

People and Solid Waste

An analysis of solid waste management in two low-income communities in Kumasi, Ghana



Throwing waste at the communal refuse container in Ayigya Ahenbronu

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List of abbreviations

MLGRD	Ministry of Local Government and Regional Development
KMA	Kumasi Metropolitan Assembly
A.M.A	Accra Metropolitan Assembly
WMD	Waste Management Department
TCPD	Town and Country Planning Department
DACF	District Assemblies Common Fund
MCE	Metropolitan Chief Executive
PRO	Public Relations Officer / Office
PPP	Public Private Partnerships
SSP	Strategic Sanitation Plan
ESP	Environment Sanitation Policy
EHC	Environmental Health subCommittee
NGO	Non Governmental Organisation
CBO	Community Based Organization
ADRA	Adventist Development and Relief Agency
CAGA	Catholic Action for Graduates
WB	World Bank
IMF	International Monetary Fund
UN	United Nations
UNESCO	United Nations Environmental, Scientific and Cultural Organization
UNCHS-habitat	United Nations Centre Human Settlement, habitat
UNPD	United Nations Development
RWSG-WA	Regional Water and Sanitation Group
SAP	Structural Adjustment Policy
H2h	House to house collection
PPP	Public Private Partnership
A.M.	Assemblyman /men

On a study in a Ghanaian town

Van der Geest (2001) cited by Obirih-Opareh; “I came across a peculiar paradox in people’s way of dealing with waste. On the one hand, they were extremely concerned with cleanliness and removing dirt from their bodies, on the other hand, the way they actually got rid of their waste was so inefficient that they were continuously confronted with what they most detest: filth...”

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Abstract

This research has been carried out in the two low-income communities Ayigya Ahenbronu and Aboabo 2 in Kumasi Ghana. The aim of the research is to discover if solid waste management in these two communities is carried out via the concept of popular participation, i.e. if solid waste management is an effort of joint collaboration between the actors involved. Hence, the actors involved are divided in three groups; (a) the inhabitants of the communities, (b) the government authorities involved (c) the civil society groups in and around the community.

Popular participation is a concept that has gained much notoriety Among especially development organizations. In short it is claimed that the most effective (project) results can be obtained when collaboration and participation between actors is sought. Popular participation contributes a large role for (a) the government, who is to set up the structure along which policies are carried out, and for (b) the civil society (defined as any form of organization, except governmental, that plays a role in society) who is thought to be the engine behind the policies and projects.

The most important research questions to be answered in this research thereby are (a) to describe the role and involvement in solid waste management of each identified actor, (b) to comment on the external and internal participation that exists between the actors.

In order to answer the research questions it was decided to use different means and methods for data collection. The primer data consists of a three-month fieldwork, secondary and tertiary data consist of information from books and other sources of information. Together, and after analysis, these have provided an answer to the research questions.

In the field, two methods for data collection were used. First, a questionnaire Among the inhabitants was held. This questionnaire provides an insight in the current situation of the inhabitants and of the role that they play in the field of solid waste management. Secondly semi-structured in depth interviews with both government authorities and civil society groups and leaders, have been held. These interviews help to construct the story of identified key actors, and show a deeper insight in the dimensions along which solid waste management is carried out. Data obtained from the questionnaire is not representative for the entire population of the communities; its results must therefore be interpreted as indicators of the situation. Data obtained from the in-depth interviews is not a complete overview of all activities; rather it includes a selection of the most important actors in and around the community.

Solid waste management in the communities is carried out via two manners. The first manner concerns solid waste collection via the communal container system. Here the government and the inhabitants play a core role; the government places a container at a central point in the community, the inhabitants dispose their waste in the container, and a private company empties the container in the name of the government. However, in both communities the system has insufficient capacity. There are neither enough containers nor the frequency of collection is sufficient. As result, wastes pile up and the community becomes dirty.

The second manner to manage waste concerns the organization of communal clean up campaigns by groups of people. During these clean up campaigns, (part of) the community is cleaned by means of a joint collaboration between the inhabitants, the government, and some civil society groups. However, the results of these campaigns in both communities are meager. Despite the fact that Ayigya Ahenbronu has a rather vivid civil society, the clean-up campaigns are not organized frequently. There are no organizations, community leaders, or inhabitants, which stand up and feel the urge to organize such a campaign. In Aboabo 2, where there is also a rather vivid civil society, there is more effort to organize communal clean up campaigns. I.e. around every three to four weeks, a campaign is held. Yet the effect of the campaigns is very small. Days after gutters have been cleaned they are filled with waste again.

In conclusion, it can be said that solid waste management is not a joint effort of collaboration between the actors. This is mainly because every actor in the field has its own perception of the solid waste problem.

First, among the inhabitants of both communities there is no agreement on the actual level of cleanliness in the community. Around 50% of the inhabitants find that their community is dirty, and another 50% find that the community is clean. It has been impossible to attribute a type of personality or family situation to the opinion, attitude or behavior of the inhabitants. Secondly, the government cannot improve the management system. First, they say to lack the means. Secondly, and equally important, on the local level they (continue to) suffer from political power struggles and bureaucratic problems, which, to a large extent influences project decisions and executions. Yet, they are of opinion that the situation will improve considerably when the inhabitants will pay a contribution for waste management. Last, not least, the civil society groups present in and around the community are (for diverse reasons), not interested in managing waste, or are not strong enough to influence the situation. It is only the World Bank that has contributed significantly to the sanitation and hence the managing of the waste. The results illustrate that it is currently impossible for actors to work together to contribute to an effective management of the waste.

THE COMMUNAL CONTAINERS IN THE COMMUNITIES



In Ayigya Ahenbronu



In Aboabo 2 (site is called Extension)

1 Introduction: about managing solid waste in Kumasi

1.1 People and waste

How is it possible that Kumasi has won an award for cleanest city while inhabitants of the city can be spotted throwing away waste indiscriminately? And why is it that waste in especially poor communities piles up?

In discussions with traders, students, missionaries, and tourists of all types of nationalities, either passing through or staying in Kumasi, the general shared Amazement of all, concerns the manner that inhabitants deal with the everyday waste in the city.

When walking through the somewhat poorer parts of the city it becomes obvious that waste is not managed properly; the communal containers serving the communities are literally overloaded with waste and the same is often valid for the scarcely distributed private containers. Public dustbins are nowhere to be located, gutters along the streets are often choked with many different types of wastes, small plastic sacs in which water is being sold, and which are referred to by the locals as 'sachets', are thrown away carelessly and are scattered along the road. Signs saying 'please don't urinate here' are located in many neighbourhoods yet the smell of urine seems to always prevail.

On top of a rather large dumpsite located in the centre of the city, and mentioned on the city planning map as 'goat and sheep area', birds, cows, goats and people looking desperately for leftovers can be spotted daily. On the edge of this site people have built their homes and are living their everyday lives. Next to one of the overloaded containers on a sanitation site elsewhere in the city, a school is located. At yet another sanitation site the waste is simply burnt illegally by a government appointed employee.

When driving along the cities' market in the city centre at night, the situation seems even worse. Instead of the smell of freshly cooked fried or baked food, it is now the smell of rotten food which is in the air. Sellers have simply left all their garbage along the roads, on the marketplace, in the gutters or on the pavement. The substance of the waste we are now discussing has been identified to mainly include organic material. However human wastes, used car batteries, and any other type of chemicals are often found in the communal containers.

A factor that makes the situation worse is the attitude of the people to (the problem of) the waste/dirt. As mentioned above, wastes are thrown on the ground and signs are bluntly ignored. Furthermore, nobody seems to tell small kids not to play in the gutters or to walk barefooted through the waste. Nobody seems to think it is better to keep the piece of plastic or paper (wrapped around their drink or food that they consume) until they find a proper place, instead this is just thrown on the ground en masse. And when asked why they display this type of behaviour, they argue that it is not their fault; the government has simply not ensured proper places to dump the dirt / waste.

Yet, despite these practices and this public display of behaviour there are clean places in the city. These places are situated in the richer parts in the suburbs. Here waste is not piled up, and gutters seem to function rather properly.

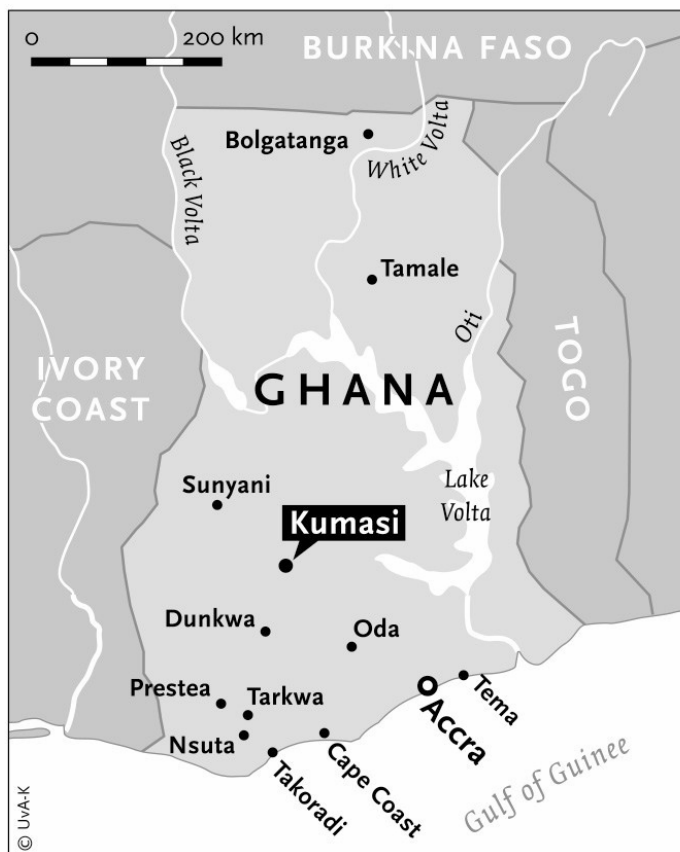
The latter aspect can explain why Kumasi has won the cleanest city award. The questions than are why different parts of the city are treated differently? What are the exact roles that the government, the businesses, the individuals and households, and organized social groups play? And what can be said about future plans for the poorer parts? It is these questions that I asked while exploring the city. And while only in the initial phase of my research I learned that the situation is complex.

First and foremost there seems to be a huge problem of attitude among almost all inhabitants of the city. Waste is treated carelessly and is thrown around when there are no proper places nearby. Secondly the waste collection system in the city is overburdened. Thirdly and intertwined with this; the local as well as the national government lack the money and equipment to collect all the waste

generated in the city. Fourthly private companies that are hired to collect the waste face the problem that no-one pays their check. Fifthly individuals and households of poorer areas are fed up with the situation because they first of all can't easily dispose over their waste and secondly can't afford to pay for the service either.

Next to this, actions by the government, private companies and individuals or groups seem never to be adequate. It is obvious that people love to sweep their compound or the road in front of their house. It is obvious the government wants the city to be clean and is busy announcing how to do this. It can be read in many papers that clean up campaigns are being organized and executed. And it is striking how badly private companies want to work. Yet in some areas the waste keeps reappearing.

Map Ghana



Source: Post & Inkoom 2003

1.2 Background of the research

Kumasi is Ghana's second largest city and it is estimated that 1,2 million people make up her population, this number climbs to two million in day time as many buyers and sellers frequent the city. As in many third world cities immense growth and migration towards the city during the last few decades has changed its structure forever. Diverse problems with housing, work, the level of services and infrastructure have become common day practice. And as many try to find a solution, the problems even tend to worsen.

In the report *'An urbanizing world; global report on human settlements'* of 1996 published by the United Nations Centre Human Settlement (UNCHS-habitat), which is to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all, it is stated that in the 1980s and 1990s African cities across the continent went through a period of **'urban crisis'**. (UNCHS pp89: 1996). This crises had three major components, firstly being a

decline in the levels of formal employment and a corresponding rapid increase in ‘informal sector’ activities in many key areas of the urban economy, secondly a deterioration in both the quality and distribution of basic services, and thirdly a decline in the quality of the urban environment, both built and natural. (UNCHS pp89: 1996). The two major urban services that have become increasingly overburdened in almost all African countries, and so also Kumasi, are public transport and waste disposal.

Community upgrading and action projects are one manner of fighting against the resulting poor circumstances and lack of basic services. They are preferably a joint effort between the government, the businesses and the people to upgrade or to install a service in the neighbourhood. In the year 2003 an initial research project by Post *et al* concerning this topic was executed in Kumasi. The research which is called; *Local Governance, Civil society, and Partnerships; Community Action in Neighbourhood Service Upgrading in Kumasi, Ghana* has basically sought to identify and broadly analyze the actors that are present when a community action project is carried out. Eight district communities were selected and analyzed in terms of prevalent community action projects, community organization, and community leadership.

From Post’s research became evident that information concerning the community projects and the actors requested more in-depth research. This research project seeks to do that. It focuses on one topic of community improvement; i.e. the waste management. This topic provides the cadre of the research, and the contents exist of a detailed analysis of the actors. Or otherwise put; the project exists of a description of the type of actions taken and the relations between the actors to improve the waste management in the two communities Aboabo 2 and Ayigya Ahenbronu.

The uniqueness of this research lies in the fact that data has been collected concerning the role of each of the identified actors in the field, including the inhabitants, the local government, and the civil society groups. Especially the first mentioned group has not yet been subject to research. Through administering a questionnaire to this

1.3 Short description of fieldwork

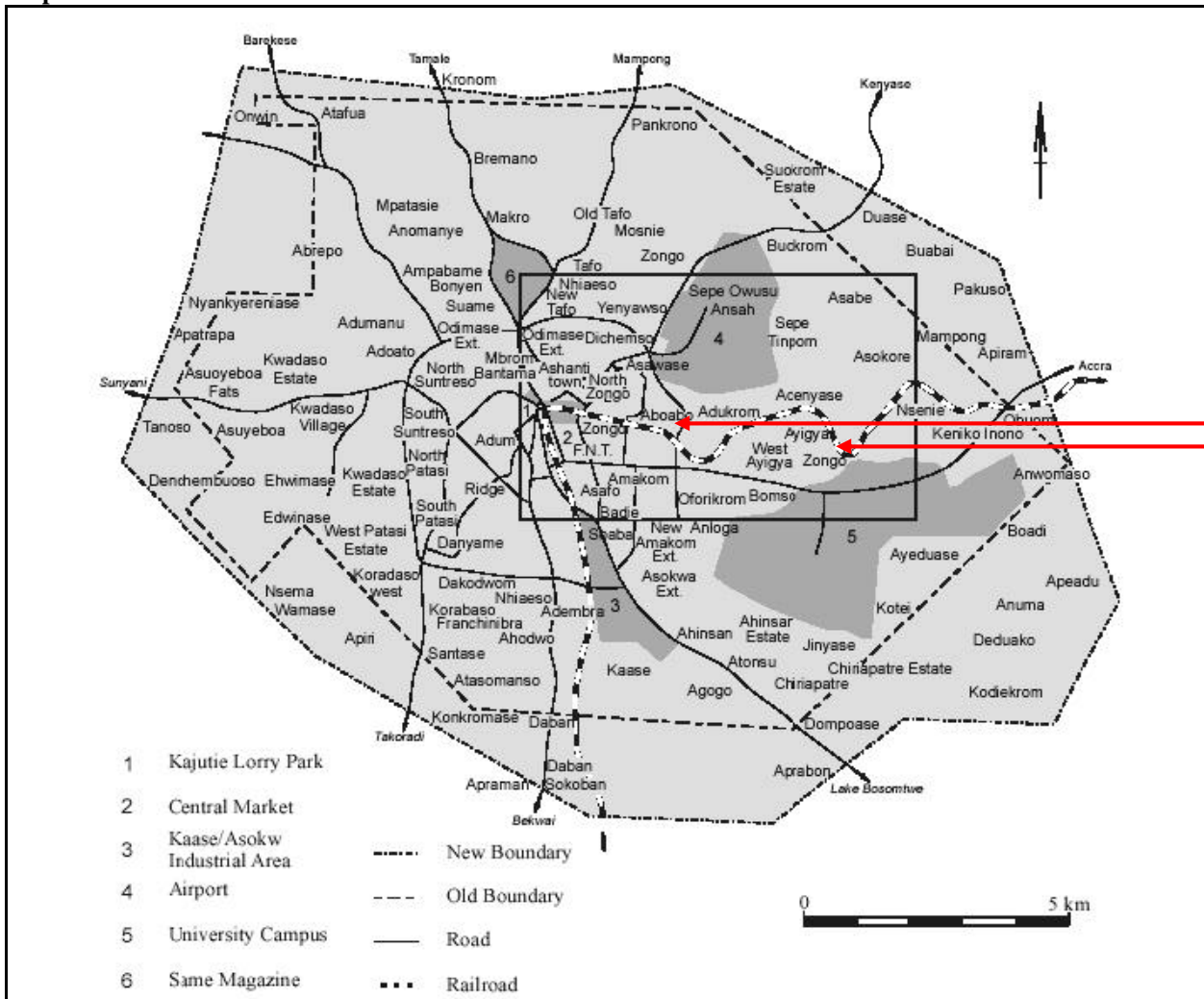
During the months June, July and August data has been collected concerning relevant actions and initiatives on the waste management problem in the two specific communities Ayigya Ahenbronu, and Aboabo 2. Both communities are low income communities with limited access to basic services.

