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Assessing MMDAs Performance Towards Achieving SDGs 6 and 11: A Case of Ga Central Municipality in the Greater Accra Region of Ghana

An undergraduate thesis submitted to the Department of Business Administration, Ashesi University. Submitted in partial fulfilment of the requirements for the award of the Bachelor of Science Degree in Business Administration

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May 2022

Declaration

I hereby declare that this thesis is my original work and that no part of it has been

presented for another degree in this university or elsewhere.

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Date: 4th December 2021

I hereby declare that the preparation and presentation of the thesis were supervised in

accordance with the guidelines on supervision of thesis laid down by Ashesi

University

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Date: 4th April 2022

Table of Contents

KEYWORDS

The following keywords might be helpful during the study:

Sustainability: Meeting current needs without jeopardizing future generations' ability to meet their own needs (Chakroborty, 2011).

Adequate housing: At a fair cost, appropriate privacy, adequate space, adequate security, adequate lighting and ventilation, adequate basic infrastructure, and adequate work and basic facilities (UN, 2009).

Sustainable transportation: Any "green" transportation that has a low impact on the environment (Development Engineering and Infrastructure Planning, 2021).

Security: The state of safeguarding important interests of individuals, society, and the natural environment from dangers posed by anthropogenic and natural environmental consequences (Barnett, 2009).

Sanitation: The upkeep of sanitary conditions (as by removing sewage and rubbish) —often used attributively —promotes hygiene and disease prevention ("Sanitation", n.d.).

ACKNOWLEDGMENT

and my supervisor, Dr. Stephen Armah, throughout the thesis journey. Next, I would like to thank my parents for their support and encouragement over the past few months. I am also grateful to the Ga Central Municipality Coordinating Director, John Owusu Donkor, and his team and the economic unit of the United Nations Development Programme Ghana for facilitating my data collection process. Finally, I would like to thank my supportive friends and colleagues.

ABSTRACT

Challenges associated with water, sanitation, and sustainability remain global problems, specifically in developing countries such as Ghana. To combat these issues, Ghana

has tried to keep up with global development goals such as the United Nations (UN)'s Sustainable Development Goals (SDG). Ghana has also tried to decentralize its governance structure to bring the government closer to the people. The core units of the decentralized governance structure are the Metropolitan, Municipal, and District Assemblies (MMDAs), and these same MMDAs are responsible for implementing national strategies such as the SDGs at the local level.

The research sought to assess Ghana's decentralized governance by studying challenges faced by the Ga Central Municipality Assembly, the Greater-Accra regional capital's worst-performing MMDA of 2020. The objectives were to evaluate the state of Ga Central Municipality regarding progress on the SDGs relating to SDG 6 (water and sanitation) and SDG 11 (Sustainable Cities), identify problems encountered, and provide recommendations. The study followed a narrative qualitative research method, and the data collection methods employed were interviews and observation. The study used primary and secondary data and data sources, including the Ga Central Municipality residents, officers in the Ga Central Municipal Office, the UNDP, and the NDPC. Information from the Local Governance Act 936 was also used. The findings suggested that the Ga Central Municipality was in a poor state regarding attaining SDGs related to water, sanitation, and sustainability. The reasons for poor performance included lack of cooperation, communication, education, and financial constraints. Recommendations to resolve the issues were improved communication, cooperation, and education on the role and importance of MMDAs.

CHAPTER 1: INTRODUCTION

1.0 Background

Water and sanitation remain vital issues facing the world. Access to clean water and good sanitation result in disease reduction and healthy environments (Columbia Center on Sustainable Investment (CCSI) et al.,2016). Unfortunately, billions of people worldwide lack access to safe drinking water and sanitation (UNICEF, 2021). The challenge is that poor water and sanitation are leading causes of the transmission of sicknesses such as cholera, diarrhea, dysentery, hepatitis A, typhoid and polio, and preventable deaths (WHO, 2022). For example, it is estimated that 829 000 die each year from diarrhea due to unsafe drinking water, sanitation, and hand hygiene (WHO,2022).

Ensuring the sustainability of cities has also emerged as a global concern in recent times as the world seeks to protect cities for future generations. Implementing policies to ensure sustainability could prove problematic because some policies cannot be implemented simultaneously (Cohen, J. E et al., 2008).

Although they are global issues, the issues of water, sanitation, and sustainability are more prevalent in developing countries like Ghana. While developed countries such as Greece, Iceland, and Spain were ranked as the top best regarding water and sanitation, developing countries such as Ghana, Sudan, and Gabon were ranked 131st, 134th, and 137th, respectively (Environmental Protection Index, 2021). Developing countries also have few successful sustainable development cases (Kiamba, 2012). The problems above show the need for countries, specifically developing countries, to adopt a development framework to eradicate these challenges. An example of such a framework is the United Nations' Sustainable Development Goals.

1.1 Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs) are a series of 17 interconnected goals developed by the United Nations to end poverty, protect the environment, and ensure peace and prosperity for humanity by 2030. (United Nations Development Programme, 2021). The SDGs are divided into five categories: People, Prosperity, Planet, Peace, and Partnership.

The People Category comprises the first five SDGs (No Poverty, Zero Hunger, Good Health and Wellbeing, Quality Education, and Gender Equality). The Prosperity category includes the seventh to eleventh SDGs (Affordable and Clean Energy, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Reduced Inequalities and Sustained Cities and Communities). The Planet category comprises the sixth, twelve, till fifteenth SDGs (Clean Water and Sanitation, Responsible Consumption and Production, Climate Action, Life below Water, and Life on Land). The Peace Category represents Peace, Justice, and Strong Institutions, and the Partnership category is Partnerships for The Goals (UNESCWA, 2021). This research addresses the planet category and focuses on the issue of Clean Water and Sanitation and related sanitation issues (SDGs 6 and 11). These goals require effective governance success at the local level to succeed.

1.2 Governance (What is the Role of Decentralization in Governance?)

Governance is associated with the performance level of a state, of which there are two views (Bhide, 2017). The first takes a more centralized approach where the government is responsible for economic development and allows global capital to access requisite infrastructure and labor services. The second is the decentralized approach, which focuses on deepening democracy through decentralization, direct participation, rethinking representation, and collective action (Bhide, 2017). Decentralization is like democracy. However, decentralization goes a step further by including participatory democracy, where citizens are allowed to make political decisions (García-Guadilla, & Pérez, 2002).

The decentralized view of governance, which will be used as the basis of this paper, aims to eliminate social exclusion by bridging the gap between the government and the people. The World Bank recommends this view in the context of development, where it is said to be one of the most significant governance reforms, unlike the centralized approach (World Bank, 2000, as cited by Bardhan, 2002). More recently, despite running a one-party state, China has moved from its centralized form of governance into a decentralized structure despite maintaining a one-party state with no possibility of change in the ruling communist party. This reform has led to massive improvements in China in recent decades. (Yu, 2012). An example of such improvements is before 1978, China's yearly growth averaged 4.4 percent, but after 1978, it averaged 9.5 percent (Xu, 2011).

China's decentralization process commenced in 1979, and local governments were delegated authority to ensure urban construction and development. Thus, they were responsible for public services such as water, road, and power systems in their respective jurisdictions. They were also given the mandate of providing public services such as education, health, culture, police service, and infrastructure. Infrastructure improvement meant improvements in business operations, resulting in general economic growth (Yu, 2012). While China seems to reap the positive effects of decentralization with a high growth rate and urban transformation, this does not reflect in Ghana, which also practices decentralization. Some examples of poor public service and infrastructure in Ghana are ineffective water and road systems. Roughly 38% of Ghanaians lack access to water (Abass, 2020), although this situation has been improving. Figure 1.2 of the appendix shows Ghana's performance regarding access to water between 2000 to 2016.

The sanitation problem in Ghana is even more dire. In a November 19th, 2015, statement, David Duncan, Chief Water, Sanitation and Hygiene (WASH) Officer at the United Nations Children's Fund (UNICEF), disclosed Ghana ranked 2nd in open defecation in Africa. "The country has also been performing poorly with sanitation coverage of only 15 percent of

the population, making open defecation a key sanitation challenge because people do not have access to key basic facilities (The Pulse, 2015). What is China doing differently from Ghana in terms of effective decentralization that has resulted in positive outcomes for water, sanitation, and sustainability even in an autocratic state, and how can Ghana rectify its errors? This research explores such questions

1.3 Ghana's Decentralized System of Governance

Ghana's decentralized governance system comprises the regional coordinating councils: the heads, metropolitan, municipal, and district assemblies, zonal councils, sub-metropolitan councils, and area or town councils (Local Government Service, 2019).

