“There are some markets where you will be afraid to even take your children. For many of us here, the market is like a second home. You can bring your children and not be afraid that they will pick diseases like cholera and typhoid.”

Improved sanitation and water in developing countries yield an average of about US\$ 9 for every one dollar spent, resulting in huge savings in health care costs and gains in productive days” (WSSCC, 2010). However, where there is little to distribute and much to do, financing sanitation may become a challenge. Management of Kaneshie Market is totally responsible for financing sanitation promotion in the market. According to management, sanitation receives the highest budgetary allocation. The company provides everything that is needed for sanitation promotion. More is still needed if management must achieve better results. As the managing director explained:

“Luckily, the Board of Directors is ready to allocate more funds to sanitation promotion in the near future.”

However, mere allocation of available funds is not enough. There is the need to combine financing with cost-recovery. This is to promote financial viability in order to secure financing for projects. Cross-sector and public-private partnerships involve the bringing together of several entities, both public and private who would work together using their core competencies through interagency committees, steering committees, and task forces among others.

4.4.3 Prompt identification of challenges

Identifying and responding appropriately to barriers in sanitation promotion is very crucial (ODI & Tearfund, 2006). Despite the positives, Kaneshie is not without challenges. The challenges include staffing problems, financial challenges, behavioural issues, power crises, and population growth with its associate problems. With more than 10,000 tenants and daily visitors exceeding 10,000, the environment department has a staff strength of only seventeen, who are responsible for making sure that the market and car park are tidy, maintaining food hygiene, developing and maintaining infrastructure in the market, and

maintaining the building and equipment among others. This is affecting the efficient and timely response to emergencies. According to the managing director:

“We currently do not have enough workers for the job. We have had to cut down on the number of workers for financial reasons. We used to have permanent electricians, plumbers and other professionals but sometimes we pay them for no work at all but we are thinking of bringing them back anyway because when you call them, it takes a long time for them to come.”

For a business entity that is totally responsible for sanitation, it is important to have technically competent staff to oversee the promotion of sanitation. This will also ensure that appropriate and cost effective technologies are employed for better results.

Another daunting challenge in sanitation promotion is attitude and behavioural issues. It is one area that is making work difficult in the market. According to the supervisor:

“People are really making our work difficult. Imagine collecting rubbish and having urine pouring on you. You put soap and towels in the washroom and people misuse them. At home, they do not take the toilet rolls or pour soap the way they do here. They think they have paid for them so they can misuse them. That is wrong.”

People are also turning the market into a dumping ground. The rubbish in the market is not always generated in the market. People carry rubbish from home and this includes workers who use the lorry parks, tenants in the market and people living around the community. A major concern is also the fact that some people even dump the rubbish at unauthorized places because they do not want to pay the little levy that is charged by those who must put the rubbish in the tall containers. They would often package them and create the impression

they were luggage for travelling and dump them at night like people travelling somewhere.

The customers are also not left out in the attitude problems.

“We have tried on many occasions to get customers to only buy from inside the market but a lot still do their shopping outside. If they would stop buying from people who sell in dirty environments, it would send a strong signal to all sellers to observe the right sanitation practices.”

This may be indicative of the fact that not much has been done in terms of communication with customers about where they must shop. While some personally avoid buying from unhealthy places in the market, others also prefer to buy from sellers outside because they want to see clearly what they have paid for especially when the lights are off. Therefore, one way the company can ensure that people buy at the appropriate places is to improve further the lighting system inside the main market.

Also, a lot of activities in the sanitation promotion process in the market depend heavily on power supply. These activities include daily sweeping and washing of the meat and fish rooms that often happen at night, carting the refuse and dumping at the designated site are also done at night, pumping water to the top floors are all heavily dependent on power. The power crisis facing the nation currently is therefore a hindrance to the sanitation promotion process. The company is currently looking forward to acquiring a plant. Even though it currently uses a generator, it is unable to power the whole market and pump water to the whole building.