Ayigya Ahenbronu is located about 8 km from the city centre, and used to be a village before it became part of the Kumasi Metropolitan. Its inhabitants are mainly Ashanti, the original population of the region, which have now adapted to the Christian religion.

Aboabo 2 is located about 3 km from the city centre of Kumasi; it exists since the 1930s and is a so-called “Zongo” community. “Zongo” is a term the inhabitants gave to the communities to indicate a Muslim migrant community. (This term has been adapted and is now used by all Ghanaians to indicate these types of neighbourhoods.)

These two communities have been selected from the eight communities of the initial research mainly because of the described history with community upgrading projects and participation, which was rather positive in Ayigya Ahenbronu and negative in Aboabo 2. In these two communities a questionnaire has been administered in order to discover the perception of the people towards waste and towards participation. Furthermore in depth interviews with various types of leaders, government officials, and businesses have been held in order to discover the facts, realities, and perceptions about waste and about participation.

Map Kumasi



The picture shows the city of Kumasi anon 2000. The two communities of the fieldwork are pointed out by the arrow. Source: Post *et al* (2003)

1.4 Why this study?

This study is basically being executed in other to gain an insight in the realities behind the theory of bottom up participation. That is to say which actors play which role and can participation among these actors is found in the field of waste management?

As mentioned before, the initial study on *Local Governance, Civil society, and Partnerships; Community Action in Neighbourhood Service Upgrading in Kumasi, Ghana*, by Post *et al* (2003) has sought to identify and broadly analyze the actors that are present when a community action project is carried out. Aim was to discover what type of development was going on at the community level, what type of organizations existed and which projects were being executed. The research focused on determining the roles of the different actors and their participation but there was not enough time to go in depth into the nature of this participation.

This research will build on the initial 2003 research and will expose the roles played by the actors. Hereby waste has been chosen as the factor of development to concentrate upon.

This factor has been selected because it is first of all obvious that parts of Kumasi and moreover Ayigya Ahenbronu and Aboabo 2 are dirty. It will be of interest to see if the actors are also aware of the dirt and if they are planning to do something about this. Secondly the current system of waste management is undergoing change; a new project called house to house (h2h) collection is introduced, and the waste management department is using more and more private companies to collect waste. It will therefore also be of interest to see if and how this change is influencing the

waste problem in the communities. Thirdly, whereas community action by the people and their leaders was identified in earlier research, this research points out if community action in the field of waste management is executed.

In current debates by scholars, planners, and executers the effect of participation among the public sector (the government authorities) and the civil society sector and the private sector is discussed. The theory behind participation claims that development increases when participation among the actors is sought. Bottom up participation as mentioned earlier is one manner of increasing development. According to the theory of participation the government should present the structure along which the private sector and the civil society sector should move. By doing this a joint responsibility for development is created and put in place. The theory looks very positive yet in reality there is a lot more to it. It is often seen that the nature of the participation influences the outcome of the partnership. And there are many factors that influence this nature of participation; power relations, corruption, lack of resources (financially as well as socially) etc. But although the reality of forming partnerships seems to be difficult and subject to many factors of influence, seeking participation is still a recurring manner of wanting to develop. Debates about the effect of participation continue. Describing the manner of participating in the two communities in Kumasi will contribute to the debate.

1.5 Aim of the thesis

The data collected **seeks to describe** the multiple influences and manners of participating of the diverse actors in the field on the waste management problem in specifically the two communities researched. These actors can be identified as civil society groups, businesses, and governmental forces. Researchers do not hold one single definition of the term civil society. But because civil society in this report is set against the influences of the government it is chosen to use the following definition; any form of organization except from governmental organizations to undertake action when necessary.

1.6 Contents report

The research questions guiding the contents of the report will be explained in the following chapter. In the same chapter and building on the research questions, the relevant discussions within the literature on management, civil society, social capital, participation, and waste is looked upon and described.

Preceding the analysis of the research questions an explanation of the used methods during the fieldwork will be given in chapter three. And chapter four covers the historical background of the situation in Kumasi and more specifically in the two communities.

In the three chapters there after the research questions will be analyzed and answered. Chapter five covers the analysis of the local government, with emphasis on the role that the waste management department plays. Chapter six covers the analysis of the situation concerning waste in the community, the inhabitants and the waste. Chapter seven covers the role of the civil society. Chapter eight summates the internal and external participation that exists between the actors, and that has been presented along the analysis. Chapter nine presents the conclusions.

2 The theoretical framework: Solid Waste and Popular Participation

2.1 Introduction

This chapter presents the theoretical framework for this research. In the first paragraph the problem statement, a summary of the theory of popular participation, and an explanation of the chosen manner to approach the problem and theory are given. Together these form the conceptual framework for the research and lead to the formulation of the research questions.

Based on the conceptual framework and the research questions, the literature review is written. The literature presented provides an insight in the current discussions and proposed solutions of scholars concerning the main questions and theory of this research.

2.2 The conceptual framework

2.2.1 Problem statement

Over the last few decades many facts and figures point to the enormous growth of the urban areas and the by-coming production of waste in Kumasi. It is mainly the low-income neighbourhoods that suffer from the resulting deterioration of waste management services; their space is scarce, they are with many, and they have limited means, meaning that it is especially their health that is in danger. Therefore it can be said that waste and the manner that is dealt with waste, particular in the low-income neighbourhoods, is a problem to development.

To make the situation worse, large groups of people in the city of Kumasi (including the inhabitants of the low-income neighbourhoods) seem to have developed a careless attitude towards the waste. They either ignore or don't know about the consequences of unhygienic matters, and as a result they deal indiscriminately with the waste that they produce.

Combining these factors shows that if nothing is done to control the waste and the people, the burden and consequences are largest for the inhabitants of the low-income neighbourhoods, which is the most vulnerable group.

The central problem of this research therefore becomes: "*the manner that poorer neighbourhoods, in this case limited to two communities, manage solid waste on an every day basis.*" (Waste in this context can compromise all sorts and forms of waste, however in order to limit the scope of the research it is chosen to only look at the solid wastes produced. A definition of solid wastes will be mentioned later in this chapter.)

2.2.2 Theory of Popular Participation

Especially Among the neo-liberals, popular participation is seen as the solution for a multitude of problems that developing countries have to deal with. Inadequate solid waste management, threatening health, environment, and productivity of the area, is one of these problems.

The concept of popular participation stresses that in order to solve problems participation among stakeholders / actors must be sought. This participation will than lead to (more) action to be undertaken, and hence to more development.

Like Hewitt (2000) states in his article on municipal cooperation; "Municipalities are called to move away from unitary, government directed models of problem solving towards 'enabling' or 'partnering' strategies, involving a variety of participants." And as he continues to state, "apart from a growing number of development agencies (such as the World Bank, IMF etc) one of the chief proponents of this approach has been the United Nations Centre for Human Settlement (UNCHS)." Popular participation can be seen from different types of perspectives, two of which are important in this research. The first perspective sees popular participation as an instrument the government should stimulate and use to better manage the city. In this case the concept can be linked with the

concept of urban management and the policies of the government. The second perspective sees popular participation as a tool of the bottom-up groups in society. Here popular participation is said to be stimulated by the want of groups / organizations to develop themselves, and can be linked with the concept of civil society. However, whether the perspective is government or bottom up oriented, the goal stays similar; i.e. development through participation. Furthermore in an ideal situation the two perspectives are complementary and should increase results.

This thesis in particular looks at how the two communities Ayigya Ahenbronu and Aboabo 2 are kept clean. It can thus be asked if it's possible that ***“a clean environment can be ensured through (popular) participation between actors, where actors enable other actors and enable action to be undertaken.”***

2.2.3 The ACTOR approach

The above standing theory states that the diverse actors should play together and enable each other. The interplay (both internal and external) between all these actors can then ensure that the solid waste is managed and the situation controlled. It is therefore important to see who the actors in the field are.

In this research, the actors found in the field have been divided in three groups being ***(a) the inhabitants of the community (b) Government authorities of the city of Kumasi and possibly beyond, (c) Civil society groups and businesses in the two areas researched and possibly beyond.***

This categorization has been selected because it enables structural research, whereby the community and the situation of the inhabitants is easier to explain apart from the civil society. In reality there are many similarities between especially the first and the last group. One can even debate if inhabitants are a part of the civil society.

As the two communities of interest are mainly residential, the group of businesses is not given as much attention as the other two. Especially the relation that exists between the inhabitants, the government and the civil society will be researched.

In order to analyze the existing forms of action and participation between these actors it is important to understand how the different groups of actors are structured and how they interplay. Hereby it is important to look at both the larger context of national and international policies and measures, within which for example the Ghanaian government operates, and the local context of existing policies, traditions, and power relations. The results will show if the communities have found manners to improve the solid waste management service, and if indeed participation between actors improved the situation.

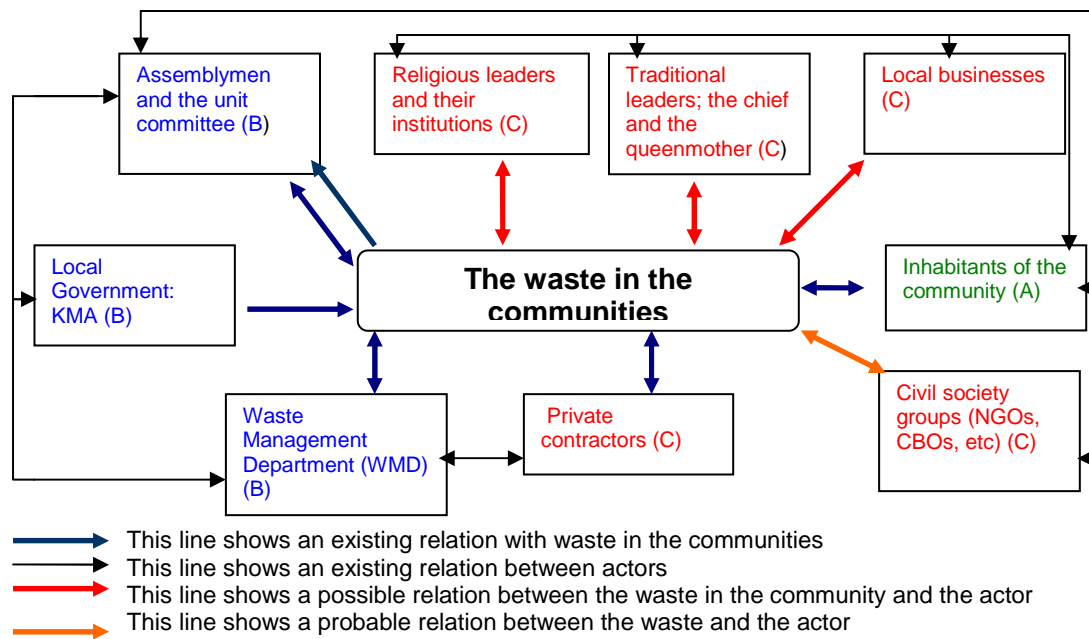
The figure hereunder describes the situation more deeply. All actors are classified and belong to one of the above mentioned groups (a, b, c). Furthermore the relation that they have to the waste in the community before the fieldwork started is described.

There are four possible types of relations:

1. The existing relation between an actor and the waste in the community. For example it is obvious that inhabitants have a relation with the waste; it is their waste!
2. The existing relations between the actors. For example the relation between the civil society groups and the inhabitants; inhabitants can be part of a group, or the relation between the inhabitants and the local businesses; inhabitants use the businesses and buy items, businesses have clients and workers.
3. The possible relation between the waste and the actor. This line assumes that there can be a relation between the actor and the waste, however this is not sure. It is for example not sure if religious leaders do something with the waste or not.
4. The probable relation between the waste and the actor, in this case only the civil society groups. This is a relation which according to the theory should exist. When bottom up participation is mentioned NGO's and CBO's are the ones that carry out the work.

Note: Possible and probable relations lay close together, as religious leaders and traditional leaders can also be seen as part of the civil society, this will be discussed later.

Theoretic framework: Actors and relations



2.3 The research questions and limitations

2.3.1 Research Questions

The central question for this research is the following; **“Is the development of the solid waste management in the communities Ayigya Ahenbronu and Ayigya 2 anon 2004, an effort of joint collaboration between multiple actors?”**

In order to answer this question; it is split in two different types of questions with associated sub-questions. The first one concerns the role the actors play in the field of waste management, the second one builds on the first one and concerns the participation that exists between the actors in terms of waste management.

The questions will give an answer to the solid waste (management) problem and will guide the reader through the report.

1. What is the role of the identified actors and how can this role be analyzed in theory and reality?
 - What is the role of the local government and waste management department
 - a. What is the policy of the local government concerning the waste, especially in the two communities, and why?
 - b. What is the opinion on the policy and the results?
 - c. What are the strengths and what are weaknesses of these policies?
 - What is the role of the inhabitants in the two communities?
 - a. How does the waste management system work in the community?
 - b. What is the opinion and attitude of the inhabitants on the waste?
 - On the system
 - On the cleanliness
 - What is the role of the civil society organizations?
 - a. What types of organizations exist in the community?
 - b. How can the organizations be classified
 - c. What is the role that they play in the community?
 - d. Have actions been taken in the field of waste management?
2. What can be said about the participation between actors for joint solutions for the waste management?
 - Who is participating with whom? And who isn't participating?
 - What can be said about the reasons for participation?
 - o What are incentives?

- What can be said about the nature of participation?
 - o Are their mutual beneficial forms of participation?