Although Chiefs are not included in local governance in the active 1992 constitution, chiefs have roles within their jurisdictions. The chief organizes, mobilizes his people, and assists in disseminating the message of the district assembly programmer to his people (Asamoah, 2012). Figure 1.3A of the appendix presents a diagram of the decentralized governance structure in Ghana. The system is governed by the local government service, a public institution that exists to ensure effective administration and management of the country's decentralized local government system. The institution enters into agreement and commitment with its employees to set clear, quantifiable objectives and indicators for attainment within a given timeframe (Local Government Service, 2021). To operate effectively, the Local Government Service uses the Medium-Term National Development Framework to facilitate the incorporation of international benchmarks such as the Sustainable Development Goals (SDGs) ((Local Government Service, 2021).

The core unit of local governance is the Metropolitan, Municipal, and District Assemblies (MMDAs). Act 462 of Ghana's constitution was passed in 1993 to establish, control, and solve related issues associated with the local government system in accordance

with the constitution. The updated local governance Act is Act 936, which was passed in 2016. Section 1(4) of Act 936 distinguishes between Metropolitan, Municipal, and District Assemblies using population size. A district must have a population of at least 75,000 people, a municipality must have a population of at least 95,000 people, and a metropolis must have at least 250,000 people. There are six metropolitans, 109 municipalities, and 146 district assemblies in Ghana ("Accra Metropolitan Assembly, 2022). In the Greater Accra Region, the home region of Ghana's capital city Accra, there are two metropolitan assemblies, 23 municipalities, and 4 district assemblies. This research focuses on the ga central municipality, one of the 23 municipalities in the Greater Accra Region (Coverghana, 2021)

Responsibilities of MMDAs include ensuring the development, improvement, and management of human settlements and the environment in the district; promoting and supporting productive activity and social development in the district and removing any obstacles to initiative and development; and initiating programs for the development of basic infrastructure and provide municipal works and services in the district (Local Governance Service, 2021).

In accordance with Section 5(1), 70% of MMDA representatives are elected by universal adult suffrage. They include the District Chief Executive, one person elected from within the electoral area, which is the Assemblyman, and the Member or Members of Parliament from the constituencies that fall within the jurisdiction of the District Assembly. The Assemblyman is responsible for educating the electorate on government policies and assembly projects. (Local Governance Service, 2021).

Section 7(1) of Act 936 explains the requirements for an appointment as a district officer. To qualify to be appointed as a district assembly officer, a person should be a Ghanaian citizen of at least eighteen years of age. The person should be a registered voter. One must ordinarily be a resident in the district in which the person seeks election or for whose District

Assembly the person is to be appointed and has paid or made satisfactory arrangements for the payment of all taxes and rates to the appropriate authority.

In consultation with the traditional authorities and other interest groups, the President appoints thirty percent of members in the district to represent him in the districts as directed by Section 5 (1) of Act 936. Other appointed officials in Section 5 of Act 936 include The District Co-ordinating Directors (DCDs), which act as the District Assembly's Secretaries. Thus, from the appointees, one could infer that the political parties in power have an influence on MMDAs, judging that the remaining thirty percent of MMDA members are the President's appointees.

The Local Government Service ranks MMDAs using the Performance Ranking System. The Performance Ranking System (PMS) is a process used to improve the performance of MMDAs by sorting them into different categories to evaluate how well they have improved. The PMS is carried out through Performance Instruments (Contract and Appraisal). (Local Governance Service, 2021)

1.4 Description of the Research Problem

The selected case study MMDA is the Ga Central Municipality. The reason for choosing this municipality is that in 2020, Ga Central scored a performance rating of "Unsatisfactory," making it the only MMDA in the regional capital of Greater Accra to perform abysmally in that year (Local Government Service, 2021).

Ga Central is a municipality in the Greater Accra Region with a projected population of 147,820 for 2020 (Ministry of Finance, 2021). The municipal's coordinating director is Sayibu Yarifa Inusah, and its capital is Sowutuom. As of 29th February 2008, it was initially part of Ga South Municipality until it was separated from the municipality to create the Ga Central Municipality on 28th June 2012. With a size of just 49 km squared, it is relatively small as compared to its counterparts such as Ga East, Ga West, and Ga South, with sizes of 113km

squared, 249 km squared, and 258km squared, respectively (Ministry of Finance, 2021). The diagram below shows a map of municipalities in the Greater Accra Region.
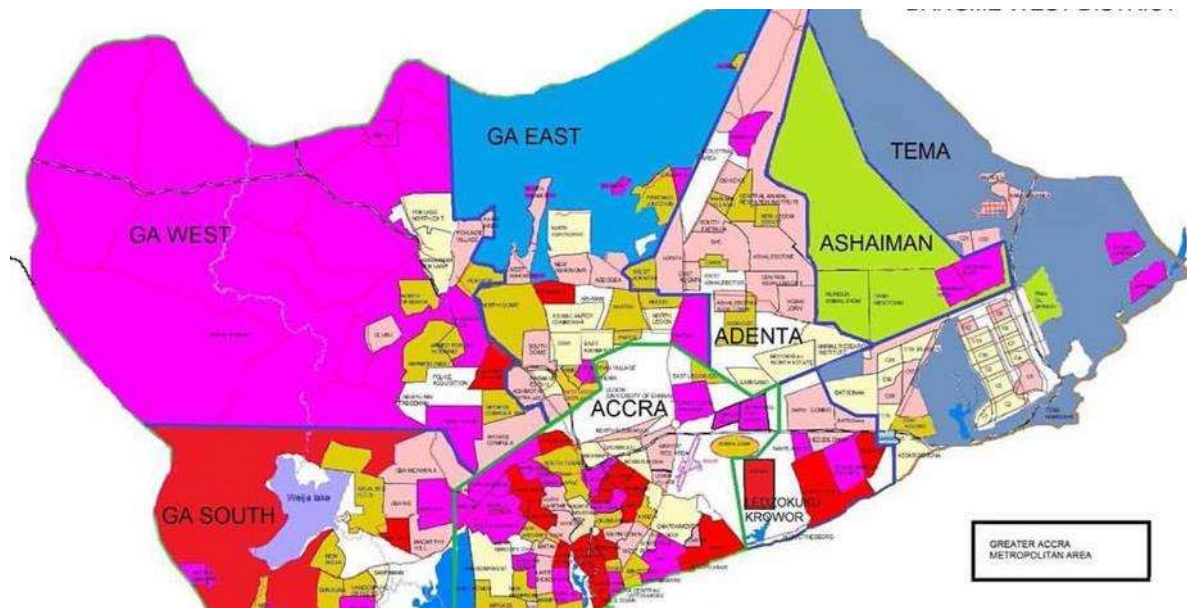
The municipality boasts of many established schools such as Pentecost University, Maranatha University College, and hospitals, including Agbeve Herbal, Deseret, and Mary Lucy Hospitals. There has also been increased involvement of women in the informal sector. However, it faces challenges such as child labor. According to the 2010 census, an estimated ten percent of youngsters aged seven to fourteen were employed. Children from low-income families and children from broken homes, adolescent girls likely to be single parents, commercial and sex workers, and single mothers are among the most susceptible populations in poverty. (Ministry of Finance, 2021).

Ga Central also faces challenges with water and sanitation. There are persistent water shortages, so some residents use concrete-built tanks and poly tanks to store water. Water Tankers charge exorbitant amounts during the dry season, and the quality of the water supply cannot be guaranteed. (Ministry of Finance, 2021).

There is a lack of final disposal sites for liquid and solid waste. On the brighter side, Honest Waste, Rural Waste, City Top, Gako, and Zoomlion provide municipal waste

management services (Ministry of Finance, 2021). Despite these challenges, the municipality has the mission to facilitate the development and delivery of socio-economic infrastructure and services for the total improvement of the living conditions of the people. (Ministry of Finance, 2021)

Some of the core functions of this municipality are to formulate and implement solutions, programs, and strategies to effectively mobilize the resources required for the municipality's overall development, promote and support productive activity and social development in the municipality, and remove any barriers to initiative and development. In addition, the municipality aims to launch basic infrastructure development programs and provide municipal works and services. Other responsibilities include overseeing the district's human settlements and environmental development, improvement, and management, as well as ensuring the municipality's security and public safety in coordination with competent national and local security organizations. (Ministry of Finance, 2021).

Based on the information provided above, the problem statement is that Ga Central is a regional capital municipality that faces barriers in achieving its mandate and the SDGs. A possible barrier is a lack of funding effectively, but several other reasons are possible. Although Ga Central has problems concerning its transportation and child labor, I intend to focus on its water and sanitation problem.

1.5 Research Questions
1 . How is Ga-Central currently performing with the SDGs related to water, sanitation, and sustainability?

2. What problems are encountered with implementing appropriate strategies to ensure good sanitation, water systems, and sustainability?

3. What recommendations can be offered to aid Ga Central in improving its water, sanitation, and sustainability problems?

1.6 Research Objectives

The research objectives were :

1. To shed more insight light into the role of MMDAs in Ghana's execution of SDG targets

2. To evaluate the state of Ga Central's performance regarding water, sanitation, and sustainability.

3. To identify the problems encountered with implementing appropriate strategies to ensure good sanitation, water systems, and sustainability.