There is also the challenge of population growth which can be overwhelming if the economic and other structures are weak (Konteh, 2008). More and more people are finding Kaneshie Market the right place to sell. Several homes close to the market have either built

shops and or given traders permission to sell on their pavements. Several streets around the market are gradually turning into markets of their own and causing sanitation concerns to the company and the public as a whole. In an attempt to curb this, the company extends its sanitation practices to all these areas because if those places get dirty, people will refer to them as Kaneshie Market.

In addition to this, the company is currently seeking a loan to build another complex and car park to absorb several of these traders and give them a more dignifying trading experience. As the environmental manager further explained, even though work generally goes on well, this is impeded when there is no water or electricity. Even with that, the workers use flashlights because they have to finish work before daybreak. Improvising in this way is not enough for a market of such size. In terms of refuse collection, there are challenges with the service provider. The workers who work on the bus terminals often sweep rubbish under cars forgetting that those cars will move.

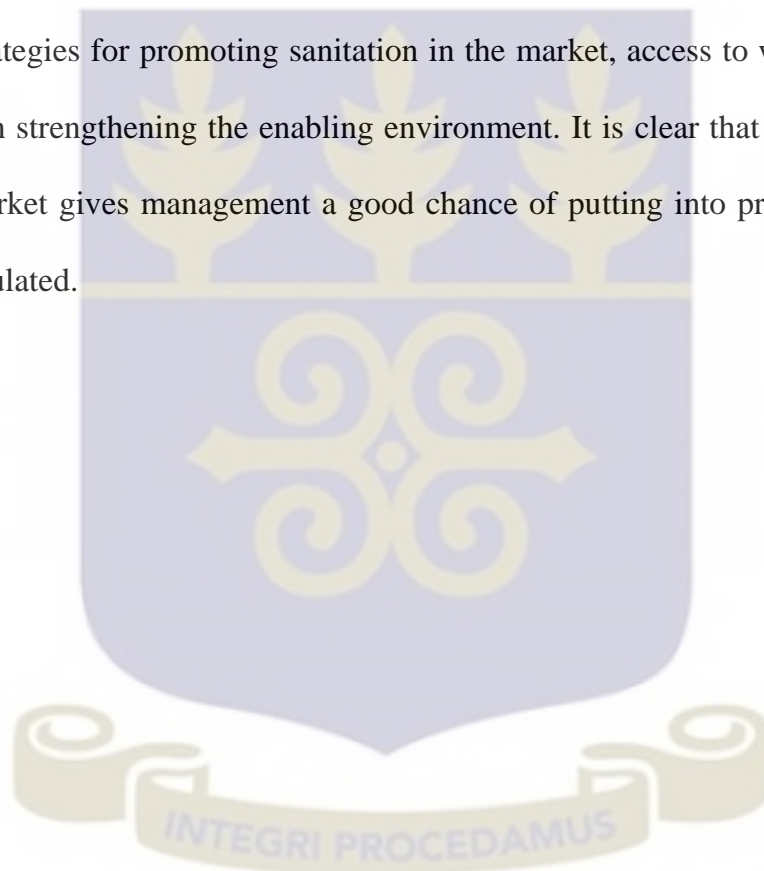
These challenges are well known to both management and tenants. Many tenants feel that management is not doing enough to address the challenges which have persisted for quite some time. Management on the other hand believes it is doing all that is possible considering the present circumstances in which they find themselves.

For an institution like the Kaneshie Market, sanitation challenges cannot be tackled with charitable measures. For a place that is manned by a private organization, sanitation must be seen as business. By this, the company can bring in various organisations that can help tackle the challenges before they become huge problems. The demand for sanitation is big and need effective collaboration. According to Abeysuriya et al., (2007) “The sustainability focus and the often decentralized technologies of this emergent stage in sanitation present many opportunities for new actors to enter the urban sanitation industry.” However, this must be

done competitively. Currently, the market is having problems with the service provider for refuse collection. Because this is not controlled by the management company, refuse collection has rather become a dent on the market's image.