Answering these questions will enable an understanding of the actual situation and will therefore provide an answer to the main question and will show if the theory of popular participation applies to the situation.

2.3.2 Limitations

The conceptual framework and the theory that provide the context for this research are very broad. This thesis does not seek to provide a complete analysis of all associated concepts of importance. First of all the available time and knowledge do not permit the researcher to do this, secondly the purpose of this thesis is smaller; it consists of looking in depth at the situation in the selected communities.

Practical limitations will be mentioned in the next chapter in which the method for this thesis is described.

2.4 The Problem of Solid Waste (Management)

2.4.1 The wider context

One aspect that allows a country to develop itself is controlling its environment. As sanitation is one of subjects that falls under “controlling the environment” it’s important to understand its dangers and shortcomings and to work towards controlling these.

Since the industrialisation in the 19th century especially the sanitation in cities has been a core problem for which solutions needed to be found. During the last century accumulated knowledge and experiences did lead to new insights and manners to deal with the sanitation. However technological advances and the increase of the consumption and creation of non natural types of solid waste have made it difficult to find the appropriate manner to deal with mainly the new types of wastes, especially in developing countries.

In the last two decades a number of organizations have addressed the need to improve the level of sanitation, including waste management, in especially the developing countries. In the Brown Agenda, the environmental problems associated with the development process are addressed. In the millennium goals the problems of proper sanitation are addressed under the target “ensure environmental sustainability”.

From the above can shortly be concluded that the problem of sanitation in developing countries is an acknowledged problem. In the international context it can be observed that some developing countries are trying to work towards an improvement of the situation, furthermore governments in developed countries and international organizations such as the UN the WB and the IMF have established policies and working projects regarding manners to ensure a better environment for the people.

2.4.2 Defining Solid waste

The definition for solid waste, as used in this research, is the basic definition in use by the Ghanaian government:

Solid wastes includes all solid waste materials generated by households, institutions, commercial establishments and industries, and discharged from their premises for collection; all litter and clandestine piles of such wastes; street sweepings, drain cleanings, construction/ demolition waste, dead animals and other waste materials.

As the units of research are two residential communities in Kumasi, solid waste is limited to the solid waste produced and gathered in those communities.

2.4.3 What has been researched?

Seen the above paragraph it is not surprising that many research projects have been executed in the field of waste management. The projects executed by scholars, academics and other professionals show a multitude of views of the problem of solid waste, and possible solutions.

For example the work by I.S.A Baud and H. Schenk (1994) on solid waste management, in Bangalore, India shows the way waste has influenced the life of many inhabitants. The writers mainly point to the, often informal, networks of waste collection and recycling of the inhabitants of the city. It is the waste pickers that ensure that the pile of waste left for the government to deal with, is diminished to a large extent. However, these waste pickers do not do this because of the existing concern about the environment. They do this because they are poor and see no other way to make a living than by doing this. To conclude, the authors implore that especially the position of the waste pickers can and needs to be changed.

When looking at research executed in Ghana, one very valuable resource is the paper of N. Obirih-OPareh (2003) on the subject of solid waste collection in Accra. The paper concentrates on the impact of decentralization and privatization on the practice and performance of service delivery concerning waste. The description of the shortcomings of the Accra Metropolitan Assembly and its Waste Management Department in their partnership with the private market show how difficult it is to find an appropriate management solution in the near future.

Research executed in Accra and in Kumasi by Post (2001, 1998, etc.) also combined the subject of waste with the concept of partnerships between the public and the private market. In his articles Post stipulates the difficulties of ensuring workable and fair partnerships between the government on the one side and the private market on the other side. Post concludes his articles by expressing the hope that such partnerships are made more equal, and that in order to do so it might even be necessary to include the often left out opinion and input of the inhabitants in the debate and in the projects.

2.5 Management

2.5.1 From governance to urban management

In this research the roles of the various actors are explored, and it is the theory of popular participation that guides the analysis. Popular participation is a theory that fits very well with the concept of governance and, on a lower scale the concept of urban management. Governance and urban management in their turn explain to a large extent the current role of the government of Ghana and, more importantly, the role of the local government in Kumasi, the Kumasi Metropolitan Assembly (KMA).

As the research results will show, the government of Ghana has set up policies for waste management that are very much in line with the ideas of the neo liberal philosophy of the World Bank and other donor institutions. Its urban management reflects these similarities.

2.5.2 Defining Governance and its context

Governance concerns the level where politics, planning and policies are to be introduced. Whereas the scope of this research is too small to conclude on the entire process of governance in Ghana it is important to conclude upon the manner that the actors work together. Understanding the definition of governance is therefore important.

According to the governance working group of the International Institute of Administrative Sciences, governance can be referred to as the process whereby elements in society wield power and authority, and influence and enact policies and decisions concerning public life, and economic and social development. (<http://www.gdrc.org/u-gov/work-def.html>) *Governance is a broader notion than government*, whose principal elements include the constitution, legislature, executive

and judiciary. Governance involves interaction between formal institutions and those of civil society. Governance has no automatic normative connotation. However, typical criteria for assessing governance in a particular context might include the degree of legitimacy, representativeness, popular accountability and efficiency with which public affairs are conducted. (<http://www.gdrc.org/u-gov/work-def.html>)

In simple terms, UNESCO defines urban governance as the processes that steer and take into account the various links between stakeholders, local authorities and citizens. It involves bottom-up and top-down strategies to favour active participation of communities concerned, negotiation among actors, transparent decision-making mechanisms, and innovation in strategies of urban management policies.

2.5.3 *Defining urban management and its context*

When taking governance to a smaller and urbanized scale we can speak of “*Urban Management*”. The concept and associated concepts of importance have been analyzed and interpreted by many, and there is no generally shared definition of how urban management should be executed.

But all analyses have led to more specialized information concerning the topic. For example in their book on managing fast growing cities, Devas and Rakodi (1993) state that information about experiences with management and planning approaches should be used and can in fact be seen as the starting point for urban management. They are of opinion that the experiences with different approaches of planning and managing fast growing cities and the reviews of the various approaches and experiences have led to an accumulation of expertise. And they continue to say that this enables better understanding of problems and issues, leads to less naïve approaches in reality, and leads to the identification of promising tools. This “New Realism” as they call it themselves, forms therefore the starting point for urban planning and management in the 1990s and beyond.

A basic definition of Devas and Rakodi which is also taken by Post (1997) in his article on urban management in an unruly setting, says that urban management “covers the full range of governmental interventions in the development and day-to-day operations of the city”.

In further describing the concept Post (1997) uses Mattingly’s distinction of the three dimensions of the concept urban management, being the **object**, the **objectives**, and the **actions**. The principal goal of urban management is to prioritize the objectives in order to prevent from wanting to much or striving for conflicting objectives. After this has been done, each object selected can be given certain objectives. Actions, the last part of the concept, will differ from time to time and hence from project to project.

According to Safier also cited by Post (1997) urban management is different from previous approaches to planning such as master and action planning because under urban management the challenge is to define new roles and responsibilities in specific urban situations for all the actors involved notably the public sector, the private sector, and social non governmental sector.

Post's six reoccurring principles on Urban Management

Post (1997) mentions six reoccurring principles which keep recurring on paper, no matter how differently policy makers, executers and scholars assess or have assessed their value and meaning.

The principles are the following:

1. An increased awareness of the role of politics is needed
2. The approach stresses the need for popular participation (empowering sort of planning)
3. The approach insists on the strengthening of local government
4. The approach is based on reappraisal of economic significance of cities in national development
5. The approach involves a plea for a resurgence of the market
6. The approach recognizes importance of urban management per se.

These six principles are likely to appear in a debate concerning this paper. However as Post already mentions, every author has its own value and meaning attached to the concept.

2.5.4 In summary

The above paragraphs illustrate that management and the new realism can be found on all levels of society. Furthermore the contents of the management approach on the diverse levels of society are very comparable difficult to grasp at. The interaction between the civil society and the government, and the resulting popular participation is for example occurring on all levels of society and hence of management. Yet there is little hard evidence about its workability.

There seems not to be a generally shared agreement on how to accomplish the wished for effect, other than planning the management carefully and using the tools as popular participation. The named “challenge to define new roles and responsibilities”, is not made tangible.

It can be concluded that management of society is most of all an undeveloped challenge for which the specific instruments and hence the reflected results still need to be introduced and highlighted. The concepts urban management and governance are very large and seem to be part of a great tendency in development thinking of scholars and intellectuals, as well as development organizations and institutions.

2.6 Civil society

2.6.1 An introduction to the concept

In the above discussion the concept “civil society” has been mentioned a few times. It is believed that a strong civil society will enable people to develop themselves and their situation. It is therefore of importance to understand the concept and its meaning in the context of the two communities and their development.

The roots of the term ‘civil society’ lay far in the past. In the seventeenth and eighteenth century the term was used in western social and political philosophy and discussed by Hegel, Marx, Gramsci, Tocqueville and many others. (McIlwaine: 1998) Currently civil society is one of the hottest topics in the literature on development. In her paper on civil society and development geography McIlwaine (1998) even mentions that the elusive concept of civil society has become a major “buzz word” within development literature and practice.

The term civil society re-emerged within political thought in the beginning of the 80s, when it could be brought into relation with the collapse of communism in the former USSR and Eastern Europe, and more recently it could be brought in relation with the democratization processes in the South. (Fine and Rai cited by McIlwaine: 1998) And as such it has effectively been utilized across the north-south divide.

Especially in development circles the notion of “strengthening civil society” is centre stage in what Robinson (1995) refers to as the “New Policy Agenda”, which is followed by many multilateral and bilateral organizations and which involves a focus on the role of NGOs and grassroots organizations in addressing poverty alleviation and social welfare objectives (Moore: 1993, Edwards and Hulme, 1996 cited by McIlwaine). From this it becomes obvious that the new policy agenda, the new realism, and popular participation share much common ground.

Concerning the role of the NGO’s and grassroots organizations, it must be mentioned that these type of organizations have been very popular in development circles throughout the 70s and 80s when they were seen as more participatory, people led and responsive to local needs than the more formal assistance agencies. However in the course of the 80s and 90s they were replaced by the broader ‘civil society’ mainly because of a growing development and a growing influence of other institutions than NGOs and grassroots organizations. (Mitlin: 2001)

2.6.2 Defining Civil Society and its context

The meaning of the term civil society is difficult. Different authors have different opinions. However in this research the following definition is used; civil society includes any form of organization, except governmental, that plays a role in society. Hereunder the concept is explained more deeply.

At the risk of oversimplification a broadly workable definition of civil society in the development context given by Hadenius and Ugglå cited McIlwaine (1998) is that it stands for a certain area of society by interactions of certain kind. The area in question is the public space between the state and the individual citizen or household. This 'area' or 'space' is further defined as an arena of associational culture. (Pearce, 1997, cited by McIlwaine: 1998). In his book on Africa, Van der Veen (2004), explains civil society much simpler; namely as the existing body of civil associations which exist next to the state. And this definition is taken on by more people. In a research focused on civil society and African societies, Konings (2003), for example explains the history and the role of the Ghanaian Trade-Union Movement, and concludes that through time these unions have led to the creation and intensification of relations with other civil society organizations.

Although civil society is usually defined as made up of various groups, there has also been a tendency to view NGO's as primary vehicles or agents of civil society. (Clark cited by McIlwaine, 1998).

A definition for an NGO as given by the UN states that the term NGO is applied to "a wide range of organizations which are not established by or operated by government. NGOs are usually private, non-profit organizations run by their members". Typically, an NGO is concerned with one particular area of activity: women's rights, education, environmental protection, employment, etc. Most NGOs are local in scope, but some are regional or national, or even international. NGOs often acquire considerable expertise and experience in their particular areas of activity, and some employ professionals or specialists to manage their work. (<http://www.unhabitat.org/cdrom/governance/start.htm>)

Next to NGO's Community Based Organizations (CBO's) or grassroots organizations play an important role in the research and as part of the context of the civil society, it is therefore important to look at this term also. CBOs don't differ much from NGO's, they are often mentioned in the development and are defined as organizations based in and working in one (or sometimes more) local communities (neighbourhoods or districts); they are normally private, non-profit organizations which are run by and for the local community. Typically, they were created in response to some particular local need or situation - often related to the local environment and they usually support a variety of specific local improvement actions (for instance, environmental upgrading, youth education, employment promotion, etc.) which are generally undertaken by or with the local people. The above definitions and discussions are very broad and show that the problem with defining civil society and its context lie in high levels of generalization and the failure to recognize the heterogeneity of groups present within it. (Foley and Edwards cited by McIlwaine, 1998). And because there is such a difficulty and vagueness in defining the concept, sceptics found it reasonable enough to dismiss the concept as a mere abstraction without substance. (Fine cited by McIlwaine, 1998).

The truth about the definition and discussion of civil society, lies probably somewhere in between. Because the concept is so broad and so often used many try to find a fitting meaning. Evidence on civil society groups is omnipresent but also very diverse. The concept can therefore best be seen as a collection name for all activities going on in a society. Like governance, the workability is determined by the context of the situation.

2.6.3 Controversy

As Mitlin (2001) states; "civil society is increasingly recognized as being critical to the successful realization of development. Grassroots organizations are regarded as a new panacea for people centred, pro-poor development. But should this be the case?"

Controversy about the concept of civil society exists in several manners. First of all a broad distinction can be made between the way Neo-liberals see the concept, and the way that neo- or post Marxists see the concept. Neo liberal approach sees civil society as a largely autonomous sphere of freedom and liberty, often associated with the writings of Tocqueville and stressing the beneficial effects of vibrant civic associations. The Neo Marxist view civil society as a site of oppression and power inequalities drawing predominantly on the writings of Marx, Hegel, and Gramsci. (See Nzimande, Sikhosana, Foley, Edwards, and Macdonald for discussions).

It is only within the definition of the neo liberals that civil society and the state are seen as separate, and that civil society actors, in particular NGOs, are increasingly co-opted as service deliverers for a much reduced state, (Gordenker and Weiss, cited by McIlwaine) and are also seen as being responsible for acting as a counterweight to authoritarian or tyrannical regimes, and for ensuring some form of popular participation. (Fowler, Foley, Edwards cited by McIlwaine) These previous mentioned aspects are yet again on the so called “New Policy Agenda” for economic and political liberalization.

2.7 Social Capital

2.7.1 *The link between civil society and social capital*

A discussion of civil society accompanies the consideration of social capital. As Mitlin (2001) states, social capital and civil society have been two closely related terms in literature. She states that the term social capital is mostly used as defined by Putman that is; “*the features of social organization that improve the efficiency of society by facilitating coordinated actions such as **trust, norms and networks***”. It is termed “capital” to reflect the importance of trust and knowledge within such social relationships, and the length of time that is needed for such trust and knowledge to develop. (Mitlin 2001)

In this research where the activities (centred around solid waste) that find place in the two communities are the core aspects, it is though important to look at the prevalence and formation of social capital and therefore also its meaning. Like with civil society, different authors have different opinions about the concept. While this research cannot include a detailed discussion of all aspects belonging to the concept in both theory and reality, it is important to look at its main components and context, again in theory and in reality.