4. To make recommendations to aid Ga Central in improving its water, sanitation, and sustainability problems.

1.7 Relevance of Study

Like other UN member states, Ghana is seeking to achieve the SDG targets by 2030. With less than nine years to 2030, there have been challenges with some MMDAs performing substantially to aid towards achieving these goals. An example is the Ga Central Municipal, which happens to be the only MMDA in the regional capital with a poor rating (Local Government Service, 2020). Information from the Ministry of Finance Website shows that Ga Central's major problem is SDG 6: Water and Sanitation. This paper seeks to explain why some MMDAs in Ghana face challenges in implementing good sanitation and water systems. The study also seeks to link Water and Sanitation with Sustainability and Inclusivity, which

involves transportation, security, and good urban planning. Ga Central happens to be the only MMDA in the regional capital with a poor rating. The results from this study will be helpful to stakeholders like the municipal heads, residents of the municipality, citizens, and the government. This research stands out because it happens to be the first paper to vividly study Ga Central and assess its major problem of poor water and sanitation systems.

1.8 Organization of Study

The paper was grouped into five chapters: Chapter 1 will focus on the introduction. Chapter 2 will focus on the literature review. Chapter 3 will focus on the methodology. Chapter 4 will focus on the data findings, and Chapter 5 concludes the research paper.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

The chapter explores literature to explore decentralization, its positive impact on Ghana, and its business opportunities. The chapter firstly defines and explains the benefits of decentralization before focusing on decentralization in Ghana. Then the chapter highlights the conceptual framework: Sustainable Development Goals Framework. Finally, the current performance of local government in Africa and Ghana with respect to water, sanitation and sustainability issues such as housing is analyzed. The following literature review affirms that

when successfully implemented, decentralization is helpful in achieving SDG Goals 6 and 11, which is Water and Sanitation, and Sustainable Cities.

2.1 The relevance of decentralization as a tool of good governance and economic development

Decentralization is the transfer of power and resources from the central government to subnational governments, which are local governments (Rodden,2004). This form of governance is widely used in the USA, Europe, and developing countries across Latin America, Asia, and Africa (Bardhan, 2002). As stated earlier, decentralization is an extension of democracy that allows for citizens' participation in political decisions.

Decentralization, when effectively implemented, has a positive effect on governance. Decentralization fosters citizen participation, strengthens social cohesion, and improves overall governance (Bisson, 2020). Another advantage of decentralization is that it eliminates chances of rebellion or violence by providing the people with some degree of self-governance (Bisson, 2020).

Decentralization promotes increased accountability because the local government is closer to its people and can be held accountable for its policies (Kulipossa, 2004). There is also improved coordination and improved decision-making with decentralization as roles are clearly defined (Kulipossa,2004). The local government helps to achieve economic development and good governance by implementing policies for the locality (Kulipossa, 2004), listening to the needs of one's people, and being the voice for them (Bisson, 2020); and reporting on their performance (Kulipossa, 2004).

Decentralization is perceived to foster improvements in the government's performance. With this form of governance, the role of the central authority is significantly reduced, and

intergovernmental competition can be fostered (Bardhan, 2002). Decentralization works well with the current technological progress in the world. With the increased technological advancements, local governments can efficiently deliver public services such as water services and manage assigned tasks (Bardhan, 2002).

Decentralization allows local governments to experiment with different policies to evaluate which policy works well within their jurisdiction (Marwan &Yerkes, 2018). It is easier to change policies at a local level with a smaller population than the entire population (Marwan &Yerkes, 2018).

2.2 Ghana's decentralization agenda and how it is consistent with the UN's Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs)

The decentralized system of Ghana dates back to pre-colonial times when there were 355 native authorities, each headed by a chief. Accra, Kumasi, Sekondi-Takoradi, and Cape Coast had town councils chosen under a new ordinance passed in 1943. Ten years later, the Municipal Councils Ordinance was passed (Sackeyfio, 2012).

After independence, President Nkrumah felt it was necessary to transform the political administration system and create a political system that bridges the gap between the central government and local government units (Ayee, 2011). Nkrumah believed decentralization would result in the maximum contribution to the national economy from each person in Ghana.

Over the years, new regions have been formed in the country to ensure effective decentralization of power (Ayee, 2011). In 1993, Act 462 was passed, and it transferred certain responsibilities from the central government to the local communities. The local communities would be represented by their own elected officials and would be either in the form of Metropolitan, Municipal, or District Assemblies (Debrah, 2014). Then in 2019, a modified

version, Act 936, was established to allow for local governance to align with the constitution. Currently, the decentralized process has been divided into a four-level structure of government:

1.   National government (comprising line ministries and deconcentrated entities)

2.   Regional Coordinating Councils (RCCs) are the regional governance institutions).

3.   Metropolitan, Municipal and District Assemblies (MMDAs);

4.   Sub-district structures: Urban, Zonal and Town Councils, and Unit Committees (Ayee, 2011).

The decentralization in process in Ghana has seen significant progress over the years. The formation of MMDAs has helped to bridge the gap between the citizens and local governance and helped facilitate the development of respective jurisdictions.

This is observed in Debrah's journal article "The Politics of Decentralization in Ghana's Fourth Republic." Debrah (2014) refers to the Ashanti Akim Assembly, which, on their own accord, felt it necessary to build classroom blocks in their locality without the government's directions. Debrah also illustrates the achievements of MMDAs in Ghana during the Millenium Development Goals era (2000-2015). According to him, the decentralization process has resulted in the construction of educational and health facilities and boreholes and dams, which aid in the provision of water. Although the paper was published a year away from SDG implementation, some achievements are coherent with the SDGs. These include the construction of roads (Debrah, 2014).

Another substantial improvement Ghana made in achieving the Millennium Development Goals (MDGs), which preceded the Sustainable Development Goals, was concerning the provision of water. As of 2012, the percentage of the population with access to water from taps, tube wells, boreholes, protected wells, springs, and rainwater has increased to

87% (Alagidede & Alagidede, 2016). There was, however, barely any literature on Ghana's SDG performance.

2.3 Conceptual Framework- History of the MDGs and SDGs

Prior to the Millennium Development Goals, there was no common framework to encourage global development. At the time, developing countries such as those in Africa, Europe, and Asia were in an improvised state. Their state could be attributed to reduced foreign aid funding from developed nations and the fact that organizations such as the International Monetary Fund and the World Bank were only prepared to support countries that reduced public spending (McArthur, 2013).

In 1990, the Organization for Economic Corporation and Development (OECD) presented an International Development Goals Benchmark proposal to donor countries. While this proposal was never implemented, it served as the foundation for the Millennium Development Goals. According to McArthur, the Millennium Development Goals (MDGs) were the first of their kind with regards to a partnership between the developed and developing nations, and this framework was implemented in 189 nations (2013). In 2001, the MDGs were divided into eight goals:

1.   MDG 1: Eradicate Extreme Poverty and Hunger

2.   MDG 2: Achieve universal primary education

3.   MDG 3: Promote gender equality and promote women

4.   MDG 4: Reduce child mortality

5.   MDG 5: Improve maternal health

6.   MDG 6: Combat HIV/AIDS, malaria and other diseases

7.	MDG 7: Ensure environmental sustainability

8.	MDG 8: Foster global partnerships

The eight MDG goals were further broken down into targets and launched in March 2002 at the UN International Conference on Financing and Development in Mexico. Donor countries pledged to help developing countries to practice good governance to achieve these SDGs. Developed countries planned to use 0.7% of Gross National Income (GNI) returns as development assistance to emerging countries (McArthur, 2013).

The Millennium Development Goals were globally successful, especially concerning the health sector. An example of success in the health sector is where in 2011, more than eight million people received AIDS treatment (McArthur, 2013). In African countries such as Ethiopia and Kenya, as of 2010, there were substantial performances with regard to eliminating poverty and access to primary education (Woldetsadick, 2012). In Ethiopia, for example, the percentage of people living on less than $1.25 a day reduced from 61 percent to 29 percent in 18 years (Woldetsadick, 2012). Kenya, meanwhile, was reported in 2010 to have reduced the mortality rate of children under the age of five by ten percent since 1990, as well as the incidence of underweight children under the age of five, and to have boosted the enrolment of girls in primary school (Woldetsadick, 2012). With respect to water, the percentage of people with safe access to water increased by 28% (Woldetsadick, 2012). However, there were still some challenges with environmental pressures and internal poverty. The Millennium Development Goals (MDGs) initiative ended on 31st December 2015 and was replaced by the Sustainable Development Goals (SDGs) Framework.

The Sustainable Development Goals Framework (SDGs) was agreed to be the successor of the Millennium Development Goals when nations met in New York in September 2015. It aimed to include areas in the Millennium Development Goals such as infrastructure

and energy. Another feature of the Sustainable Development Goals measure is that it sought to adopt an all-inclusive approach by considering lagging nations and ensuring cooperation between the public and private sectors to implement goals successfully (Jaiyesimi, 2016).