4.4.4 Conclusion

Though there are many challenges in sanitation promotion in the Kaneshie Market, management is making a lot of effort to bring it to an appreciable level. The market is a distinguished one that is working hard on sanitation. However, a lot more needs to be done in all areas; strategies for promoting sanitation in the market, access to water and sanitation hardware and in strengthening the enabling environment. It is clear that the enclosed nature of the main market gives management a good chance of putting into practice the strategies they have formulated.



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMEDATIONS

5.1 Introduction

This is the final chapter of the study. It has three sections comprising the summary of major findings of the study, the conclusions drawn and recommendations. The recommendations are

based on the findings as well as those of respondents covered in the study.

5.2 Summary of major findings

In summarizing the major findings, there is the need to look again at the main questions that guided the study:

- i. Does the market have specific strategies for promoting sanitation?
- ii. Do people in the market have access to water and sanitation hardware?
- iv. What is the level of participation of stakeholders in sanitation promotion in the market?

In order to answer these questions effectively and also achieve the objectives of the study, the qualitative research approach was used. This was to enable the researcher have a deeper understanding of sanitation in the Kaneshie Market Complex. In all, fifty respondents were contacted. They included ten officials, twenty tenants and twenty customers. These were all selected purposively. Data used are therefore both primary and secondary so as to increase the reliability of the findings. The following are summaries of the major findings based on the research questions asked.

The study found out that sanitation is very important in the market and therefore there is a department known as the Environmental Department which is responsible for the tidiness of the market and making sure of appropriateness of all structures that must help create a healthy trading environment. There are therefore specific strategies that have been put in place by the company to promote sanitation in the market. They include communication which deals with educational programmes through which appropriate behaviours are communicated to targeted groups. Individual and group responsible activities come next comprising daily sweeping where tenants who own shops or stalls are made to sweep their own spaces while the company has workers who sweep the car park, daily washing of essential areas such as the meat and fish rooms which is very important to the market because it helps to keep the place free from flies and stench that might emanate from there if not cleaned, Sunday scrubbing which is the washing of all the lanes within the enclosed areas of the market.

Another strategy is the quarterly general cleaning where all tenants are to close their shops and clean their surroundings as directed by management. This is compulsory for all tenants and there are sanctions for those who do not attend. There is also a quarterly fumigation and periodic spraying to rid the market of disease vectors and flies respectively. The study also found out that every two weeks, the septic tanks are emptied and washed thoroughly clean. The open drains are also cleaned to make way for waste water to flow into the bigger and closed drains. In addition, there is constant education of the various groups and associations on best sanitation practices in relation to the area of trade. This also includes health screening for those who have direct contact with food.

There are also strict regulations that must be adhered to by all tenants and these are constantly monitored by inspectors. The market is also well endowed with washing facilities

including about sixty improved sanitation facilities and several washrooms. These form the main strategies for sanitation promotion as done by the management company of the market. In terms of waste collection which forms a major part of sanitation in the market, the company makes sure that the refuse is collected from the various stores into the container provided by the AMA, the body responsible for refuse collection in the Accra metropolis.

The management has made provision for constant water supply to the market. Apart from the main pipe-borne water, a borehole has been constructed from where water is supplied to the market. The only problem is that the pump is unable to pump the water to the top floors of the market. The market has several improved sanitation facilities for both male and females according to how much each person can afford. They come as ordinary and executive toilets. However, the current state of some of the ordinary ones is deplorable. The executive washrooms have sinks and soap for hand washing. They are much cleaner than the ordinary ones. The ordinary ones altogether have one sink and soap to share. However, there is misuse and petty thievery of these items from the washrooms by users. Containers have also been provided at one collection point for dumping of refuse. The market has not been able to place bins at vantage points in the market because they are often filled with human excreta tied in plastic bags. The tenants are therefore advised to gather refuse in front of their stalls for collection by workers from the environment department.

The market is very well organized. All tenants belong to groups and associations. The company works directly through these groups and associations so level of participation in sanitation promotion activities can be said to be high. Same can be said of other stakeholders in almost all areas except in waste collection. The company believes there is a national crisis when it comes to waste disposal and this is creating problems in the market. It is however evident that the management company seems to be doing much better in areas where they

have full control. For those areas of collaboration, quite enough needs to be done there as well.