An explanation for the term social capital lies in the context of livelihood analyses, where social capital is one of the five vital sources that make up a people’s livelihood. Other assets to asses this livelihood are natural capital (resources such as land, water, etc available), human capital (labour available), financial capital (stocks of money to which is access), and physical capital (capital created by economic production processes such as buildings, machines). In this context, social capital is the capital that “captures community and wider social claims on which individuals and households can draw by virtue of their belonging to social groups of varying degrees of inclusiveness in society at large”. (Ellis: 2000) This shows again the close relation that is said to exist between social capital and civil society. Yet analysis of concept stays difficult, seeing that even the author states that social capital is the most difficult concept of the five components to define, and as authors on the subject often have different opinions about the exact meaning.

Drawing on the work of Coleman (1990) and Putnam (1993; 1995), there is thought to be a “synergistic relationship” between the emergence of a strong civil society and a strong social capital formation in particular. Foley and Edwards (1997) describe this synergy as “the social energy civil society alternatively generates or feeds on”. (McIlwaine: 1998) As McIlwaine (1998) continues to state, Tocquevillian in inspiration, the term social capital, refers to the various networks of norms and trusts which govern societal interactions and has received increasingly attention within the development literature, the term being used in both the 1997 World Bank development report (p115) and the 1997 UNPD Human development report (pp 62-63). Analyses of social capital emphasis how these networks serve as an asset for the poor (Moser, 1998, Moser and Holland,

1997, on Jamaica Moser and McIlwaine 1997, on the Philippines) and their role in building up civil society organizations (see Bebbington, 1997; Lloyd Evans and Bowby, 1997; Newton, 1997). (McIlwaine, 1998)

Mitlin (2001) adds that were Moser regard social capital as an important asset to the poor and finds that community organizations are positively associated with social capital; this is perhaps too bold an assumption. Since especially questions can and have been raised about the motivations of the leaders within the community and the extent of membership participation.

This illustrates, that like the definition of civil society, the link between civil society and another such a broad concept the working realities are defined by the context of the situation. At the end of this paragraph this is further illustrated.

2.7.2 Social capital and collective action

As mentioned above, the discussion on the prevalence of social capital in a certain type of environment can even be taken further when the concept of collective action is taken in the discussion. According to Kabki (2002) there are strong indicators that social capital can be an essential precondition for collective action.

Putnam (1993) cited by Kabki (2002) states that “working together is easier in a community blessed with a substantial stock of social capital. The social capital embodied in norms and networks of civic engagement seems to be a precondition for economic development as well as for effective government.” Whether this can be regarded as being true stays subject of discussion.

An aspect brought up by Kabki (2002) that is thought to stimulate collective action, is the prevalence of information and the act of turning information into knowledge in a society. Logically in societies where social capital is prevalent, information is most likely to spread among the people through the use of the networks (via the link networks – information – knowledge). Therefore many researchers find social capital a crucial resource for obtaining information and knowledge which again can lead to action.

However, Kabki (2002) also notes that the connection between social capital and collective action is subject of a discussion about the type of action and the type of social capital existing and wanted. What type of action is selected and why? Does the group organizing the collective action / project need to be homogeneous or heterogeneous? And does there need to be a type of incentive for those that are active?

Finally external factors and culturally imposed factors mostly created over an enormous length of time in a society also influence the type and nature of social capital available and hence also influence the prevalence and nature of collective action.

Thus as can be concluded, even though working together is easier when social capital exists, it still is no guarantee for successful projects to be carried out, as both internal factors and external factors influence the nature of the capital.

2.7.3 Presence of civil society and social capital in Ghana

That civil society is important in Ghana, is illustrated by the fact that in the capital, Accra, a conference on civil society was organized in 1996. It was then tried to identify the nature, the vicissitudes, functions and problems associated with civil society in order to contribute to political and social pluralism as well as the quest for democratic governance.

In the book that was published after the conference civil society is seen as an “*Arena where manifold social movements and civic organizations from all classes attempt to constitute themselves in an ensemble of arrangements so that they can express themselves and advance their interests*” (Stephan cited by Drah, 1996). In general voluntary organizations, community groups, trade unions, church group co-operatives, business, professional and philanthropic (humanitarian) organizations, and a range of NGOs make up the concept.

It is a combination of political, social, cultural, economical and historical forces that will lead to the creation of a particular civil society. Developing a civil society will therefore also consist of a combination of these factors.

In particular, research pointed out that (a) in many cases the development of the civil society (and thus of the organizations in society) depends on the availability of social capital in a society, and (b) that there are strong indicators that social capital can be an essential precondition for collective action (Kabki 2002). From which can be concluded that the chance for both a pluralistic civil society and collective action is greater when social capital is available.

Evidence found on the existence of networks, one of the aspects of social capital, in Ghana points to the existence of social capital and the existence of a civil society. The findings of Chazan (1988) in the article on problems of governance and the emergence of civil society in Ghana from the 50s to the 80s, illustrate this (see box). Findings of Post (2001), Boafo Arthur (1997), and Konings (2003) on the existence and tradition of networks and group forming in Ghanaian society support this. (In the appendix 11 a document on the prevalence of civil society organizations in Ghana is included)

Evidence networks in Ghana

Evidence of Networks in Ghana

“Where the Ghanaian answer to domination has been a quest for liberty; the reaction to poverty a reassertion of initiative, and the response to injustice a search for equality, this “democratic reawakening” can be explained by two factors. Firstly, a deeply rooted democratic tradition enconced in local political cultures, where local associational groups reflect democratic authority patterns that conform to these norms. Secondly is the existence of alternative institutions and patterns of interaction separate from those that have developed in the formal arena. Ghana has a vast array of voluntary associations and communal networks that are not only autonomous but actually flourish when access to the center is denied. These groups unable to attain attenuate formal power have recognized their activities and established a series of norms to guide their lateral interactions. Led by disaffected professionals, traditional authorities, independent farmers, students, or members of the country’s capitalist group, they have underwritten the parallel economy and laid the foundation for economic survival. At the same time, they have accumulated independent power. Around those institutions, democracy in Ghana is gaining new relevance, even though it is unaccompanied by the apparatus of legal-rational institutions.”

Source:

chazzan 1988

2.7.4 In summary

Although most international institutions and organizations are positive about the effect that civil society organizations have, there are also some negative points attached to the concept. Furthermore from the above paragraphs it has also become clear that the definition of the concept and the concept per se, are both subject to the particular context in which civil society is placed.

In her article on *the uses and abuses of civil society in Africa*, Hearn (2001) singles out three countries, being Ghana, South Africa and Uganda during the late 1990s for whom she shows that no matter what is stated by the international discourses on civil society, it stays a potential battleground.

Mitlin (2001) concludes in her paper that where there are conflicts between members and leaders and lack of interest in participation, there may be little opportunity for strong and accountable relationships between leaders and members. She is of opinion that the institutions of civil society reflect the society and social processes in which they are embedded; grassroots organizations are rarely able to play a transforming role. Rather they play the same role that they have always played. This reflection can be linked directly with the discussion on the level of social capital available that Kabki started in her paper.

According to Mitlin the challenges for the researcher appear to be clear. Despite the enthusiasm of development agencies and other professionals for civil society, many grassroots organizations are more concerned with poverty alleviation than with poverty reduction; with maintaining existing relationships rather than with securing ones that are more equitable. In this context, what needs to

be prioritized is a better understanding of how grassroots organizations can be supported to address the needs of their *poorest* members.

Mitlin's remarks reflect the dimensions of the concept of civil society, and to some extent also of urban management. Ghana luckily disposes over a rather peaceful society with a vivid and developed civil society. However, it becomes clear that the wished for effect of civil society organizations is not evident to obtain. In low income communities the organizations present will reflect the needs and wants of the members. The question is firstly if this includes management of waste. Furthermore, Mitlin's quest for addressing the needs of the poorest members through grassroots organizations is touching, yet not always conform the reality. As she has stated, grassroots organizations are formed following the principles of the members and the society in which they are embedded. A second question is therefore, if degradations in poverty also lead to exclusion.

2.8 Partnerships and (Community) Participation

2.8.1 The necessity of participation

The theory that is tested in this research is whether actors enable other actors and enable action to be undertaken. The concept of enabling leaves enough room for participation to be filled in. i.e. it is thought that through forming partnerships actors can enable each other and action is a logical consequence.

In the previous paragraphs the concepts of urban management, civil society and social capital have been analyzed. Urban management is said to provide a climate for development where the government sets and guides outlines to be filled in by the people, i.e. the inhabitants, and the civil society. In turn, these groups are made up of diverse people, organizations, etc, with certain characteristics. In theory the combination of a proper urban management combined with an active role for the inhabitants and a vivid civil society should lead to participation and joint action for development of in this case the solid waste situation. However, research also shows that despite the stance of many developmental organizations, the reality of the participation is subject to a great number of aspects that influence its outcome.

In this research the attention is mostly devoted to the participation that exists between the inhabitants of the two communities, the diverse civil society groups and the government. When taking up the debate it becomes clear that there are many drawbacks about the theory. Urban management is yet another manner of incorporating wants and needs of many parties; questions can and has been raised about the nature of the civil society and the relation between the organizations and institutions that need to participate, etc.

As becomes evident from the above, fruitful participation between actors is of core importance. It is the linking factor between the internal and external relations of the actors. In this chapter participation and its limits will therefore be explained.

2.8.2 Defining participation

Community participation, which often turns out in community action (and therefore carries many similarities), has existed for decades. Through time the concept developed itself and the context changed. As with urban management, civil society and social capital the definitions that exist at this moment are diverse. Yet of all concepts participation is probably the clearest concept of the research for the reader to grasp. It refers most likely to joint actions and collaboration of a set group of people or organizations which can be called actors. A standard definition for the concept is given by the UN Habitat: 5

"Participation means to become actively involved in an action. This requires supporting and challenging the principle actors or all stakeholders to be actively engaged in a specific mission. Organizational commitment,

increased motivation and performance by stakeholders are expected outcomes of effective participation. Forms of participation may vary between direct/in-direct, formal/in-formal and the short and long-term.”

A concept that is in close relation is that of the “partnership”. According to the definition given by the UN habitat partnerships incorporates;

“Areas will involve strengthening of organizations or networks; addressing conflict related issues; integrating diverse stand-points; identification of entry points and areas of collaboration especially regarding cross-cutting issues; **creating win-win situations**; developing shared strategies and responsibilities; creating feedback links between and Among the local, national and international fora.

In the research preceding this thesis, Post *et al* (2003) have chosen to use the definition of a partnership as given by Hordijk (2001). The definition is more specialized than the definition above;

- A partnership involves two or more actors
- Each partner is a principal, i.e. each is capable of bargaining on its own behalf, rather than having to consult with other forms of authority
- A partnership is an enduring relationship between these actors (based on a written or verbal agreement, informal or formal in nature, with some continuing interaction)
- Each of the participants brings something to the partnership. Each of the partners has to transfer some resources, material or immaterial to the partnership. The partnership is mutual beneficial (without assuming equality between the actors)
- A partnership finds its expression in concrete activities
- A partnership implies a shared responsibility for the outcomes of the activities
- Partnerships are meant to serve a public interest (baud *et al*, 2001; peters, 1998) to distinguish them from commercial partnerships, they are now sometimes called public interest partnerships (pip)s

Both definitions concern the same concept, yet the first is a simple definition, and the second one includes several conditions. As the following paragraphs will show, conditions apply to the dimensions of the concept. Like the other concepts discussed, participation also is embedded in a particular context and hence will only take on meaning when the context is understood.

2.8.3 The dimensions of participation between actors

Participation can exist between diverse parties. The previous discussion concerning civil society showed that there are many types of organizations that the people can form (i.e. unions, youth clubs, student organizations, NGO’s, CBO’s etc.). In all these organizations it is natural that participation between members exist; i.e. that the members work towards a commonly agreed upon goal. When this exists we can speak of participation between members.

The situation becomes more difficult when it concerns community participation, as within a community there may be different actors with different needs and wants. An often named precondition is that community participation should include working towards the improvement of the community in general which can of course be indicated in specific terms / projects (in this case solid waste). In this situation it are diverse civil society groups and other involved actors that should work towards a commonly agreed upon goal.

In the literature there is a debate about the effect of a pluralistic civil society on development. Many development organizations think that the more civil society groups are active, the better the society is developed, and the more is worked towards a common goal. This is for example proven by the fact that the World Bank (WB) and the United Nations (UN) stimulate bottom up participation and think of it as the way for developing countries to develop themselves.

However other authors go against this and point out that in reality the situation is more complex. The definition of the partnership as given by Hordijk, for example specifies the conditions that have to be fulfilled when a partnership can come and working towards a common goal can be started. One can understand that it is difficult to determine exactly what should be the common goal, who should guide all activities to work towards this goal, who has decided on this idea, who will seek to it, etc. Management, as also stated by organizations like the WB and the UN can provide the answer. But above named conditions are important aspects that need not be forgotten.

2.8.4 Identified Limits of participation in Kumasi, Ghana

A number of limits towards participation in this specific research have already been identified. Post (2001) has mentioned five different reasons that indicate weaknesses in popular participation in Ghana. These weaknesses are to a large extent embedded in the current system of democracy that Ghana uses. And whereas an explanation of this current system will follow in the appropriate chapter, it is still chosen to present the weaknesses here because it will allow for a more complete understanding of the situation of participation.

As participation should most likely include a combination of public and private actors, its local democracy should be developed. However Post is of opinion that this local democracy suffers from a number of weaknesses. He mentioned five reasons that indicate this weakness.

First of all the CBO's and their activities are thought to deteriorate. According to Post (2001) Brydon and Legge have found that especially in urban areas the CBO's are becoming less effective over time.

- Part of this can be explained by the changing socio-economic and ethnic heterogeneity of the population and the rise of individualistic attitudes.
- Secondly the population has developed a 'no-pay for taxes and services' attitude towards the government. Actions by the government to boost the CBO's and to introduce taxes led to a decrease in motivation of community organizations.
- The third reason local democracy is weak is because it is very difficult to restore popular confidence in community projects. People are thought to be no longer interested.
- The fourth factor that indicates weakness is the strong link that community institutions have with political patronage. Money can therefore influence action to a greater extent than wished for.

A second weakness is the actual development spending versus popular priorities. The selected development works are mostly not the popular development goals of the people. Where the people like the infrastructure of water, electricity and sanitation to be bettered, centrally it has been decided that areas such as education and even costs of decentralization are main priority.

A third weakness for popular participation is the fact that centrally appointed officials continue to exercise great influence on local decision making. Public servants are not used to the system of democracy and rather place themselves above the decision making system. And therefore the accountability of public servants to the district assembly is rather poor.

Fourthly the chief executive of the district often is too powerful. The chief executive is appointed centrally and therefore also backed up by the central government. His decisions are therefore also not always democratic, but rather reflect central party politics rather than local interests.

Fifthly the elected local representative of the community, the assemblyman, is in a difficult position. This man is expected by its community to bring change and development and is expected by the assembly to bring in taxes and to promote government decisions. He is therefore in a difficult, maybe even double position. This double position can frustrate him and may make him give up either his position as community activist, or as government representative.

The above arguments show that it is difficult to set up an effective participation between the Ghanaian government on the one side and the local people on the other side. Everyone brings his own luggage and has its own boundaries. They are set up by researchers that have executed many projects in a similar environment, i.e. that of Kumasi, Ghana. The list is not complete, but indicates the most apparent difficulties.

To conclude this paragraph it can be stated that like urban management, civil society, and social capital, participation is a complex concept. Its nature and its effect are determined by the interplay of the relations on all levels of society and in every type of context, be it social political cultural or economical.