While the MDGs consisted of only 8 goals, the SDG framework is made up of 17 Goals and 269 Targets. Jaiyesimi outlines the differences between the MDGs and SDGs by showing the goals which are currently in the SDGs that were omitted from the MDGs. These goals are:

9. Industry, innovation, and infrastructure

10. Reduce inequality

11. Sustainable cities and communities

12. Responsible consumption and production

13. Climate action

14. Life under water

15. Life on land.

16. Peace, justice, and strong institutions (2016).

From an assessment of the additional goals, it is safe to infer that SDGs focus on sustainability. The SDGs acknowledge that while economic growth is crucial for development, it is essential to consider the future generations to avoid making their stay on earth miserable. It also helps to denote that there is no proper development with poor environmental protection and disregard for members of society. The reason for using the SDG framework as my conceptual framework is that it specifically focuses on how to help countries improve on global challenges such as water, sanitation, and urban planning.

2.4 Structure of SDG Targets

As stated earlier, there are 269 targets, but for the current study, more insights will be shed on SDGs 6 and 11 as they are specifically related to the objectives of this study. The targets under SDG 6 are,

1.   Target 6.1: Safe and affordable drinking water

2.   Target 6.2: End open defecation and provide access to sanitation and hygiene

3.   Target 6.3 improve water quality, wastewater treatment and safe reuse

4.   Target 6.4: Increase water use efficiency and ensure freshwater supplies

5.   Target 6.5: Implement integrated water resources management

6.   Target 6.6: Protect and restore water-related ecosystems

7.   Target 6. A: Expand water and sanitation support to developing countries; and

8.   Target 6. B: Support local engagement in water and sanitation management (UN, 2021).

The SDG Targets under SDG 11 include the following:

1.   Target 11.1: Safe and affordable housing

2.   Target 11.2: Affordable and sustainable transport systems

3.   Target 11.3: Inclusive and sustainable urbanization (UN, 2021).

2.5 Water, Sanitation, and Sustainability Lessons from Asian Countries

Asian nations such as China, Vietnam, India, and Singapore have grown rapidly over the past few years. Among these countries, Singapore stands out as one of Asia's wealthiest nations (Henderson, 2012). In Singapore, a Housing and Development Board administers buildings with high-rise blocks that many Singaporeans live in. There are also quotas on the

formation of housing to prevent ghettos from forming. Singapore also tries to create sustainable communities by eliminating racially based political parties (Henderson, 2012). News media are regulated to ensure that there is no threat to racial and religious harmony. Singapore has also implemented tree-planting programs, an extension of recreational spaces, and green roof technology into public planning. These have been beneficial to the cleanliness of Singapore and environmental protection (Henderson, 2012). Another positive development of Singapore is the Active, Beautiful, Clean Waters Program formed in 2006 to improve water quality and rainwater collection and beautify the environment (Henderson, 2012).

China, on the other hand, has implemented strict rules concerning its waste problem and has implemented policies for effective waste management systems such as reducing plastics in the country (Leo Deming, 1999). China has also implemented a ban on non-biodegradable shopping bags. Over time it will be phased to include other forms of plastics and include additional cities and towns by 2022 (Leo Deming, 1999

Asian developing nations have collaborated with developed nations to achieve sustainable development (Institute for Global Environmental Strategies, 2005).

2.6 Water, Sanitation, and Sustainability in Africa

While African countries strive to meet the SDGs by 2030, transportation issues, traffic congestion, uncontrolled informal activities, poor sanitation, and slum growth continue to plague the continent (Cobbinah & Dankwah, 2017). These problems are a result of poor urban planning. Sub-Saharan Africa has the lowest percentage of people with improved water (66%) and sanitation (32%) (World Bank 2013, as cited in Sommer & Shandra, 2015). Sub-Saharan Africa also has a record of the most slum dwellers (62% of the urban population) (UN-Habitat 2012 as cited in Marx et al., 2013).

2.7 Water, Sanitation, and Sustainability in Ghana

One critical problem facing Ghana's housing and urban planning is that the poor political leadership in the country has resulted in political deficiency. Traditional authorities own about 80% of the land in Ghana, resulting in some problems (Djokoto & Opoku, 2010, as cited in Cobbinah & Darkwah,2017). The main problem with this is that these traditional heads usually sell plots of land without adhering to existing land regulation policies (Amoateng et al., 2013, as cited in Cobbinah& Darkwah,2017).

Another issue Ghana faces concerning the housing challenge is poor maintenance of buildings (Tipple & Speak, 2009, as cited in Amedzro & Obeng-Odoom, 2011). One reason for this is that Ghanaians have a poor maintenance culture and poor attitude toward maintaining buildings (Amedzro & Obeng-Odoom, 2011). Another reason is that some cultural beliefs are instilled in people's minds that maintenance of houses is not an urgent issue but rather the sentimental value of the house (Tipple, 1987; Willis & Tipple, 1991; Geest, 1998 as cited by Amedzro & Obeng-Odoom, 2011). From the points above, one could infer that culture has adversely affected housing in Ghana to some extent.

It is important to note that poor housing planning minimizes the assurance of preserving houses for long and even poses a likelihood of increased deaths in a nation. As a result of poor urban planning, in 2015, the lives of over 150 people were lost. Millions of properties succumbed to the June 2015 flood in Ghana (The Seattle Times, 2015, cited in Cobbinah & Darkwah, 2017).

Water and sanitation difficulties are also a problem in Ghana, despite the country's goal of providing sustainable and basic sanitation for everybody by 2025. According to statistics, two-thirds of low-income Accra residents do not have access to pipe-borne water in their houses, compared to only 12% of wealthy households who have piped water. In Ghana, 70

percent of diseases are connected to a lack of access to potable water (Harris, 2021). Some neighborhoods, such as Madina, do not have piped supply and face additional water costs by paying for water from truckers. This shows how alarming the water situation is in Ghana. In terms of sanitation, in 2010, 25% of the urban population had access to improved sanitation (Appiah-Effah et al., 2019, as cited in Dwumfour-Asare, Larsen. & Wong, 2020). From this, it can be inferred that Ghana faces a sanitation problem.

Finally, concerning sustainable transportation in Ghana, there is an increasing trend in road traffic crashes, traffic congestion, and emission of carbon dioxide (Aidoo, Agyemang, & Afukaar, 2013). These hinder economic development as they cause pollution and economic losses as the opportunity cost of being productive at one's workplace is spent in traffic (Aidoo et al. 2013).

2.8 Conclusion

From the literature provided above, it has been established that effective decentralization has the potential to cause effective developments. This can be seen from examples in Asian countries. Despite its decentralized structure, Ghana still has more room for improvements concerning the implementation of strategies for water, sanitation, and sustainability issues.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter focuses on the research methodology, study population, sample method, data collection, and analysis. It also gives details on ethical considerations and limitations of the study.

3.1 Research Design

The study followed a qualitative research approach. The qualitative research approach allows a researcher to learn about the respondents' interpretation and reasoning concerning their behavior (Heyink, J. W., & Tymstra, T. J., 1993). Applying this to the research study, qualitative research effectively analyzed water, sanitation, and sustainability in Ga Central Municipality by gaining insights from the relevant parties involved. The research lasted for a month.

3.2 Population of Study

The focus of the study was on Ga-Central Municipality Assembly, which is in Accra. The reason for choosing this location for the study was that this area was ranked the worst performing in the regional capital of Ghana. Among its challenges are issues with water, sanitation, and sustainability. Thus, it was essential to gather experiences from residents within the locality to grasp the situation at hand fully.

The study was carried out at the Ga Central Municipal Assembly Office and within the locality and insights were gained regarding Ga Central's current performance with respect to

SDG 6 (Water and Sanitation) and SDG 11 (Sustainable Communities) and the challenges faced. The officials were selected because they better understood the topic at hand.

Finally, representatives/stakeholders from organizations such as National Development Planning Committee (NDPC) and United Nations Development Programme (UNDP) were interviewed. The National Development Planning Committee is responsible for providing and executing the national development policy framework, to which MMDAs are expected to adhere ("NDPC", 2021). Therefore, this organization was vital in providing information on the expected progress level of MMDAs regarding the national development policy framework and possible recommendations for struggling MMDAs. The United Nations Development Programme formed the SDG Framework. It was, therefore, relevant to gather their output on possible recommendations for struggling MMDAs.

3.3 Sampling Method

For this study, I used snowball sampling and stratified sampling. Stratified sampling is where the population is divided into smaller groups based on specific characteristics, and then once this process is completed, random selections are made from the samples proportionally. This stratified sampling method was useful in selecting citizens from different communities within Ga-Central Municipality. Snowball sampling was used to gather data from UNDP and NDPC. Firstly, available respondents at NDPC and UNDP were interviewed, and they helped connect with other employees who were helpful for the study. The sample size was fifty residents, five from the Ga Central Assembly Office and five from UNDP and NDPC.