The sanitation has several effects on the market. Positively, the Kaneshie Market is a preferred place for many shoppers who find the place more acceptable even though more expensive. The market has not directly experienced or has not been linked to any health or disease breakout because of the preventive mechanisms that are in place. There are however challenges with issues concerning behaviour of people - both tenants and customers towards maintenance of sanitation in addition to problems of financing, staffing, rapid population growth and the power crisis.

5.3 Conclusion

The study gave an insight into the sanitation situation at the Kaneshie Market. Comparing the Kaneshie Market to other markets in Accra, the Kaneshie Market stands out as one of the two good ones. Studying the market through this process has revealed that, without comparing the market to the poorly performing ones under the AMA, the Kaneshie Market still stands tall in itself. Its main strategies can be said to be preventive (diarrheal diseases) and regulatory (for maintenance of structures). The market is well demarcated and well organized in modern terms. It is well ventilated and maintained. Special attention is being given to special areas. There is a lot of input in sanitation in terms of the provision of improved sanitation facilities and sanitation hardware, water supply and others. The only difficulty is with the collection of waste in the market which according to management, goes beyond them due to what they describe as a general crisis in the nation. A better cost recovery strategy than what is being done currently would have helped much better in this area. But the company can still pursue some innovative ways of reducing the impact of this particular problem.

There is no doubt that the sanitation practices in the market *constitute the basic* reason many customers refer it to several others in the metropolis. This should be able to impact positively on the fortunes of the company. This is because most sanitation facilities in the market are accessed by payment of tolls or levies. An example is using the washrooms which comes at a cost paid before entering the place. Considering the number of people who work in the market and those who visit the market daily, management needs to relook at the facilities and their maintenance in order that funds generated from this area can help to tackle some of the identified challenges.

5.4 Recommendations

Based on the findings of this study, the researcher recommends the following to Accra Market Ltd, the AMA and other stakeholders of the market. First and foremost is the need for infrastructural expansion. There is massive population growth forcing the market to expand into homes and streets in the communities around the market. As one walks through these areas, there is a clear indication that these expansions have the tendency to pose sanitation challenges. It is therefore recommended that the market is expanded in the same enclosed manner as the existing one since sanitation is much better managed in an enclosed area than in an open area. Regulations should be defined to guide private developers who are turning their homes into shops because of the market. New structures should be built with enough available space for vehicles to park.

There is also the need for constant education on sanitation issues. The Kaneshie Market is fast becoming an area for promoting sales by mobile businesses. Most of these businesses make use of public address systems and music to draw attention to their products. Occasionally, the management company can take advantage of these opportunities to educate the general public on sanitation related issues. In addition, there is the need for more work to

be done on the improved sanitation facilities in the market. There must be a maintenance culture that will help to maintain the standards of the place as stated by the company itself.

Also, the market can consider some new sanitation promotion technologies such as MINTing -Materials in Transition. MINTing promotes the creation of awareness and the changing of attitude towards all types of waste and making it become a lifestyle of the people. One such strategy is the sorting of waste. Waste from the Kaneshie Market can be clearly identified and segregated. Even though management is of the view that there are no technologies for this, other companies whose raw material base is composed of items generated as waste can be contacted for help and collaboration in adding value to the waste generated at the market.

Even though the sanitation situation in the Kaneshie Market cannot be described as perfect, it is worth emulating. Within the area itself, the study revealed that those parts directly under the management company are much better than those under the control of AMA. This is an indication that privatizing management of the markets can have a good impact, a point that is worth considering by the AMA which is responsible for several of the markets in the Accra Metropolis. At the National level, the structure of the market should be considered in the construction of new markets if the war against sanitation must be won.

Research on sanitation in public places such as markets, schools and other institutions that often have large gatherings should be encouraged. This can help determine if these places have the required facilities that promote dignity, human rights and public health. This can also help generate innovative ideas for sanitation promotion in the various areas. Findings can also form strong bases for policy formulation and drawing of rules and regulations for effective monitoring.