The analysis of the situation will show what can be said about participation when it concerns waste management.

3 Methodology: upon doing fieldwork in communities in Kumasi, Ghana

3.1 Introduction

This is a descriptive research about the state of management of solid wastes in two communities. In this chapter, the methodology used during the period of the data collection is explained.

Firstly the reasons for the choice of the two communities are presented. Then it is explained who are the participants and why they were questioned, hereby a distinction is made between participants for the in-depth interviews, and participants for a questionnaire. Thereafter the materials and variables that are used to collect the information from the participants are described. Subsequently the procedures for the data collection in general are described. The attitude towards the researcher is described in the before last and in the last paragraph the limitations of the research are given.

3.2 Setting

The exact setting of the fieldwork is within and around the analyzed communities Aboabo 2 and Ayigya Ahenbronu. The reasons for choosing these communities are the following:

- 1) It was decided to look at the upgrading of the **solid waste service** in general because during initial visits this problem was most apparent and solutions in the communities most diversified. I.e. almost all the communities visited were in the eyes of the researcher dirty. Furthermore there seemed to exist diverse methods of waste collection and diverse opinions on these methods
- 2) It was decided to compare **two communities** because this would not only allow the researcher to compare and add and comment on the previous research findings, but would also make internal comparison possible and look if indeed community participation is different if leaders and organizations are different.
- 3) Due to the limited time / scope of the fieldwork not more than two communities could be compared. It was decided to compare two communities with the same level of income (low), and the same type of housing (indigenous instead of for example a community built and owned by the city for employers of the government).
- 4) There was an interest by the researcher in testing the assumption about existence and prevalence of Community Based Organizations (CBO's) in these communities per se. Previous research had concluded that not many of these activities existed in Aboabo 2, whereas in Ayigya many such activities existed. Yet in an initial visit to the community Aboabo 2 the researcher was told about new forms of organizations in the community, whereas an initial research to Ayigya Ahenbronu revealed that the situation concerning the organizations had changed negatively. Possible reasons for this sudden end and revival would probably shed more light on the situation of the forming and existence of organizations. (In none of the other communities visited such a change in activities could be identified.) The questionnaire and the in depth interviews would provide more light into the situation in both communities.
- 5) In contrast to the similarity in income level between the communities, the location and population / ethnicity are different. This difference can make the comparison of the two communities of interest. First of all, Aboabo 2 by virtue of being situated 2, 1 km from the central business district has no more room to grow, but growing internally, and Ayigya Ahenbronu still seems to have space to grow. Waste Management can thus be a smaller problem in the latter community.
- 6) There seemed to be prejudices among many inhabitants of Kumasi that the researcher spoke to about the level of cleanliness in the "zongo" communities. The researcher wanted to be able to reject these prejudices by comparing a zongo community with a non zongo community.
- 7) Last but not least is the fact that the assemblymen and some other inhabitants of both communities wanted to collaborate in the research and were prepared to devote time to the researcher.

The previous research and an initial visit to all eight communities were the sources of information. The method for the selection consisted of making a cross tabulation of all eight communities and

arguments. In the cross tabulation every community was assigned points and these points were added up. The used arguments are;

1. Income level
2. Location
3. Type of housing in community (state build or private)
4. Ethnicity (“zongo” – “original”)
5. Method of waste collection and management
6. Interest in prevalence and existence of CBO’s
7. Willingness to participate

The arguments and outcome were carefully analyzed and discussed by both the researcher and the supervisor at place. The most valuable argument was point six; prevalence of CBOs, followed by the argument number five; method of waste collection / management.

Following selection of the communities it was decided to select only a part of the community of Ayigya because the entire area of Ayigya is too large and has three assemblymen. It was decided to choose the most historic part of the community because all above mentioned arguments would be valid for this part of the community, whereas in other parts these would not be valid.

3.3 Participants

3.3.1 Introduction

The participants that have described the situation are diverse. Basically they can be split in two groups;

1. Key actors with whom in dept interviews were taken,
2. Inhabitants who were asked to participate in a questionnaire.

In the following paragraphs information about how many, how they were selected, what are their characteristics, and how were refusals non-returns handled, will be outlined.

Next to the participants, the research allowed the researcher to participate in some events through which the situation could be observed and discussed somewhat more casual. The main events are; membership of a CBO (including participation to almost all weekly meeting), and participation at a community - NGO durbar. Furthermore, information was also obtained trough encounters and discussions with passers-by and the like.

3.3.2 Key actors semi-structured- in-depth interviews

The aim of the research is to describe the situation of all the actors present in the field of solid waste management. In order to gather the most data possible about the situation of various stakeholders / actors involved, it was decided to carry out in-depth interviews.

In total a number of 37 in depth interviews have been held. It was decided to use a snowball method. Meaning that through interviewing a certain person for whom a key interest existed, more information about the situation became known and possibly more names of persons / organizations / companies would be mentioned. (Flowerdew *et all*: 1997) Basically the group of key actors includes:

- **Involved government employees:**
 - o Direction of Waste Management Department (for specific information concerning the waste)
 - o Direction and Public Relations of the Kumasi Metropolitan Assembly (for information concerning vision and opinion)
 - o Assemblymen and unit committees of the communities (for information concerning local leadership, actions, opinion)
- **Involved civil society groups / leaders**
 - o Religious leaders
 - Chiefs / queenmother

- Imam / reverend
 - NGO leaders
 - CBO leaders
- **Involved businesses**
 - Local stores
 - Other businesses

During the entire period of the research the researcher never contacted somebody that did not want to participate. However, the researcher did not result in contacting the chief of Ayigya Ahenbronu, which is one of the key actors that she had wanted to include in the research. She tried to contact him many times via various links and on diverse telephone numbers, but all efforts have been in vain.

3.3.3 *Questionnaire respondents*

The respondents

A questionnaire has been designed and executed in the communities in order to get to know the inhabitants, their (household) situation, and their attitude and opinion towards the waste. It was thought important to come to understand this in order to conclude on the level of participation and contribution of the people to the development of their community, more specifically the development of waste management.

A shortcoming of the questionnaire is that is not a household questionnaire but an (ordinary) inhabitant questionnaire; i.e. respondents were demanded for their personal opinion instead of the opinion of the household. A better choice would have been to do less questionnaires, target the head of the household and hold longer interviews, or select several compounds and do a case study (hereby the dimensions of the particular living situation can come to light).

Furthermore the conclusions of the questionnaire are not representative but are only indications about the lives of the people in the communities.

The sample population, size, and manner of sampling

The populations in this research are the inhabitants of the communities Ayigya Ahenbronu and Aboabo 2. It was known that in order to draw conclusions from a variable at least 30 results should be obtained.

The units of this research are the inhabitants. A table in the previous research gave exact numbers of inhabitants in the communities; these were compared with the numbers of the census of 2000 and taken as truth.

In the census the estimated size of a household and the structure of the population are also given. The household size varies per community, and the structure of the population indicated that 50% of the population is below 18. From the TCPD maps about the two areas were obtained (see page chapter five) and the number of buildings were counted. The following are the data with which is worked;

Aboabo 2

- The inhabitants of Aboabo 2 are: 20,486;
- The average household size is 5,2;
- Total number of houses (estimation) is 316 (calculated from city plan);
- **In total 75 questionnaires have been executed;**
- Every fourth house is selected;
- Around 0, 7% of the inhabitants of 18 and above is interviewed ($20,486 / 2 = 10,243 =$ estimation population above 18, $= 100\%$ compared with the actual number of interviewed people; $75; = 0.73\%$)

Ayigya Ahenbronu

- The inhabitants of Ayigya Ahenbronu are around the 7500 (total for Ayigya is 30.283);
- The average household size is 5,1;
- Total number of houses (estimation) is 167;
- **In total 45 questionnaires have been executed;**
- Every fourth house is selected;

- Around 1, 2 of the inhabitants of 18 and above is interviewed (total 7,500 / 2 = 3750 = estimation population above the 18, = 100% compared with actual number of interviewed people; 45; = 1, 2%)

Handling of non response

Handling of non response is not applicable in this research all people that were asked to participate participated.

Sometimes questions weren't applicable, for example not everyone has kids so the number of kids does not apply to the respondent asked, and this led to missing data in the data file. These responses were first counted as zero and later as "missing values".

3.4 Materials and Variables

3.4.1 Description semi-structured in-depth interviews

The semi structured in-depth interview was prepared in English on paper before the interview was held and was distributed to the respondent before the interview started; throughout the period of fieldwork this structure was followed. When the respondent wanted to elaborate on a subject or when the researcher requested other information, there was room to do this. The questions presented were mainly open questions. Only sometimes the respondents were asked to answer either "yes" or "no", and even in these cases the respondents could elaborate on the subject.

After the interview was held the results were written down in a word document. The data report that resulted from this was printed and read for several times, important passages were underlined. During the writing of the thesis this data report was used. In the final paper respondents are quoted at times, other times they are being referred to. An extra tool for text analysis, as for example a software package, has not been used.

3.4.2 Description household questionnaire

Contents and variables

The questionnaire can be divided in three parts; firstly; identification, including all basic information about the type of house, the respondent himself, and the household, secondly information about community life, thirdly information about the opinion and attitude of the respondent towards the waste in the community.

The questionnaire consists of 25 questions of which only the last two are open questions. All other questions and sub-questions are divided in categories and are almost all non-numeric.

The types of questions and hence the collected variables are diverse;

- Part one of the questionnaire concerns the statement of facts, or rather the collection of attribute variables (variables that contain information about the characteristics of the respondent); Age, male/female, religion, type of house, number of persons in the household, number of elderly, kids, occupation, income, water, electricity, toilet.
- In part two of the questionnaire it concerns the collection of behavioural variables; do you participate in clean up campaigns? How often? Are you a member of an organization? Which one? Other collected variables concern the belief of the respondent; do you think the clean ups benefit you? Are they held regularly? Do you enjoy being a member of a specific type of organization? Are you a member because of ...?
- In part three of the questionnaire the respondent is asked to first state how he disposes over his solid waste (attribute variable). Secondly his opinion on waste and the community is asked. The respondent must indicate what he feels / thinks of diverse statements. Each time he can choose between five categories; *strongly agree* - *agree* - *no opinion* - *disagree* - *strongly disagree*. It therefore concerns the collection of both attitude and belief variables.

Information and sources that were used to compose the categories were; the supervisor Doctor Daniel Inkoom, the translator Douglas, the Dutch PhD student Mirjam in Kumasi, the host Eric of the researchers apartment, and various documents concerning Kumasi.

Because of the fact that almost all data is non-numeric the statistical tests that can be executed are limited. The data has been analyzed by using descriptive data or cross-tabulations only, or by measuring association; i.e. the strength of the relationship between two categorical variables. Last not least, a pilot of the household questionnaire has been held. During the pilot the difficulties that appeared were noted and hereafter the questionnaire was adapted. Because of the tendency of losing attention of the respondent the biggest change after the pilot involved skipping and shortening some questions.

3.5 Procedures

In this paragraph the protocols and procedures of the research are explained. Because a multiple method of data collection was used, the procedures can be divided accordingly. However there are two instruments that are similar for both types of data collection; my translator and me. Both are therefore discussed first.

3.5.1 The researcher and the translator

The researcher executed both the in-depth interviews and the household questionnaires. This has influenced the research project. Important to know is that the researcher is a white female university student from the Netherlands. This has had both advantages and disadvantages in the data collection process.

Consequently the background of the researcher influenced the responses to the questions asked. In the case of the in depth interviews this impact could be limited to a certain extend; i.e. by means of follow up interviews “other truths” could be revealed and these often showed that the situation was actually more complicated. However in the case of the questionnaire, it (more than) likely influenced people to show a more positive side of them selves. One manner to overcome this proved not to work; i.e. in the test questionnaire and in some of the first questionnaires almost identical questions were inserted apart from one another however the translator and / or the respondent wouldn't understand this. Either the translator would use the same words in translating, or the respondent would see through it and would wonder why the question was asked again. Therefore the results from the questionnaire cannot always be taken as truth, and may also not give the right impression.

During the entire period of fieldwork a translator was used when necessary. This translator was introduced to the researcher by her landlord. It concerned a third year university student. The researcher needed him to translate English to Twi and the other way around. The researcher wanted him to be reliable because she wanted to be able to count on him, and she wanted him to be intelligent because he'd be important during the data collection and therefore also needed to understand what he was doing.

The translator was mainly used to assist during the administering of the household questionnaire. In order to train him he was first given the English version to study and translate, and secondly this was discussed. He assisted during the pilot and thought of manners to improve the questions. Furthermore, he assisted during in-depth interviews when necessary. In order to be prepared he always received a printed version of the interview a day before the interview took place.

3.5.2 The in depth interviews

The procedures used in selecting and contacting the key actors are simple. The snowball method, discussed earlier, allowed the researcher to gather information of the respondents that she wanted to interview. Further procedures to contact respondents were common sense. It was always explained that the interview would be used for a research project for a master diploma. Furthermore the researcher asked them if she could interview them and where and at what time they would like to

meet. Finally all respondents were given the possibility to receive a summary of results of the research, and the key actors that were used more often were given a symbolic “thank you” present.

3.5.3 *The household questionnaires*

Logically the procedure to collect respondents for the questionnaire is different. Respondents were selected on a systematic manner. The following arguments show the exact method of selection of a respondent;

- Every fourth house in both communities was selected and entered.
- Because the entrance of a house almost always led to a compound (open place in the middle of the house) we almost always had to deal with walking into a large number of persons that were either working or chatting. Therefore it was decided to target the first person above the 18 that we met and spoke to.
- Because the females are mostly working on the compound such a method would lead to the largest part of the respondents being female.
- To have some influence on the diversity of respondents it was decided to administer the questionnaires during the entire day, i.e. between 6:00 A.M. and 7:00 pm.

Every possible respondent targeted was first of all explained what the research was about and told that it would take about 30 minutes, and was then asked if he still wanted to participate. To this all but a few respondents said yes. One of the exceptions concerns a woman who first wanted to finish her cooking and eating; here we promised to come back. Further when someone indicated not to have time, before the explanation, we targeted someone else.

Finally, in order to make the data from the questionnaire representative, at least five percent of the population needed to be questioned, however because the populations of both communities were large, it was chosen not to do this. Therefore the results found give an impression of the situation instead of a statement of facts.

On top of this, measuring attitude is difficult. Foremost because respondents are inclined to tell you what they think you want to hear, or what may be nice for you to hear

3.6 Attitude towards the researcher

The people’s attitude towards the researcher is different from person to person. Some families or respondents may greet you very warmly and will have plenty of time to answer the questions that you pose to them, whereas others may not be interested at all or give short answers to the question not elaborating on the subject at all.

Participants of in-depth interviews often reacted different than participants of the household questionnaire. The following manners of behaviour of participants of the household questionnaire were observed often.

- The inhabitants of the communities all seem to share the impression that life in Europe will be much greater. Many respondents (and their neighbours) have asked the researcher to take him/her to her country.
- One other aspect often experienced during the household questionnaire is the general impoliteness of a great number of people. When people were asked to participate with the survey, they would be bored throughout the questionnaire and in the end they would also ask the researcher what she would give them (often they would also ask for money themselves) although beforehand the situation was explained.
- Furthermore it does stay difficult to communicate with the people in the communities. The use of the translator that spoke Twi as well as English changed part of the situation. However, whereas the general assumption in Kumasi is that everyone understands Twi; several people weren’t able to speak or to understand this language. Luckily this problem could always be solved by using willing neighbours as translator. But it must also be mentioned that it could be observed that some of the people actually claiming not to understand the questions, did nod and make other signs of understanding when the question would be read to them.