3.4 Data Collection Tools

The data source for the study was primary data, which was obtained through interviews and observation. Interviews followed a semi-structured form. The reason for selecting this

format was that it was helpful to draft questions that could serve as an interview guide. In addition to this, respondents presented new insights that required more clarity and more understanding, and as such, it was necessary to ask questions away from the drafted script. The type of interview used was narrative research, where the experiences of people currently facing the problem were explored to gather perspectives on the problems and the assumed reasons for their occurrence. Based on the insights provided, solutions were presented. Observations were to gain a firsthand experience of the municipal's challenges with issues such as sanitation and sustainability by patrolling the municipal and writing down insights gained. Secondary data was obtained from Act 935- Local Government Service Act.

3.5 Data Analysis

Thematic analysis was used where results obtained were grouped according to similarities and categorized into codes and themes. The themes from the study were helpful in retelling the story from the respondents' perspectives.

3.6 Ethical Considerations

A safe and conducive environment was created for respondents, and they were not coerced to answer questions they deemed sensitive. Respondents were also assured that the information they provided was confidential and solely for academic purposes. Respondents were also not physically or emotionally abused during the research study. Another way validity and reliability were ensured was by interviewing people across the municipality.

CHAPTER 4: RESULTS

4.0 Introduction

The chapter presents the results of the qualitative research in narrative form. The paper seeks to do the following (i) evaluate the progress of the Ga Central MMDA regarding the achievements of its objectives (consistent with the SDGs) in the areas of water, sanitation, and sustainability, (ii) identify problems encountered with implementing these and (iii) offer recommendations. The results emanate out of thematic analysis based on primary data and secondary data. The respondents were residents of Ga Central, the Ga Central Municipal Assembly Office, the United Nations Development Programme (UNDP), and the National Development Planning Committee (NDPC). Secondary information from Local Government Act 936 was also used. Responses organized in themes are presented below

4.1 Themes

Some themes identified concerning the state of Ga Central Municipality included bad conditions, improvements regarding only water, improvements regarding only sanitation, and good conditions. However, the dominant theme among most residents was bad conditions. The second research question sought to answer problems encountered with implementing appropriate strategies for the Ga Central's water, sanitation, and sustainability issues. Some dominant themes were lack of communication, lack of cooperation, financial constraints, and lack of cooperation. Regarding recommendations, dominant themes were improved transportation systems regarding roads and transport services, better communication and cooperation, and education.

4.2 How is Ga-Central currently performing with water, sanitation, and sustainability?

The findings from residents and the municipal office suggest that Ga Central is in a poor state with regards to water, sanitation, and sustainability, with few to no improvements.

Some residents complained of an infrequent supply of water in their homes. One respondent said, "My household has been forced to purchase poly tanks due to infrequent water flows. Water has not flowed for three days.". In the case of another town, respondents were used to having no water due to being in a hilly environment. One other respondent angrily complained saying," Water only flows at night, leaving me with no option but to fetch water at the expense of my sleep. The water that flows at night is unclean and tends to have a brown color.". These insights imply that there is massive room for improvement. The water challenge in Ga Central agrees with the literature that two-thirds of Accra's low-income residents do not have access to piped water (Harris, 2021). The cases above imply that the municipality is performing abysmally regarding access to water, which is a part of 'SDG 6".

The issue of water is a much more complicated topic, particularly as one official from the Ga Central Municipal Office explained that the supply of water is centralized and handled by the Ghana Water Company. The centralized supply of water poses a challenge to the community. It is also surprising because as part of the functions of MMDAs, they are to be responsible for the development, improvement and management of human settlements and the environment in the district." This insight means that the municipality directors are not directly responsible for the poor water supply. However, residents do not know this as they constantly blame the municipality members for their predicament

The waste management services are controlled by private individuals. Concerning sanitation, many respondents complained about being surrounded by refuse due to limited dustbin services. While undertaking the research, three residents pointed at refuse to prove how accurate their claims were. While wondering whether it was either because of a lack of dustbins

for each household or no dustbin collection services, one respondent explained that it was because of these two factors.

Another respondent explained there was no official waste management service and, instead, a group of people in a tricycle collecting refuse for the community. The problem is the services are unreliable and pose a challenge to the community,

In another town, however, respondents explained that while there was one waste management service around, it was not advisable for the township to have only one dustbin collection service, particularly as the single dustbin service is not consistent. One critical aspect of sanitation that was addressed is the issue of flooding.

In the case of Ga Central, many respondents complained of flooding arising from poor drainage systems. One respondent said, "On June 3rd 2015, my house in Ga Central also got flooded and it was an unbearable situation." There was an instance where one respondent pointed in the direction of what was to be a dam, but instead a refuse spot as indicated in Appendix 4.2 A. An image of a drainage system in the municipality can also be seen in Appendix 4.2 B Literature addresses the detrimental effects of poor sanitation in the country as addressed by (Cobbinah & Darkwa). Literature highlighted that a detrimental effect of poor sanitation was flooding and the incidence of June 3rd, 2015, in Ghana were the lives of many were lost due to poor sanitation, which shows that indeed poor sanitation can result in flooding.

Unlike water, sanitation is managed by the municipality assembly. While this is positive, especially as it aligns with literature on decentralization, there appears to be a conflict because respondents at the Ga Central explained that there were three- four dustbin collecting services available in the municipality and that sanitation was under control'. However, researcher observation suggested otherwise. It is possible that the municipality office's respondents meant that there were three-four dustbin collecting services and not necessarily three-four per every township in the municipality.

Another difference between the responses from residents and respondents from the municipality office is that while the residents blamed the municipality for sanitation-related problems, the directors at the municipality also insisted that monthly clean-up exercises were held, but the residents failed to participate. One common theme expressed by both residents and respondents at the Ga Central office is that sanitation is a problem for the municipality. Merging water and sanitation, the municipality has poorly performed regarding SDG 6, which is not surprising as Ghana has been ranked the 131st in the world with respect to water and sanitation. Although Nigeria is ranked worst with a position of 168 (Environmental Protection Index, 2021), there is still room for improvement for Ghana.

Sustainability includes the layout of the area and provision of public facilities, including transportation services. Concerning sustainability, many respondents believed that their communities had a poor layout. Some respondents specifically pointed to houses they believed were built in the middle of roads. A respondent shared instances where taxis unknowingly drove into people's houses because they felt it was a road.

Another respondent complained about how difficult it was to arrive home. The respondent also further explained that the house's environment was very poor such that during the election campaigns in 2020, political parties chose to visit neighboring places, excluding the respondent's locality. The information implies that it is highly possible that zoning rules were not adhered to, and that people might not have obtained building permits before construction. Respondents also complained about the lack of public facilities. Many respondents explained that there were no libraries or police stations in their vicinities, with one respondent laughing when asked whether there were libraries in her locality. There are also no public washrooms in some areas. Sadly, a respondent shared instances where visitors asked for a public washroom but were answered negatively.

Transportation is also an issue in some localities. Some localities have no transport stations, and thus residents walk far distances to access public transport stations. A respondent complained of how time-consuming the journey was and how it served as a deterrent for leaving one's house. With respect to roads, respondents complained about the poor road networks and how the state of the roads has worsened transportation. One respondent said, "There are no cars available, so it is very hard to get to town. My children also struggle to go to school, and on days that it rains, we all have to stay home." Findings are linked to SDG 11, which focuses on sustainable cities. Based on the points above, Ga Central has failed in this SDG.

4.3 What problems are encountered with implementing appropriate strategies to ensure good sanitation, water systems, and sustainability?

It has been identified that Ga Central MMDA faces challenges with SDGs 6 and 11. Findings suggest that the reasons for these problems are financial limitations, lack of cooperation from both residents and directors, poor communication between MMDAs and residents, limited decentralization, and lack of education about the role of MMDAs.

There are financial limitations both at the high and low levels of the MMDA structure. Concerning the high levels of management, it is proposed that the municipality does not receive sufficient funds to cater to all its changes, hence its ability to solve most of its problems.

According to Section 124 of Act 936 of the constitution of Ghana, MMDA's revenues are derived from decentralized transfers, internally generated funds, and donations and grants. Internally generated funds are obtained from licenses, fees and miscellaneous charges; taxes; investment income; and rates. From this, citizens contribute toward the total

Lower levels of MMDAs, such as assemblymen, are also faced with financial constraints and thus cannot settle some problems within their vicinity. During the research, some respondents expressed that they were fully aware that their Assemblyman was heavily

motivated to improve their community but was financially limited to help. What this implies is that all levels of the decentralized structure could be committed to achieving the SDGs and bettering the lives of their people. However, a financial factor beyond their control has made it impossible to achieve this.