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APPENDICES

APPENDIX 1: Interview Guide for Officials

University of Ghana Business School

Department of Public Administration and Health Services Management

Interview Guide for Officials

Introduction

Dear Respondent,

I am currently a student of the above school studying for an Mphil in Health Services Management. In relation to this, I am conducting research on the topic “Analysis of sanitation promotion strategies of Kaneshie Market Complex, Accra”. I have selected the Kaneshie Market Complex because it is considered a model modern and first class market in the Accra Metropolis by the Accra Metropolitan Assembly.

You are however assured of complete confidentiality.

Thank you.

Background information

1. What is your position at the market?

.....

2. How were you appointed?

.....

3. What language(s) do you speak?

.....

4. Can you tell me a brief history of the market? (Or will the information on the website suffice?)

.....

5. Do you agree that sanitation covers the following issues?

- i. Disposing of or hygienic management of human and animal excreta,
- ii. Disposing of or hygienic management of refuse
- iii. Disposing of or hygienic management of wastewater,
- iv. The control of disease vectors
- v. The provision of washing facilities for personal and domestic hygiene.

.....

6. Do you have a department mainly responsible for sanitation?

.....

.....

A. Strategies for promoting sanitation at the Kaneshie Market Complex

1. What are your main strategies for promoting sanitation?

.....

.....

2. How did you develop them? (Based on situations, sanitation manuals etc.)

.....

.....

3. How well have you been able to execute them?

.....

.....

- Clear strategies
- Raising awareness through communication and education
- Use of appropriate communication channels
- Monitoring

B. Access to water and sanitation hardware

1. What are some of the physical items or hardware that you have put in place to promote sanitation in relation to the number of tenants and the number of people who visit the market daily?

2.
.....
.....
.....

3. Do you face any challenges in providing water and sanitation hardware?
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.....
.....
.....



C. Participation of the stakeholders in promoting sanitation in the market

1. Who do you consider the stakeholders in promoting sanitation in the market and how closely do you work with them?

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.....

2. How would you describe their level of participation?

.....

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3. What accounts for such a level of participation and what must be done to sustain or improve it?

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Conclusion

What would be your final word on sanitation in the market?

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APPENDIX 2: Interview Guide for Tenants

University of Ghana Business School

Department of Public Administration and Health Services Management

Interview Guide for Tenants

Introduction

Dear Respondent,

I am currently a student of the above school studying for an Mphil in Health Services Management. In relation to this, I am conducting research on the topic "Analysis of sanitation promotion strategies of Kaneshie Market Complex, Accra". I have selected the Kaneshie Market Complex because it is considered a model modern and first class market in the Accra Metropolis by the Accra Metropolitan Assembly.

You are however assured of complete confidentiality.

Thank you.

Background information

1. How long have you been in the market?

.....

2. Do you agree that sanitation covers the following issues?

- i. Disposing of or hygienic management of human and animal excreta,
- ii. Disposing of or hygienic management of refuse
- iii. Disposing of or hygienic management of wastewater,
- iv. The control of disease vectors
- vi. The provision of washing facilities for personal and domestic hygiene.

.....
.....

3. Do you know of a department mainly responsible for sanitation?

.....
.....
.....
.....

Strategies for promoting sanitation at the Kaneshie Market Complex

1. Are you aware of some specific strategies/ activities for promoting sanitation?

.....
.....
.....

2. How well have do you think management has been able to execute them?

.....
.....
.....

- Clear strategies
- Raising awareness through communication and education
- Use of appropriate communication channels
- Monitoring



Access to water and sanitation hardware

1. What are some of the physical items or hardware that have been put in place to promote sanitation in relation to the number of tenants and the number of people who visit the market daily?

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.....
.....
.....

2. Do you face any challenges in having access to water and sanitation hardware?

.....
.....
.....