3.7 Limitations of the research

Executing fieldwork in a developing country has many advantages. The researcher can go to the field, can explore the situation, can put hands on own experiences, etc. However, there are also some disadvantages. Foremost is the fact that once the research has been executed and the period of fieldwork has come to an end, one cannot easily go back to retrieve missing information. Next and related to this are other disadvantages that limit the outcome of the research. Hereunder the researcher (I) presented some personal experienced shortcomings, limitations, and difficulties;

General limitations:

- The fact that the topic of waste was only selected in the field and not beforehand
- Not a clear establishment of research variables
- The broadness of the concepts this research is built upon. As result there are many generalizations. In-depth research of a particular phenomenon on especially the level of the inhabitants has become impossible.

Limitations concerning the in-depth interviews

- Sometimes asking questions where the answer is already included
- Not being able to contact all respondents

Limitations concerning the questionnaire

- The selection method for respondents in the questionnaire; when a true household questionnaire would have been used more in-depth information per household could have been retrieved. However in contrast to this; this would not allow a comparison between communities, neither would it allow for much data to be collected. However if the research would be hold again the researcher would consider having several households as case study instead of a general questionnaire.

4 Background to the research: Kumasi & waste

4.1 Introduction

In this chapter, the background to waste in the city of Kumasi is explained. Hereby two different types of sources are used; first of all the accumulation of information about the city and its development made accessible by other researchers, secondly, information obtained in the fieldwork concerning facts about the waste.

When speaking of the background it is necessary to draw the line at some historical point in time. Because this thesis deals with waste in two communities in a large urban area, it is decided to take the colonization of the Ashanti region as the starting point.

4.2 Placing Waste and Kumasi in its context

4.2.1 *The British plan and development for Kumasi*

Ghana is a former colony of the British and this has left its traces on the contemporary shape of the city. After the British annexed Kumasi in the 1902 war, the city was subject to major changes. Not only did the original population, the Ashanti's, lose their independence and their king, the British rebuilt the entire city in their colonial style. Hereby, proper sanitation combined with fear for (unknown) diseases have been of main importance.

At the end of the 19th century British city planners, like any other western city planners, had developed a particular manner in dealing with their colonized cities. Most colonial cities suffered from severe epidemics and diseases, which led to immense decreases of the population. And although nor the cause or knowledge about the diseases and death was always known, especially in the period from 1880 to 1930 doctors were treated as all round specialists on hygiene and hygienic construction of living spaces.

By going on rounds through city quarters, so-called sanitary experts had to ensure that people obeyed the many laws created by the doctors. In reality these doctors did not poses much knowledge about sanitation. It was for example not until late in the 1890 that the reason for the spread of malaria was commonly accepted. Beforehand the spread of malaria was attributed to the young and mal-nurtured local children. Other wise put; many of the doctors and sanitary experts at that time attributed the high death rates from disease in the colonial cities to in-sanitary living practices rather than to the inequalities and contradictions of the colonial situation, poverty and economic privation. (Hamer, 1997)

In Kumasi a 75-foot gridiron configuration, which (in different measurements) has been used for centuries in city planning, was used to improve the hitherto unsanitary conditions. (Post *et all*, 2001). This gridiron, also called by some as the "ultimate symbol of the imposition of human order on the wilderness", is a physical form of a planned town of wide streets embodying classical ideas of symmetry (Hamer, 1997). Next to this entire new layout, every planned plot in the city was assigned a bucket latrine. Both tactics resemble the remedies the British proposed to most of their colonized cities, i.e. better ventilated houses, pure water and good drains, better waste and sewage disposal, open spaces, and the residential segregation of the races. (Hamer, 1997)

Next to sanitation, the British found infrastructure an important aspect contributing to development. So while constructing in Kumasi, they also increased her accessibility to the coast cities of Sekondi – Takoradi and later Accra by rail. Diverse markets were now within reach and trade and the resulted necessary economic benefits were growing. Within a few years Kumasi had taken on the role of an inland port, a sub-regional transshipment centre for exports as varied as cocoa, rubber, cola, cattle and sheep, as well as a wholesaling centre for imported goods. (Post *et all*, 2001) Next to the benefits in economic terms, this new system of commerce and distribution also changed Kumasi's population structure forever. Where they previously had never done or imagined it

Muslim traders, mostly coming from the Northern regions, now established themselves in the city in order to trade with local populations, but also to trade with people coming from other sites and directions (Korboe, 1995).

On the physical level new manners of building and new buildings kept appearing. The traditional compound structure of a house for an extended family was changed from a traditionally open structure consisting of several detached buildings (as was and is still existing in the rural areas), to a closed compact block with several wings which was found more suiting for city use (see picture). Furthermore the construction of firstly some public offices, two hospitals, and military barracks, and later on also a college, a new central market, a railway station, central transport terminal, and an ever increasing number of churches made Kumasi a true colonial city.

Over time the original residents of the city, the Ashanti's, were allowed to put their own system of ruling back into practice. Where the British first had exiled the Ashanti king in 1902, they led him return in 1924, and in 1936 they even restored the Ashanti confederacy. A possible explanation for this is the ever returning fear for dead and disease of the British. (Post *et all*, 2001) During the period that followed the Ashanti chief therefore had power over land and over its people, and only around 100m² of the city centre remained under governmental rule. The Ashanti region hereby became the only region where the traditional system of chieftaincy would have so much control over the land.

Meanwhile the city's prosperity continued and so did her population and layout. Migrants kept coming, and people from each large migrant group carved out an exclusive neighbourhood for their companies. Neighbourhoods could therefore best be defined by ethnic affiliations. (Post *et all*, 2001) One of these "migrant" neighbourhoods is the community called Aboabo, which is the community where fieldwork for this research has been executed.

Meanwhile the British continued planning the physical layout of mostly the inner city. In the 1945 plan developed by the couple Maxwell Fry and Jane Drew, both modernist planners and both assigned by the board of planners to far away locations in Africa and Asia, Kumasi was carefully turned into a garden city, with beautiful houses, places and spaces. As result she became the most attractive city in West Africa, where waste was not at all a concern for the population.

4.2.2 *After independence*

In the 1950s, British planning had turned Kumasi into a prosperous, notorious, and one of the most beautiful cities of its time, but these glorious days would soon be over. When Ghana, under the leading of Dr. Kwame Nkrumah and being the first country in Africa to do so, gained her independence in 1958, the British had to leave the country. This was positive for the population as a whole, but for Kumasi, it meant that she became subject to central government rule. At that time, the political ideas of inhabitants of Kumasi were quite contrasting with the ideas of the leading party, which had as result that leading figures in the city of Kumasi were exiled by the government. Meanwhile Kumasi, still a popular destination for many migrants and farmers from surrounding villages, started to experience more and more troubles with her (population) growth. In order to control growth and development in 1963 a master plan for the entire city was designed and implemented. But masterly in scope, in reality working conform the plan proofed very difficult. For example, the planned ring road around the city, a grand idea, is until this time no more than a plan. And although the plan became the protocol for land use and control, it wasn't conform the real situation; in Kumasi, the chiefs are the legal owners of the land, and whether or not a building is conform the plan of 1963, the owner of the building can not be removed from its land.

Problems from that time on seemed not to stop. Starting in the sixties there was an enormous shortage of services for water, sanitation, housing, transportation etc. and consequently these services started to deteriorate and continued to do so well in the 1980s and 1990s.

The ever-increasing growth of the population did not solve this problem either. Where at the turn of the 20th century there were around 3000 people living in the city (dispersed number due to the war with the British), at the turn of the 21st century the number had climbed to somewhere around the

one million (Post *et al.*, 2001), which means an increase of 333, 33% in size in only one century time.

What happened after this period is an accumulation of facts. According to Heijman and Langendijk cited by Post (2001), the development of services has not been able to keep pace with construction, which until now contributes to poor drainage and sanitation conditions and severe erosion in most of the cities suburbs. They further mention that incidents of flooding have increased in recent years and these, *inter alia*, can be attributed to poor refuse management and illegal land use.

To conclude, in the 21st century Kumasi stays a city in a developing country, experiencing problems on many levels. The level of and availability to services in the city seems to have been a problem already before urbanization really started. The British thought to solve this with building structures but used rather bold assumptions about the reality as guidelines. When Kumasi was truly linked to the global world by means of her increasing accessibility and resulting boost of networks and people, problems with basic service rose extremely. Kumasi is hereby not out performing any other city in a similar setting yet everyday its people suffer from the lack of services. Whether its same people will stand up and do something in order to better their personal situation is the subject of the research presented in the next chapters.

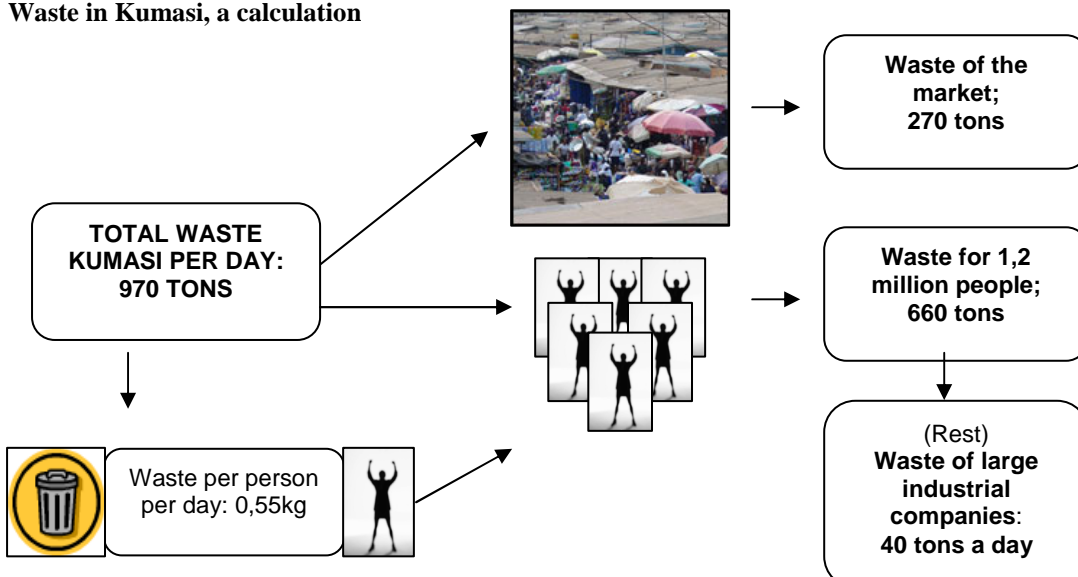
4.2 Facts about the waste in the city

4.2.1 The waste in Kumasi

Inadequate waste collection coverage of the population has been identified as far back as the mid 70s as one of the most important problem areas in solid and liquid waste management in the urban and peri-urban areas in Ghana. (Danso, 2004)

Knowing how much waste is produced and what exactly is the density and composure will shed more light on the problem of the waste. Yet, during the fieldwork, questions concerning this topic have led to many inconsistent results. Managers and directors at the WMD often contradicted themselves and others. Since there where no official documents the most likely figures are used. The following can be said about the amount of waste produced per day;

Waste in Kumasi, a calculation



According to the WMD director the total amount of solid waste produced on a daily basis is estimated to be around 970 tons a day. Furthermore the estimated Amount of solid waste per person per day (p.p.p.d.) is calculated. According to the WMD director this is 0, 5 kg p.p.p.d. In his article on waste in Ghana, the former WMD director Danso (2004) gives an estimate of 0, 6 kg. And Post (1998), estimates the amount of waste per person to be variable especially according to the time of the year. Because the difference between the given amounts is not very different, it has been chosen to use the average of 0, 55 kilo per person per day.

4.2.2 The waste and the sanitary inspectors

In order to complete the background picture on the waste in the city as a whole and in the communities in specific, it must be mentioned that until this day, the government uses sanitary inspectors that are officially trained and employed by the department of health.

The inspectors go around the communities and check on healthy and unhealthy sanitation situations, and undertake action when necessary. These sanitary inspectors (or experts as they used to be called) have existed for a long time; in the first paragraph of this chapter their role at the turn of the twentieth century was mentioned.

History of sanitary experts

The chief of Aboabo 2 (one of the communities of the research) mentioned his content with the existence of the sanitary experts. He explained that these sanitary inspectors have ensured the treatment of the waste through time, simply by letting it burn or compost. However, he also added that as times changes, waste changes, and the composition of the waste is not the same anymore. Therefore he was happy that new methods were introduced. He however added that the method at this period in time was insufficient to deal with all the wastes.

4.2.3 Composure and density of the waste

The composition of the waste shows what is thrown away on average by the inhabitants of Kumasi. The WMD has executed an official research to measure this composition. This together with found statistics on waste composition for six West and East European countries is put in a table on the next page.

4.2.4 Collection and disposal of the waste

Collection aim

Collection and disposal of the waste is where the current method and management seem to be inadequate; communal containers always seem to be overloaded with waste and in the communities visited, the house-to-house (h2h) collection system seemed overburdened as well. Additionally the landfill site, the place where all companies should finally dispose over the waste has problems to.

In a first interview the director of the WMD tells that about 80% of the total Amount of the waste is collected daily. However in following interviews it becomes obvious that this is the realistic aim and not the actual situation; 80% of the waste can only be collected if there are no problems with the collection of the waste or with the final disposal site (called landfill site) of the waste. The tendency that one of the two factors is not functioning up to standard is large.

Collection reality

The collection of the waste is entirely taken care of by private companies. This started as project of the WB and has been introduced steadily to all areas of the city. The normal procedure is that the private companies work for the KMA and have a contract with the KMA. However some private companies collecting waste do not have a contract, are not on the pay list of the KMA, and do not receive any payment for their work, which to a certain extend may affect their work. (See chapter 6) Furthermore, private companies can experience maintenance and technical problems so that they cannot collect the waste. However, the problem they run into most often is inability to dump the already collected waste at the landfill site because of technical problems at this site. This new disposal system for the waste, which is in use since the beginning of the year 2004, has a number of operating and financing problems. The main operating problem is the lack of equipment in order to control the spread of the waste on the site. Technically a bulldozer should do this, however the bulldozer in use is more often defect than in use. When the bulldozer is defect the landfill site can not receive any incoming waste. This means that waste stays at the communities.

Concerning the financial situation it is the central government that pays for the expenses of having the waste dumped on the landfill site. But because dumping at the site is too expensive for the government they aim to have users pay for the waste.

Calculation waste in compound house

When all inhabitants of a compound (50 or more) have to share the same container the Amount of waste produced per day is at least 25 kilo (0,5 * 50). When the density formula is used, it is shown that this is equivalent to 0,16 m3 waste per day, which means that in less than a day a container will be filled and 30% of the waste will not even fit in the container. So when the waste is collected two times a week, the Amount of waste exceeds the containers capacity by more than 300%.