The lack of cooperation between the municipality and the residents is also a leading cause for the state of Ga Central. Some residents expressed their frustration in responding to interviews and questionnaires about the area as it appeared that there was never any input from the MMDAs. On the other hand, the municipality expressed frustration with obtaining the help of residents. Residents refused to pay dues, and as a result, the municipality received minimum amounts for the internally generated funds, which further hindered its ability to perform efficiently. From this, it shows that the financial input of residents is required for improving their conditions and so may have some responsibility to play with the municipality's conditions.

Poor communication between the MMDAs and residents can be attributed to the municipality's poor performance. Some respondents explained that they had never seen the assemblymen and the heads and thus did not know to whom to express their concerns. This is challenging because assemblymen represent the level of MMDA that are to serve as the intermediaries between the people and the MMDA structure. While there is one office main office for the Ga Central Municipality Office, located at Antieku, there are offices for assemblymen for each area. From the research, it appeared that some problems that the municipality believed had been resolved were not reflected in the towns. From this, it can be inferred that there is a barrier to communication. Without this being fixed, the municipality will likely face problems as they will be oblivious to the needs of the people. Residents also perceive that the municipality has no interest in bettering their lives. However, this is not the case. From literature, the decentralized system exists to bring people closer to the government and bridge communication (Debrah, 2014). However, this benefit does not seem to reflect in Ga Central Municipality.

Another hindrance to Ga Central Municipality's performance is that it is not entirely in charge of its affairs. For example, the municipality is not in charge of water. Although the issue of water remains a challenge in the area, there is little the municipality can do to offset the challenge. Contrast this to if the municipality had control over water. It would have been easier to devise strategies to correct the situation. Another factor is the political influence of the government to insist that MMDAs align their plans to the party's goals even if these policies are not necessarily beneficial to the community. These prevent MMDAs from having the freedom to implement policies that are a high priority for the community.

The next possible reason is that the members of the MMDA might not be fully educated about their roles and thus do not perform to their fullest capacity. Alternatively, they might not know the effect of their actions on the municipality and the country. As a result of their minimum knowledge, their actions will prevent the municipality from enjoying the benefits of decentralization. On the other hand, the residents might not understand the role of MMDAs, which might affect their ability to cooperate when their input is required.

A major problem encountered is with regards to zoning. According to a respondent at the NDPC, while MMDAs are responsible for enforcing zoning rules for better city planning, the land is controlled by chiefs who tend to sell land and disregard city planning. This significantly hinders overall sustainability.

4.4 What recommendations can be offered to aid Ga Central in improving its water, sanitation, and sustainability problems?

The findings indicate that some recommendations for the district include improved cooperation, communication, and education on the role of MMDAs.

Regarding improved cooperation, the officials in the Ga Central office should increase their participation in the various localities within the municipality. Assemblymen are also encouraged to be more involved and place more effort in the affairs of the residents. On the

other hand, residents should be willing to play a role if they hope to see improvements. Residents should be encouraged to pay dues and offer resources they believe could be instrumental to the development of Ga Central. One official at Ga Central Municipality cited an example of any willing resident offering land for a land refill site for the municipality. This would be helpful because the municipality has financial limitations and requires immense support from its internally generated funds. Residents should also be willing to participate in clean up exercises.

Concerning improved communication between these two groups, the Assemblyman should be willing to act as a middleman between the municipality office and the residents where he communicates to the municipality challenges face. Residents should also be willing to communicate their challenges with the Assemblyman without withholding information. A proposed way of doing this is organizing monthly meetings in the community. The municipality heads should also be willing to take feedback from the assemblymen into consideration so that the respondents feel their voices are heard. The municipality heads should be willing to communicate the challenges and current improvements so that residents are well informed about the developments in their municipality and appreciate the municipality's efforts.

Residents and members of the municipality should be well educated about the importance and role of decentralization in improving the country as a whole. Educating the community will help them identify which activities the MMDAs are accountable for and which activity each person in the municipality is responsible for. In that way, it will be easier to know who to address or commend should a challenge or improvement arise. Educating the members of the MMDAs about their role will motivate them to give in their best to offset Ghana's current state. Educating officials helps them to identify which members they are responsible for and to who they are to report.

CHAPTER 5: CONCLUSION

5.0 Introduction

The chapter summarizes the study and presents the findings, and identifies limitations and recommendations for future researchers.

5.1 Summary of research findings

The research sought to understand the challenges regarding Ghana's decentralized system by effectively studying the 2020's regional capital's worst-performing MMDA -Ga Central. The study followed a qualitative research design, specifically a narrative research form, and used primary and secondary data. The data collection methods were interviews, observation, focus group discussions and Act 936 Local Governance Act. Interviews were

carried out using snowball and stratified sampling. Data sources were fifty residents in the Ga Central Municipality, officers in the Ga Central Municipality Office, and selected respondents from the United Nations Development Programme and the National Development Planning Committee. The research questions were How is Ga-Central currently performing with water, sanitation, and sustainability? What are the problems associated with implementing appropriate strategies to ensure good sanitation, water systems, and sustainability? What recommendations can be offered to aid Ga Central in improving its water, sanitation, and sustainability problems?

From the findings, participants believed Ga Central had a poor performance regarding the factors studied. The highlighted challenges included poor water and sanitation, poor drainage systems, poor road network networks, and a lack of public facilities in some areas, such as libraries. According to respondents, the problems encountered with implementing appropriate strategies for water, sanitation, and sustainability include lack of communication and cooperation from both residents and the Ga Central Municipal Office, financial constraints, and lack of education about the role of MMDAs. The recommendations for the municipality were improved communication and cooperation from both residents and officials, education on the role of MMDAs, and improved drainage systems.

5.2 Insights

Based on the selected respondents, it can be implied that Ga Central has challenges regarding the supply of water and sanitation and sustainability issues. This indicates a great need for the MMDA to devise measures to solve these challenges to improve its ranking. There is an implication that there is room for improvement regarding the efficiency of the decentralized form of governance in the municipality. Another point that is observed is that there is a huge likelihood that the performance of the MMDA will substantially improve if the residents and the MMDA heads join forces to tackle issues.

5.3 Recommendations to the Ga Central Municipality

To improve communication, the assemblymen within the Ga Central Municipality could hold monthly meetings in their respective areas to find out the society's needs and communicate how the municipality officials are trying to solve these and the problems encountered. The assemblymen should quickly communicate the needs of the society to the high levels of management with the municipality office. During these meetings, residents should be educated on the role of MMDAs so that these residents are motivated to be of help to the development journey.

Cooperation could be improved by encouraging residents to come on board and reduce littering. Residents who contribute to the development journey could be rewarded at the end of the year. Residents should also be encouraged to pay their dues and offer financial support. Concerning issues with sanitation, including drainage systems, there could be monthly clean-up exercises to keep the society clean and prevent choked drains.

Although there are financial constraints, the MMDA could have a list of roads they intend to fix every year given their budget, and this should be communicated to the entire municipality. Residents can volunteer to help in the road construction process.

5.4 Recommendations to future researchers

One key recommendation to future researchers is to start the research on time to ensure quality work. There is also a need to establish contacts within the research space to facilitate the data collection process.

5.5 Limitation of the study

It was challenging to gather responses from fifty willing residents in Ga Central Municipality, especially as the research started later. Fortunately, this was resolved through the help of the Ga Central Municipality office, an assemblyman, and a resident within the vicinity. Another challenge was language barriers, and this was resolved with the help of a translator. It was agreed to speak a language both parties were conversant with for some respondents. Some respondents were also skeptical about partaking in the research for fear of their personal information being exposed to the public. This problem was resolved by assuring the respondents of anonymity. Another challenge was the lack of some data required, such as graphs for Ghana's performance regarding water and sanitation and infrastructural developments since 1990. Fortunately, there was information on Ghana's current ranking regarding water and sanitation, which was valuable for the research. Due to the fact that data was collected using interviews, sensitive topics such as corruption could not be discussed. Finally, there were financial constraints that limited the richness of data. However, it is believed that despite the financial constraints, data is still rich and successfully answered the research questions.

REFERENCES

2020 ANNUAL LGS PERFORMANCE EVALUATION REPORT AND RANKINGS OF RCCs & MMDAs – LOCAL GOVERNMENT SERVICE. (2021). Retrieved 27th September 2021, from http://lgs.gov.gh/index.php/2020-annual-local-government-service-performance-evaluation-of-rccs-and-mmdas/

2021. [online] Unescwa.org. Available at:<https://www.unescwa.org/sites/default/files/inline-files/the_5ps_of_the_sustainable_development_goals.pdf> [Accessed 9 October 2021].