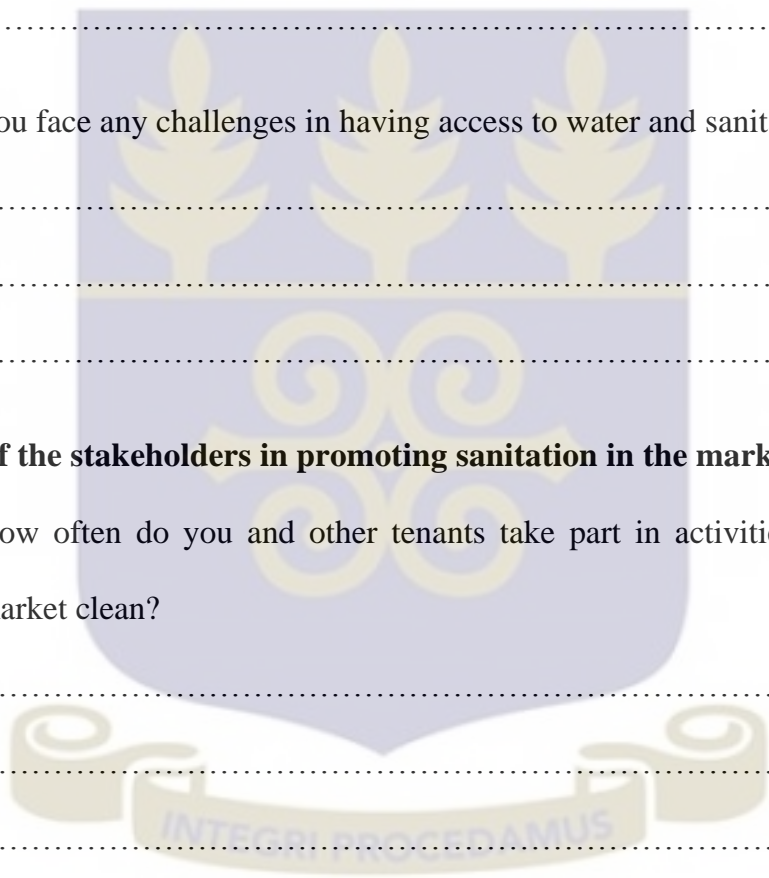
Participation of the stakeholders in promoting sanitation in the market

1. How often do you and other tenants take part in activities to keep the market clean?

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.....
.....

2. How would you describe the level of participation of the people in the market?

.....
.....
.....



3. Do people often come from places outside the market to speak to you on sanitation?

.....
.....

4. What accounts for such a level of participation and what must be done to sustain or improve it?

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.....

Conclusion

What would be your final word on sanitation in the market?

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APPENDIX 3: Interview Guide for Customers

**University of Ghana Business School Department of
Public Administration and Health Services Management
Interview Guide for Customers**

Introduction

Dear Respondent,

I am currently a student of the above school studying for an Mphil in Health Services Management. In relation to this, I am conducting research on the topic "Analysis of sanitation promotion strategies of Kaneshie Market Complex, Accra". I have selected the Kaneshie Market Complex because it is considered a model modern and first class market in the Accra Metropolis by the Accra Metropolitan Assembly.

You are however assured of complete confidentiality.

Thank you.

Background information

1. How long have you been shopping at the Market and why?

.....

.....

.....

.....

2. Do you agree that sanitation covers the following issues?

- i. Disposing of or hygienic management of human and animal excreta,
- ii. Disposing of or hygienic management of refuse
- iii. Disposing of or hygienic management of wastewater,

iv. The control of disease vectors

iv. The provision of washing facilities for personal and domestic hygiene.

.....
.....

A. Strategies for promoting sanitation at the Kaneshie Market Complex

1. Do you know of any specific strategies/activities for promoting sanitation?

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.....
.....

2. How well do you think they have been able to execute them?

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.....
.....

B. Access to water and sanitation hardware

What are some of the physical items or hardware that you have seen that in the market that are used to promote sanitation?

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.....
.....

What are the challenges you think the market faces in this area?

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.....
.....

C. Participation of the stakeholders in promoting sanitation in the market.

1. Have you ever participated or encountered any groups of people doing anything to promote sanitation in the market?

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3. How would you describe their level of participation?

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4. What do you think accounts for such a level of participation and what must be done to sustain or improve it?

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Conclusion

What would be your final word on sanitation in the market?

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