Waste composure

	2004	1990	1990	1990	1990	1990	2001
	Ghana	Belgium	Greece	Finland	Ukraine	UK	Nether lands
Greens and vegetables	44	47	50	41	27	19	35
Plastics	3.52	4	11	5	3	10	13
Fabrics and textiles	3.2						2,9
Paper and cardboard	3.1	31	23	37	28	39	30
Bottles / glass	0.64	8	4	2	3	9	4,2
Metals	0.64	4	4	3	4	7	4,7
Rubber	0.3						
Small chemical waste							0,27
Miscellaneous (food waste, ash, sand, etc)	44.6						
Other (rubber, wood, mattresses, clay)		6	8	12	35	16	10

Information for middle mentioned countries comes from report on composure municipal waste, dobris, environmental assessment nr. 1 <http://reports.nl.eea.eu.int/92-827-5122-8/nl/page010.html>
 Information on the Netherlands composure comes from the document MONITORINGRAPPORTAGE, HUISHOUDELIJK AFVAL, Resultaten 2001, AOO 2003-16, http://www.aoo.nl/images1/aoo_nl/bestanden/AOO2003-16.PDF

Prudence is necessary when conclusions from the statistics are being drawn. For example; in Kumasi the waste is not recycled nor separated before collection.

The table shows that the composure of waste in other countries differs little when it concerns greens and vegetables, plastics to some extend, and in the Dutch case fabrics and textiles, but is very different as it comes down to the collection of paper, glass, and even rubber. Furthermore the "miscellaneous" wastes in Ghana include the aspects used in the everyday life there, whereas the miscellaneous or "other" as it is called, in the other countries includes rest waste of aspects of everyday life in these countries.

A formula is also given in order to calculate the density of the waste. The formula is simply dividing the weight by the volume = density, where the density is estimated by WMD to be 350 – 450 kg/m³. This means that if there are 970 tons of wastes produced per day, this produces on average 2425m³ of waste a dav.

Collection systems

There are currently three different types of systems in use by the Kumasi WMD to collect the waste. (1) Crude dumping, (2) Use of communal containers, (3) House to house collection. In the box on the next page the use and conditions of the systems are explained.

Evaluation of the systems

The government seems to have made its mind up. The h2h collection system is the system that should be introduced to all households. Mostly because they think that (1) via this system the city can be kept the cleanest and (2) the method earns itself back via the fee collection.

However there are some major draw backs concerning the workability of the system for especially the low income areas.

- First of all not all areas have proper paved roads so that trucks cannot access the houses.
- Secondly in some situations there are more than 15 households (over 50 people) in one compound house. The container will not be large enough for the Amount of waste so many people produce. (see box)
- Thirdly the Amount that needs to be paid for both the container and the collection fee is a relative huge Amount for people that sometimes have to live on less than a euro a day.

Collection systems

(1) Solid waste collection is by means of crude dumping

- System can barely be called a system at all.
- It is the practice that exists the longest of all systems
- It is a system in so far that the waste that is disposed over (and therefore somehow collected) at a large site some where close to the community is pushed and spread over a surface by a bulldozer.
- Proper functioning of the bulldozer is a pre condition for the system to function. However in reality bulldozers are often broken so that the situation is even less hygienic.
- Crude dumping is used in places where there are no access roads.
- The WMD and KMA do not like the practice but feel that in some instances they have no choice.

(2) The second form of waste collection is via the use of communal containers

- According to the solid waste manager the system was introduced in 1982.
- The purpose was to serve an entire community with a collection system for waste.
- At this moment the collection via these containers is still popular especially Among low income communities.
- The communal containers are placed at a strategic place within a community or a market, and emptied on a rather regular basis. The strategic place is often called sanitation site. At this site there are also public toilets, and when the site is large it has a labourer on top that controls and cleans the site.
- Communal containers vary in size, material, and capacity. The following communal containers are available:
 - o Smallskip: 12m³, 9m³, 7m³
 - o ERF: 23m³
 - o Tippertrucks: 14m³, 12m³, 9m³, 7m³
- It is important to note that collection of these containers must be done by using the appropriate trucks. Smallskip containers can for example only be lifted by the smallskip trucks, etc.
- Furthermore maintenance of the containers is critical for its estimated lifetime.
 - o The estimated life time of the containers according to the director varies between the three and five years, depending on the way that they are treated.
 - o The tippertrucks in general pose most problems in maintenance. (see appendix)
 - o The tendency that a container rusts is very large. And the tippertrucks are designed that way that when they are subject to rust, they also break!
- Households so far have not been paying a fee for the use of this type of waste collection.
 - o But whilst households are not paying doesn't mean that the system is not costing anything; the government therefore plans to introduce a taxation scheme for this, to be implemented after the elections in December 2004.
 - o The Amount the government plans to charge each household varies around the 10,000 to 15,000 cedis (equivalent to around €1,- to €1,50,-) a month.

(3) House to house (h2h) collection

- The system started out as part of the wider environmental sanitation project of the World Bank.
- H2h is the newest manner to collect waste in the metropolitan area
- Theoretically it is possible to introduce the system when
 - o There are access roads in the community to be served
 - o And when the households in the community are willing to pay for the service and for the container needed.
- In practice at this moment the system is merely introduced in the somewhat richer communities, but more and more average and low income communities are being targeted as well
- The company in charge of collecting the waste will do so two times a week.
- At this time the system of the house to house collection is being used in 4 zones of the city (see map)
- Containers are needed
 - o The containers used for this service are mainly produced in Germany.
 - o All households that want to use the service need to buy a container.
 - o Because the generally shared opinion of the KMA is to introduce this system to the whole city, the KMA sponsors the sale of the container. Cost for a container is 750.000 cedis (equivalent to around €75,-). Households can buy a container for 650.000 cedis (equivalent to around €65,-), the rest of the money is paid by the KMA.
 - o At this moment a container for one household can contain 240 liters, which is 0.12 m³.
 - o The price for the service of the house-to-house collection is around the 20.000 to 25.000 cedis (around €2, to €2,50,-) per month. For no other waste collection system fees are charged.

The use of the communal container system is not without any problems either. When waste is not collected, unhealthy situations appear. Next to the increased spread of diseases and the like, people use different and unhealthy methods to deal with left over wastes. They for example burn the waste left in the communal containers or at home and they dump waste at other most often illegal places like the gutter.

Lastly, it is obvious that crude dumping is bad for the environment in many ways. Waste is simply disposed on the ground, often quite close to where people live, so that diseases can spread and the ground will be damaged. The government shares this opinion and has announced that waste can not be treated like this anymore, unless there is no other possibility.

One of the largest problems of waste management for the (local) government is the absence of fee collection for waste collection. As it is right now, only the some-what richer communities using the house-to-house collection are paying a fee. Poor communities are not paying for the service at all. It will be especially difficult to promote a tax system under the users of the communal container system since the users have never paid a fee before. However, WMD and the KMA share the general opinion that the polluter should pay, and they are planning to introduce the tax nonetheless. In their opinion when this will not happen, waste management will not function properly.

Future scenarios

As this report is written new ideas concerning the collection methods are being discussed by KMA and WMD. The idea for the new collection system (or scheme as it is called by employees), should encompass the shortfalls that the h2h collection system gives to certain areas. One of the ideas concerns a collection method for a cluster of households. The container that will be introduced under this system will be able to contain 3m³. This means that if 50 persons are using the container, it only has to be emptied one time in 18 days. This system is still in development. One of the problems at this moment is that there is not yet a producer for the type of containers envisaged. Other (practical) problems will be where to place the container, and where to empty it, and who will eventually pay for its use.

5 Actor 1: The inhabitants of the communities

5.1 Introduction to the communities and the waste

In the communities the waste and especially the manner to deal with it is an everyday recurring battle. The system for solid waste collection seems overburdened, the inhabitants themselves seem rather careless about the dumping of waste at other places, and since the communities are both located along main highways, it's easy for many passengers of cars to choke gutters and surroundings with their (collected) wastes. Therefore it isn't surprising that in the communities diverse wastes can be found scattered on the ground and in the gutters.

Yet in general, the collected data shows that people are not worried about the waste (see also the table hereunder).

Respondents in both communities were asked to react on the statement; *"The current manner of how we deal with waste in this community worries me"*. They could choose from the categories: strongly agree, agree no opinion, disagree, and strongly disagree.

Waste & worries in the communities

The Current manner of how we deal with waste in this community worries me

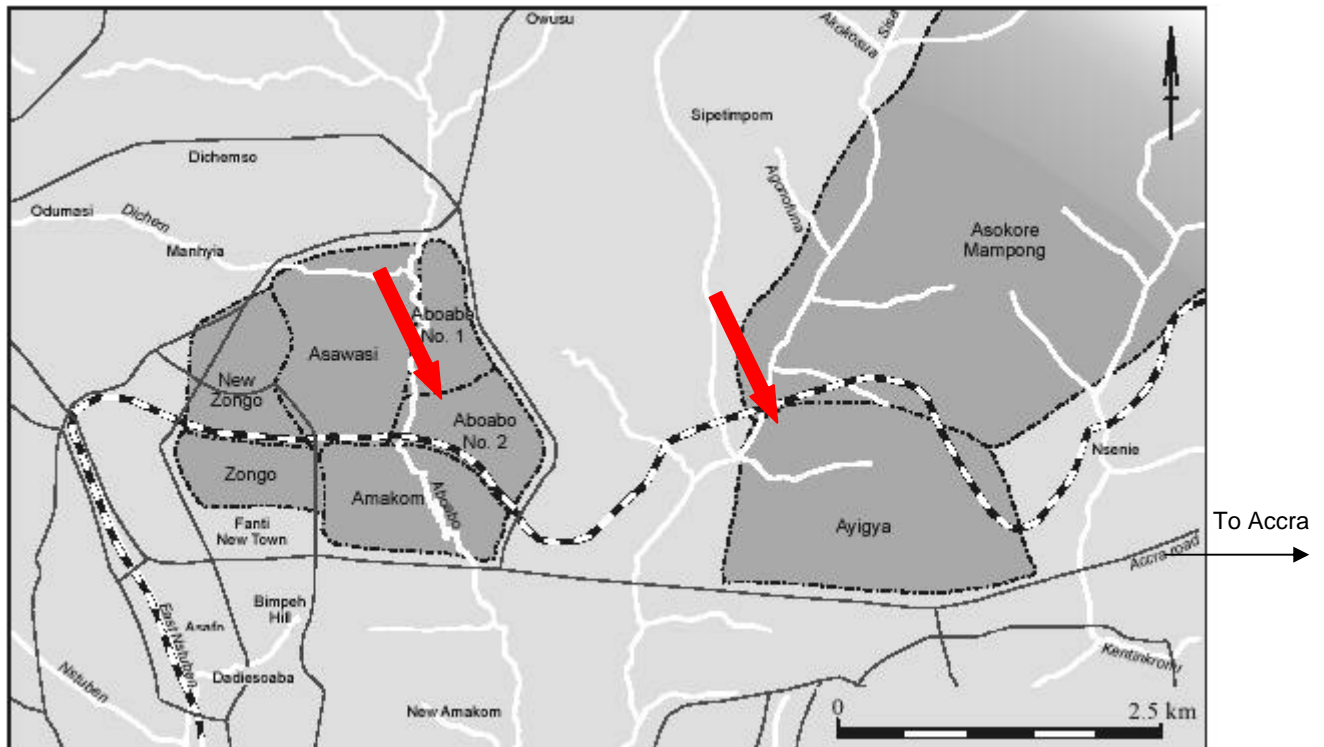
COMM		Frequency	Percent	Valid Percent	Cumulative Percent
Ayigya Royal	Strongly agree	20	44,4	44,4	44,4
	Agree	7	15,6	15,6	60,0
	No opinion	2	4,4	4,4	64,4
	Disagree	10	22,2	22,2	86,7
	Strongly disagree	6	13,3	13,3	100,0
	Total	45	100,0	100,0	
Aboabo 2	Strongly agree	47	62,7	62,7	62,7
	Agree	8	10,7	10,7	73,3
	No opinion	2	2,7	2,7	76,0
	Disagree	7	9,3	9,3	85,3
	Strongly disagree	11	14,7	14,7	100,0
	Total	75	100,0	100,0	

From the table it becomes clear that the opinion of the respondents is not on one line. Whereas the largest percentage of respondents, strongly agrees or agrees, to the fact that the way that is dealt with waste is worrisome, (respectively 60% in Ayigya Ahenbronu, and 73% in Aboabo 2) a rather large proportion of respondents also disagrees, or even strongly disagrees with this, (respectively 26 % in Ayigya Ahenbronu, and 25% in Aboabo 2.)

The central question in this research is how the identified actors are managing the waste in the two communities. The first identified set of actors is the inhabitants of the two communities. Therefore, in this chapter, the two communities are introduced and the situation in the two communities is explained.

The chapter seeks to create a rather complete picture of the communities, of importance for further analysis. The major characteristics of both communities, i.e. the location, housing, access to services, are described first. In the paragraph thereafter, the situation concerning the main waste management system will be explained. Finally the behaviour, attitude, and opinion of the inhabitants towards the waste is described and analyzed. As there are two communities subject to comparison and analysis, in every paragraph both situations will be portrayed.

Map research area



In this picture the 8 original communities of the research of Post *et al* of 2003 are show. This picture can be seen as the zoom of the previous picture. The source is Post *et al* (2003)

5.2 The communities

5.2.1 Ayigya Ahenbronu

The story of Ayigya Ahenbronu is one that illustrates part of the demographic growth pattern that the Kumasi metropolitan area experiences. Ayigya used to be a village, which, according to the queenmother of the community, was found 80 years ago (around 1925) by the Ashanti King Prempeh 2nd, who had just returned from exile. The King married to the grandmother of the current queenmother and donated the land to her. At that time, the settlement became known as *Ayigya*, which in Twi means, “**Land for the wife of the chief**”. Furthermore, in Twi, *Ahenbronu* stands for **Royal**, which makes the community researched; ‘the Royal land for the wife of the chief’.

Ayigya is situated around 6, 1 kilometre from the central business district. Roughly, the community can be divided in three parts, all parts with their own assemblyman (community representative for the local government; elaborated upon in the next chapter). The first is Ayigya Ahenbronu (Royal), being the oldest part of the community and the community in which this research was executed. The second part is Ayigya zongo, a part mainly inhabited by migrants. The third part is New-Ayigya, which lies somewhat to both the East and the West of Ayigya Ahenbronu. Especially in the West, the somewhat richer people able to construct more solid houses inhabit this part.

Ayigya itself lies on the northern side of the main road leading from Kumasi to Accra, which (for all simplicity) is called, “the Accra road”. In the South, across from this road, lies the enormous campus of the Kwame Nkrumah University of Science and technology (KNUST). The Western border consists of brackish land and a stream, where, according to stories, only the brave or the rich try to build. Beyond the stream, different communities are constructed. The railroad indicates the Northern border, around the rail lies the same type of brackish land alternated with farmland and beyond the rail there is a relative new community. The eastern border is most difficult to define. The railroad passes through the area but forms no real barrier, since the 70s, the ability to grow was rather restricted by the construction of cottages for university personnel. However, these cottages

did not serve as true barrier either. Soon enough construction started beyond this area, the here from resulting neighbourhood can best be called New-Ayigya.

Major characteristics; former village & current proximity to large university

Two major characteristics differentiate Ayigya from other communities. The first concerns the communities' history, the second its location.

Through time the growth of on one side the city of Kumasi and on the other side Ayigya village made that Ayigya was included in the 1963-development plan of the Kumasi Metropolitan Area. Around 40 years later (i.e. anon 2004) the former village is seen as a community absorbed by and belonging to the metropolitan area.