Abass, K. (2020). How water scarcity adds to women's burden in northern Ghana. Retrieved 23 October 2021, from https://theconversation.com/how-water-scarcity-adds-to-womens-burden-in-northern-ghana-138357

Accra Metropolitan Assembly. (2022). Retrieved 27 April 2022, from http://ama.ghanadistricts.gov.gh/

Ahuja, A. (2019). Swachh Guide: What Is ODF?. Retrieved 4 December 2021, from https://swachhindia.ndtv.com/swachh-bharat-abhiyan-what-is-odf-open-defecation-free-32993/

Aidoo, E. N., Agyemang, W., Monkah, J. E., & Afukaar, F. K. (2013), Passenger's Satisfaction With Public Bus Transport Services In Ghana: A Case Study Of Kumasi–Accra Route. Theoretical and Empirical Researches in Urban Management, 8(2), 33–44. http://www.jstor.org/stable/24873348

Aizawa, T., Helble, M., & Lee, K. O. (2020). Housing Inequality in Developing Asia and the United States: Will Common Problems Mean Common Solutions? Cityscape, 22(2), 23–60. https://www.jstor.org/stable/26926892

Alagidede, P., & Alagidede, A. N. (2016). Meeting and missing targets: the public health dynamics of water and sanitation in Ghana. Journal of Public Health, 38(4), e425–e429. https://www.jstor.org/stable/48567540

Akatey, N. The launch of the National Sanitation Campaign: a shared and collective responsibility - Ministry of Sanitation and Water Resources. Retrieved 27 March 2022, from http://mswr.gov.gh/the-launch-of-the-national-sanitation-campaign-a-shared-and-collective-responsibility/?print=print#:~:text=The%20launch%20of%20the%20compaign,and%20the%20world%20at%20large.

Arhinful, E. (2021). Poor road network, driver misconduct cause of rising accidents – MTTD. Retrieved 23 October 2021, from https://citinewsroom.com/2021/07/poor-road-network-driver-misconduct-cause-of-rising-accidents-mttd/

Asamoah, K. (2012). A qualitative study of Chieftaincy and Local Government in Ghana. Journal Of African Studies And Development, 4(3), 90-95. doi: 10.5897/JASD11.089

Ayee, J. R. A. (2011). Provincial Governance in Africa: The Ghanaian Experience. Verfassung Und Recht in Übersee / Law and Politics in Africa, Asia and Latin America, 44(3), 409–421. http://www.jstor.org/stable/43240888

Bardhan, P. (2002). Decentralization of Governance and Development. The Journal of Economic Perspectives, 16(4), 185–205. http://www.jstor.org/stable/3216920

Barnett, J. (2009). The Environment and Security. In International Encyclopedia of Human Geography. Retieved from https://www.sciencedirect.com/topics/earth-and-planetary-sciences/environmental-security

.Bhide, A. (2016). Changing Trajectories Of Urban Local Governance. India International Centre Quarterly, 43(3/4), 172–183. http://www.jstor.org/stable/26317323

Bisson, L. (2020). Decentralization and inclusive governance in fragile settings: Lessons for the Sahel. Clingendael Institute. http://www.jstor.org/stable/resrep24643

Cobbinah, P. B., & Darkwah, R. M. (2017). Urban planning and politics in Ghana. GeoJournal, 82(6), 1229–1245. http://www.jstor.org/stable/45117471

Cohen, J. E., Doctoroff, D. L., Filler, M., & Bennack, F. A. (2008). Sustainable Cities. Bulletin of the American Academy of Arts and Sciences, 61(4), 5–10. http://www.jstor.org/stable/40481188

Columbia Center on Sustainable Investment (CCSI), UNDP, UN Sustainable Development Solutions Network (SDSN), & World Economic Forum. (2016). SDG6: Clean Water and Sanitation. In Mapping Mining to the Sustainable Development Goals: An Atlas (pp. 33–35). Sustainable Development Solutions Network. http://www.jstor.org/stable/resrep15880.11

Composite Budget | Ministry of Finance | Ghana. (2021). Retrieved 27th September 2021, from https://mofep.gov.gh/publications/composite-budget

Coverghana. (2021). List of Districts, Municipals and Metros in Greater Accra Region, District Capital and LI number. Retrieved 27 April 2022, from https://coverghana.com.gh/list-of-districts-municipals-and-metropolitan-in-greater-accra-

region-municipals-in-greater-accra-districts-in-greater-accra-metropolitan-in-greater-accra-districts-in-ghana-and-their-capital-town/

Chen, Y. (2012). Decentralization, economic growth and the local provision of public goods. In L. Song (Ed.), Dilemmas of China's growth in the Twenty-First Century (pp. 254–270). ANU Press. http://www.jstor.org/stable/j.ctt24hcck.18

Chakroborty, P. (2011). Sustainable transportation for Indian cities: role of intelligent transportation systems. Current Science, 100(9), 1386–1390. http://www.jstor.org/stable/24076603

Constitution of the Republic of Ghana [Ghana], 7 January 1993, available at: https://www.refworld.org/docid/3ae6b5850.html [accessed 27 September 2021]

Debrah, Emmanuel. "The Politics of Decentralization in Ghana's Fourth Republic." African Studies Review, vol. 57, no. 1, Cambridge University Press, 2014, pp. 49–69, http://www.jstor.org/stable/43905077.

Development Engineering and Infrastructure Planning. (2021). Sustainable Transportation. Retrieved 31 October 2021, from https://www.vaughan.ca/projects/projects_and_studies/sustainable_transportation/Pages/defa ult.aspx#:~:text=Sustainable%20Transportation%20refers%20to%20any,car%20sharing%2C %20and%20green%20vehicles.

Dwumfour-Asare, B., Larsen, B., & Wong, B. (2020). Solving urban sanitation in Ghana — a brief review. In Benefit-cost analysis of improved urban sanitation in Ghana: Ghana Priorities (pp. 2–6). Copenhagen Consensus Center. http://www.jstor.org/stable/resrep26144.4

Emergency Medicine Society Of Ghana. (2021). 1st Anniversary of June 3 disaster; how it happened; lessons learnt. Retrieved 23 October 2021, from https://emsog.org/news-and-resources/news/18-1st-anniversary-of-june-3-disaster-how-it-happened-lessons-learnt

: EPI. (2022). Environmental Performance Index. Retrieved 27 March 2022, from

https://epi.yale.edu/epi-indicator-report/H2O

Full List Of MMDAs In Ghana - 2022/2023 Ghadmin. (2022). Retrieved 20 April 2022, from

https://ghadmissionforms.com/mmdas-in-

ghana/#:~:text=How%20many%20MMDAs%20do%20we,district%20assemblies%20(or%2

0MMDA's).

García-Guadilla, M. P., & Pérez, C. (2002). Democracy, Decentralization, and Clientelism:

New Relationships and Old Practices. Latin American Perspectives, 29(5), 90–109.

http://www.jstor.org/stable/3185177

Harris, L. M. (2021). Everyday Experiences of Water Insecurity: Insights from Underserved

Areas of Accra, Ghana. Daedalus, 150(4), 64–84. https://www.jstor.org/stable/48620140

Henderson, J. C. (2012). Planning For Success: Singapore, The Model City-State? Journal of

International Affairs, 65(2), 69–83. http://www.jstor.org/stable/24388219

Heyink, J. W., & Tymstra, TJ. (1993). The Function of Qualitative Research. Social

Indicators Research, 29(3), 291–305. http://www.jstor.org/stable/27522699

Institute for Global Environmental Strategies (IGES). (2005). Sustainable development in

Asia: Dilemmas, achievements and challenges. In Sustainable Asia 2005 and Beyond: In the

pursuit of innovative policies (pp. 10–31). Institute for Global Environmental Strategies.

http://www.jstor.org/stable/resrep00775.8

Jaiyesimi, R. (2016). The Challenge of Implementing the Sustainable Development Goals in

Africa: The Way Forward. African Journal of Reproductive Health / La Revue Africaine de

La Santé Reproductive, 20(3), 13–18. https://www.jstor.org/stable/26357106

Kulipossa, F.P., (2004). Decentralization and Democracy in Developing Countries: An

Overview. Development in Practice, 14(6), 768–779. http://www.jstor.org/stable/4030022

Kshetri, N. (2010). Diffusion and Effects of Cyber-Crime in Developing Economies. Third World Quarterly, 31(7), 1057–1079. http://www.jstor.org/stable/27896600

Luo Deming. (1999). Economic Growth and Sustainable Development in China. Economic and Political Weekly, 34(45), 3213–3218. http://www.jstor.org/stable/4408601

Livingston, S. (2013). Crime and Stability in Africa. In Africa's Information Revolution: Implications for Crime, Policing, and Citizen Security (pp. 5–22). Africa Center for Strategic Studies. http://www.jstor.org/stable/resrep19165.4

Local Governance Act, 2016 (Act 936)

Local Government Act, 1993 (No. 462). (2021). Retrieved 4 December 2021, from https://www.ecolex.org/details/legislation/local-government-act-1993-no-462-lex-faoc091927/#:~:text=An%20Act%20to%20establish%20and,to%20provide%20for%20related%20matters.&text=This%20Act%20makes%20provision%20for,assembly%2C%20a%20municipality%20or%20metropolis.

Map Room: Water Scarcity. (2009). World Policy Journal, 26(4), 12–13. http://www.jstor.org/stable/40468732

McArthur, J. W. (2013). Own the Goals: What the Millennium Development Goals Have Accomplished. Foreign Affairs, 92(2), 152–162. http://www.jstor.org/stable/23527464

Marx, B., Stoker, T., & Suri, T. (2013). The Economics of Slums in the Developing World. The Journal of Economic Perspectives, 27(4), 187–210. http://www.jstor.org/stable/23560028

Ministry of Finance. (2021). Retrieved 27 September 2021, from https://mofep.gov.gh/sites/default/files/composite-budget/2021/GR/Ga.pdf

"Medium Term Development Plan" (2021). Retrieved 4 December 2021, from https://lgs.gov.gh/wp-content/plugins/download-attachments/includes/download.php?id=523

Mulumba, J. N., Nothomb, C., Potter, A., & Snel, M. (2014). Striking the balance: what is the role of the public sector in sanitation as a service and as a business? Waterlines, 33(3), 195–210. http://www.jstor.org/stable/24688166

NDPC. (2021). Retrieved 15 November 2021, from https://ndpc.gov.gh/

Obeng-Odoom, F., & Amedzro, L. (2011). Inadequate housing in Ghana. Urbani Izziv, 22(1), 127–137. http://www.jstor.org/stable/24920562

Ponce, J. (2010). Affordable Housing as Urban Infrastructure: A Comparative Study from a European Perspective. The Urban Lawyer, 42/43(4/1), 223–245. Rodden, J. (2004). Comparative Federalism and Decentralization: On Meaning and Measurement. Comparative Politics, 36(4), 481–500. https://doi.org/10.2307/4150172http://www.jstor.org/stable/41307739

Woldetsadick, T. G. (2012). Women, famine and the Millennium Development Goals: The Horn of Africa test. Agenda: Empowering Women for Gender Equity, 26(1 (91)), 33–40. http://www.jstor.org/stable/23287229

Roistacher, E. A. (1987). HOUSING AND THE WELFARE STATE IN THE UNITED STATES AND WESTERN EUROPE. The Netherlands Journal of Housing and Environmental Research, 2(2), 143–175. http://www.jstor.org/stable/43928352

Sackeyfio, N. (2012). The Politics of Land and Urban Space in Colonial Accra. History in Africa, 39, 293–329. http://www.jstor.org/stable/23471007

Sommer, J. M., Shandra, J. M., Restivo, M., & Coburn, C. (2015). Water, Sanitation, and Health in Sub-Saharan Africa: A Cross-national Analysis of Maternal and Neo-natal Mortality. Human Ecology Review, 22(1), 129–152. http://www.jstor.org/stable/24875152

Sanitation. (n.d.). In Merriam-Webster.com dictionary. Retrieved from https://www.merriam-webster.com/dictionary/sanitation

Sukhwal, B. L. (1987). Political and Legal Implications of Water Scarcity in Southwestern United States and Alternatives of its Proper Utilization. GeoJournal, 15(3), 307–315. http://www.jstor.org/stable/41144009

Sustainable Development Goals | UNDP in Ghana. UNDP. (2021). Retrieved 15 September 2021, from https://www.gh.undp.org/content/ghana/en/home/sustainable-development-goals.html.

UN(2009).Retrieved 31 October 2021, from https://www.un.org/ruleoflaw/files/FactSheet21en.pdf

UN. (2021). Take Action for the Sustainable Development Goals. Retrieved 31 October 2021, from https://www.un.org/sustainabledevelopment/sustainable-development-goals/

UNICEF. (2022). Billions of people will lack access to safe water, sanitation and hygiene in 2030 unless progress quadruples – warn WHO, UNICEF. Retrieved 27 March 2022, from https://wcmssec4.unicef.org/press-releases/billions-people-will-lack-access-safe-water-sanitation-and-hygiene-2030-unless

UNICEF. (2021). Sanitation. Retrieved 23 October 2021, from https://www.unicef.org/ghana/sanitation

WHO. (2022). Drinking-water. Retrieved 27 March 2022, from https://www.who.int/news-room/fact-sheets/detail/drinking-water

World Population Review. (2021). Safest Countries In Africa 2021. Retrieved 23 October 2021, from https://worldpopulationreview.com/country-rankings/safest-countries-in-africa

Xu, C. (2011). The Fundamental Institutions of China's Reforms and Development. Journal of Economic Literature, 49(4), 1076–1151. http://www.jstor.org/stable/23071664

Yerkes, S., & Muasher, M. (2018). Goals and Benefits of Decentralization. In

Decentralization In Tunisia: Empowering Towns, Engaging People (pp. 5–11). Carnegie

Endowment for International Peace. http://www.jstor.org/stable/resrep21004.
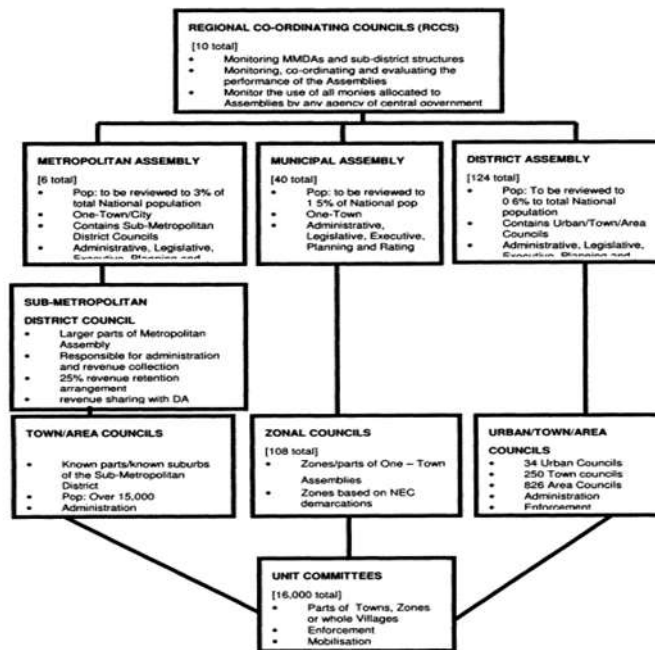
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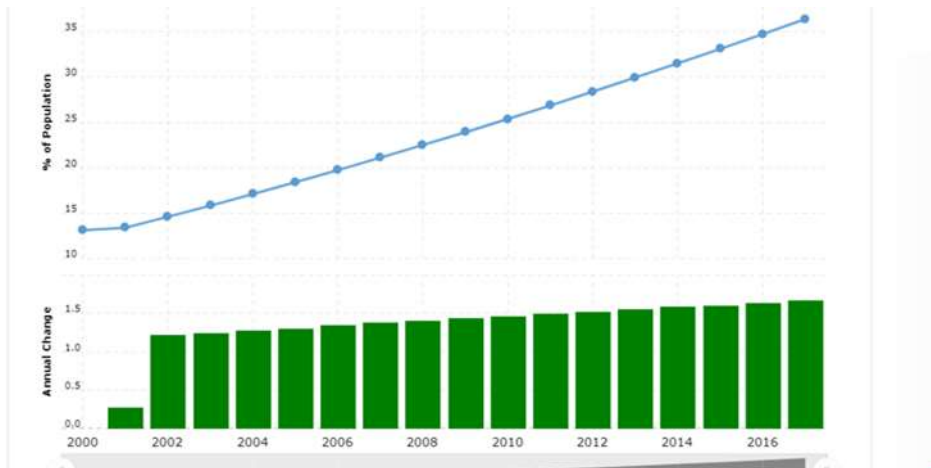
Figure 1.2

The diagram shows Ghana's performance regarding access to water from 2000 to 2016.

Figure 1.3A

The diagram represents Ghana's decentralized system

Figure 1.3B

MMDA ROLES	
1.	"Formulate and execute plans, programs and strategies for the effective mobilization of the resources necessary for the overall development of the district. "
2.	"Be responsible for the overall development of the district and shall ensure the preparation and submission through the regional coordinating council for approval of the development plan to the commission and budget to the minister of finance for the district."
3.	'Initiate programs for the development of basic infrastructure and provide municipal works and services in the district. "
4.	"Promote and support productive activity and social development in the district and remove any obstacles to initiative and development."
5.	"Ensure ready access to the courts and public tribunals in the district for the promotion of justice."
6.	"Be responsible for the development, improvement and management of human

The table above presents the roles of MMDAs in Ghana according to Act 936

Figure 1.4

The map highlights the MMDAs in the Greater Accra Region

Figure 4.0 A

The picture depicts themes identified in responses regarding the first research question

Figure 4.0 B

The picture depicts themes identified in responses regarding the second research question

Figure 4.0 C

The picture depicts themes identified in responses regarding the third research question

Figure 4.2 A

Figure 4.2 B

The picture above is a dam in Ga Central

The picture above is a drain in Ga Central