Yet, the fact that Ayigya used to be a village separate from the city is still one of its major characteristics. Until this moment, there are signs that point to this history. For example, the manual and physical work activities as farming and working with charcoal and other rural products are still finding place. Furthermore, as Ayigya is located on the edge of the city inhabitants easily make trips to the farmland just outside the city. As a result, smaller settlements like the east side of New-Ayigya have come into existence.

Another major characteristic of this community is its location next to the Kwame Nkrumah University of Science and Technology (KNUST). This university has a good reputation in West Africa and is furthermore the second largest university of the country. At this moment the university is still growing, which means that there an increasing level of students and a corresponding increase of by-coming facilities. The presence of this university has Among others ensured access to a hospital, an increase in transportation and by-coming sales activities centred in and around the entrances of the campus, the construction and maintenance of over a dozen of dormitories, gardens, and internal roads, and therefore a probable increase in employment. However, both the assemblyman and the inhabitants of the community have made it clear that against all speculations, they have not experienced that many advantages of the KNUST as expected.

On a average morning in Ayigya Ahenbronu,

...activities begin long before the clock of five. Especially the traders, drivers, and the artisans start the working day early. At around six the centre of activities is around the market on the Accra road. Music is playing loud and people are everywhere. While some enjoy their breakfast others try to conquer their place in a taxi or small bus. When there have been no accidents the road is clear and finding transportation is not very difficult. However when there is a traffic jam the place becomes a true mess. During the day the place becomes less chaotic, but around four in the evening the scene is identical to that in the morning. At six the sun has gone under and the place is in the dark. It are the scarce streetlights and the candles of the sellers that still light the place. But the activities never seem to end. When the last sellers clean up the market at around three in the early morning, the new ones arrive with baskets of bread on their heads. Ready for the new day.

5.2.2 Aboabo 2

From its foundation at the beginning of the 20th century on, Aboabo can be divided in 2 separate communities; Aboabo 1 and Aboabo 2, each with a separate assemblyman and unit committee. There are no specific reasons why the communities are separate; according to the stories, both groups of settlers originally come from Nigeria, one group of migrants founded Aboabo 1 and another group Aboabo 2.

Defining the exact border between the two communities is somewhat difficult. Different people have different and often contrasting ideas about the exact location of the border. Thus as the truth lies somewhere in between, the selected border for this research is based on the most often heard suggestions and the most logical choices obtained via field and interview experience.

Anon 2004 -2005 Aboabo 1 and 2 can easily be reached by the existing eastern bypass direction north which also serves as western boundary for the entire community. The boundaries of Aboabo 2 are on the south-east the railroad, and on the north Aboabo 1. The community is in close proximity to the cities airport, which lies at the eastern side of the eastern bypass.

Major characteristic: migrant community

From its foundation on Aboabo 2 has proven to be a true migrant community that has grown immensely during the last century. There are two particular reasons for this. The first is the (above mentioned) history of the city and its opportunities that it could offer migrants. Which is backed up by percentages of the 1960 population census which shows to what extent migration influenced the growth of the city; *63 % of the residents of Kumasi at that time where migrants of which only 13 % of a foreign country.* (Post, 2001)

Secondly, literature as well as reality shows that migrants usually settled themselves in ethnically based neighbourhoods. People coming from a specific northern tribe would therefore look for a community with other people from their tribe. Aboabo hereby was a settlement that was popular and wanted among migrants.

As migrants continued to come to the city and continued to settle themselves, neighbourhoods throughout Kumasi became more and more crowded. Aboabo 2 in particular is situated only 2, 8 kilometres from the city's central business district (CBD), which meant that through time it became surrounded by other communities. The only possibility to make space for new comers therefore became moving in together, thus decreasing the average space for living per person. One often heard solution for creating extra space for a new family for example, is the transformation of the toilet room into a living room. With population on the increase and space per person on the decrease one can imagine that the availability of services must have deteriorated enormously.

Luckily, since four years, the main roads in the community are well developed; they are paved and accompanied of large gutters and streetlights on both sides. The construction of this found place under the World Bank urban IV infrastructure upgrading project / sanitation project.

According to a unit committee member, the upgrading really helped the community. But she also added that she together with the entire unit committee, the assemblymen, and the leaders of the project ran into a problem; during the scope of the project sometimes the roads had to pass through (often illegally built) houses of people. These people were paid compensation to which all parties agreed but after they'd received this they continued to refuse to leave the area. In this case, during the scope of the project a joint solution was found. This shows that squatters (as illegal settlers can be called) –and their house- are part of Aboabo 2, a vulnerable part, but one that also needs representation. And until this day they are found in large quantities in the community. Nonetheless the city of Kumasi argues that squatters are not a problem they have to deal with. They state that the master-plan will indicate what is to happen. Squatters simply have to rescue themselves or have to be helped by the central government who carries the responsibility for housing.

An everyday morning in Aboabo

...starts around four am with the first prayer which is announced via the public address system of the central mosque. Hereafter people prepare for the day to come, water is boiled, rice cooked, and bakeries have already produced the first load of bread. Walking around in the community around six A.M. learns that many wash and brush themselves around the gutters. Children run around either naked or covered with soap while others are busy brushing their teeth. Some people are buying their warm cup of tea or porridge and enjoy chatting with each other, others quickly leave the community on their way to wherever, and yet others simply sit and stare. During the day the sounds in the community stay omnipresent. Honking cars, screA.M.ing children, and chatting women make the scene vivid to watch. The announcements of the prayers come and go. And when night falls the sounds continue. A passing train is barely noticed. Yet the new load of bread is already ready. Cookers have to set up business again. and kids have to get washed and dressed to go to school.

5.2.3 Similarities and differences between the communities

There are minor and mayor similarities and differences between the two communities. They are summarized in the list hereunder. (Information can also be found in the appendices) The list is based on the analysis field situation and the questionnaire submitted to inhabitants of both communities, data is therefore only indicative, not representative.

Similarities;

- Both communities are low-income communities. The average income in both communities is around the same \$50 - \$100 per month.

- (In both communities there are currently no addresses)
- The main occupation of the inhabitants is identical, i.e. trading; respectively 38% and 44% of the questioned inhabitants indicated this.
- The types of stores in the communities are almost identical. The only difference is the type of clothing and material and some foodstuff that is sold. These are adapted to the background of the people.
- The occupation of houses (compound, story, or tenement) is almost identical in the two communities. In Ayigya Ahenbronu 64% lives in a compound, 18% in a story building, and 22% in a tenement structure, in Aboabo the percentages are 67-18-14.
- Both communities have many squatter settlements. In Ayigya Ahenbronu these are centred around the market on the Accra road, in Aboabo 2 they are throughout the community.
- Both communities have many shops spread through the entire community. Furthermore the nature of the shops often is the same. The only differences are the type of cloth and special foodstuff made and sold.
- The access to electricity is the same in the two communities; around 91- 92% of the inhabitants dispose over electricity
- The average size of the household is the same, i.e. 4-6 persons per household.
- In both communities it is said that all children with the legible age go to school
- The number of children that is said to work is identical, around 14% of all households with children work.

Differences:

- Ayigya Ahenbronu used to be a former village, and Aboabo has always been a migrant settlement.
- Ayigya is located much further from the CBD (6,8 km) than Aboabo (2,2 km)
- Ayigya is located next to the KNUST, Aboabo is located next to the small airport
- Ayigya Ahenbronu has no paved roads or gutters, Aboabo 2 has both
- Ayigya Ahenbronu (used to) have more alternative living spaces for new comers / new families
- Ayigya Ahenbronu has two markets, one inside the community, one located along the Accra road Aboabo 2 has none
- In Ayigya Ahenbronu, a larger percentage of respondents (i.e. 61%) have a toilet in the house, than in Aboabo 2 (i.e. 35%). Reason might be that especially in Aboabo 2 the room of the toilet was necessary for additional persons.
- In Aboabo 2, more people have access to piped water in the house (51%), than in Ayigya Ahenbronu (35%)
- The language most spoken in Ayigya Ahenbronu is the Twi, in Aboabo this is the Hausa.
- In Ayigya Ahenbronu, the largest percentage is Christian (91%), while in Aboabo 2 the largest percentage is Muslim (87%).
- In Aboabo 2 there are on average more elderly persons living with the household (43%), than in Ayigya Ahenbronu (22%)
- In Ayigya Ahenbronu are more households with children (86%), than in Aboabo 2 (76%)
- In Ayigya Ahenbronu, 50% of all females interviewed are also the head of the household, in Aboabo 2 this is 28%. Further, of all males interviewed in Ayigya Ahenbronu, 38% is head of the household, and in Aboabo 2 this is 59%.

To continue, in the last question of the research the inhabitants were asked what they would like to improve in their community. The results are summarized in a table and are put in an appendix 5. They reflect what the inhabitants like to see improved and therefore also reflect part of their opinion on the community.

From the table it becomes clear that inhabitants in Ayigya Ahenbronu really like to see the roads and sanitation system in their community being upgraded. Sixty percent of all respondents have indicated that they like to see the road being upgraded. Of all 131 statements given by the respondents, sanitation is mentioned 66 times, meaning that in fifty percent of the cases sanitation is thought to be important. Sanitation in this case includes cemented gutters, enough toilets, and a functioning waste management system.

In Aboabo 2, the inhabitants didn't give as many points of improvements as in Ayigya Ahenbronu. Here mayor points were the general cost of services and products, an increase of toilets, and an improvement of the solid waste sanitation system in the community. Sanitation was mentioned 64 times of the 150 times, i.e. in forty-three percent of the cases. Furthermore, many inhabitants of Aboabo 2 find that the government should play a larger role in the development process. Of all 150 statements, 30 times, i.e. in twenty percent, it is thought by the respondents that the government

should do more. A somewhat worrisome fact in this community, especially in light of the often-mentioned (by the people) peaceful Ghanaian culture is that eight percent of the respondents commented that the security needed to be improved.

In the following paragraphs, the facts concerning the waste situation and the sanitation in the two communities are explained.

5.3 The solid waste collection system in the communities

5.3.1 The communal container system and the sanitation sites

As the city of Kumasi is divided in many communities, within every community a specific manner to collect the solid wastes is utilized. (See previous chapter for description of available methods & their characteristics.) In the two communities of this research, the current manner in practice is the communal container-system.

The communal container necessary for the system is placed on a central point in the community, which is (often) the sanitation site. As part of the general planning scheme of 1963, these sanitation sites have been set up for sanitation purposes for the inhabitants of the community, like for example going to the toilet.

Maps of the communities (including their sanitation sites) are available at the TCPD (Town and Country Planning Department) and are no more current than is paid for by the owner of the land. The Maps of Ayigya Ahenbronu and of Aboabo date from 1978 and 1980 and they are printed on the following page.

5.3.2 The site in Ayigya Ahenbronu

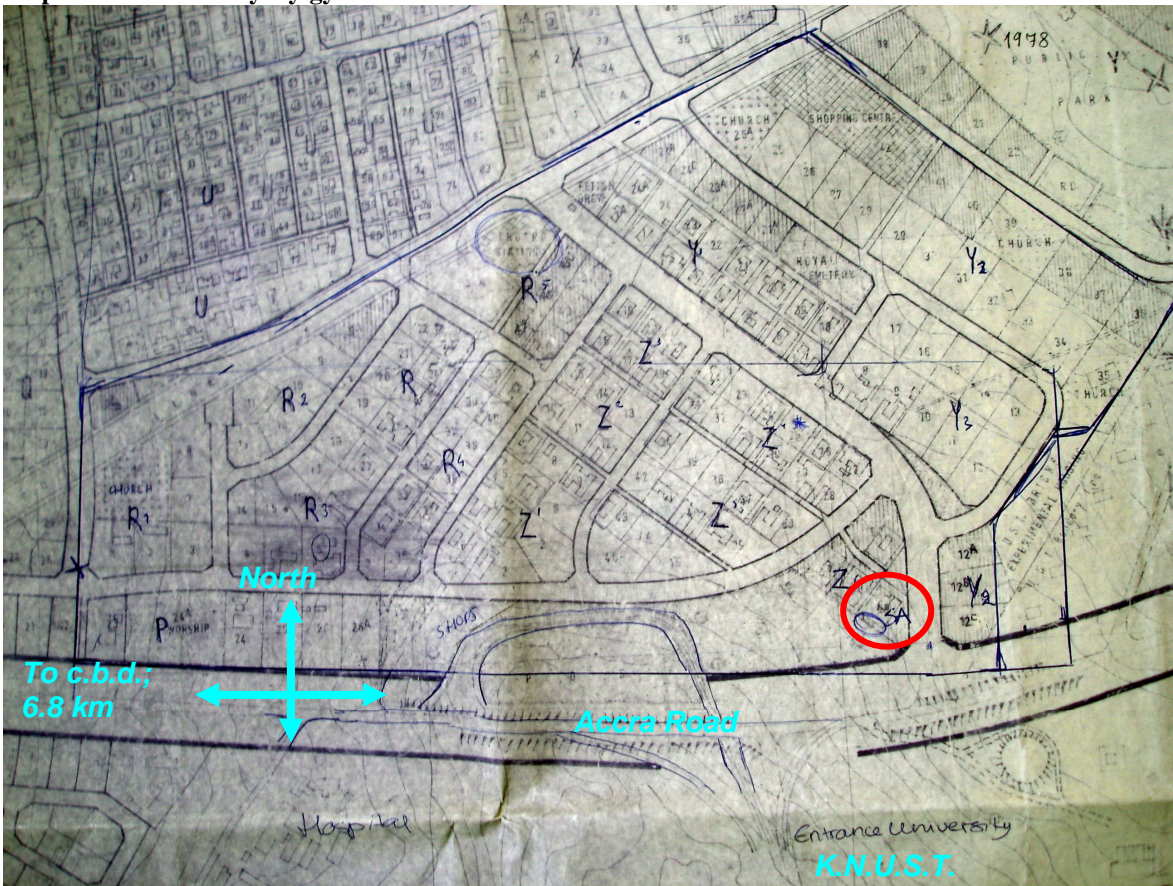
In the 2003 executed research project, it was mentioned that Ayigya disposed over two uncontrolled landfill sites that served for solid waste dumping. The exact time could not be recalled by participants of interviews, but since about two years the community “enjoys the benefits” of a communal container service system. This, the communal container is located at the sanitation site and a private company called Meskworld collects this communal container.

The sanitation site, which is around 13 by 7 meters, is very good accessible for trucks that come to load and unload the container. It lies at approximately 50 meters from the main Accra road and on top of it the larger part of this small road is tarred which is an exception for the community.

However, next to this advantageous accessibility the site has some mayor disadvantages. First of all the dump is not the only service, the sanitation site is used for. A block of public toilets is also located on the site. With the frequency of collection of the waste not always up to standard one can imagine its effect on the users of the toilet who have no choice but to breath in the smell of rotting and forgone wastes. One positive aspect of the container being located close to the public toilet is that at least there is some kind of supervision. The person that is hired to collect money from people that use the toilet can easily see what is going on at the site and can inform the assemblyman of the situation, which is also what happens in reality. The second negative aspect of the current location of the container is the proximity of a school within 10 meters of the container. Here the same effect as with the users of the public toilet is valid, only this time for school going children. Through conversations with both the assemblyman as well as the inhabitants of the community it became known that the container has recently been located here, and that the school was built later.

The previous location of the waste / dump site was more towards the outskirts of the community where instead of a container system a crude dumping method was used. At that time the site was larger. But the construction of a hotel next to this dumping site changed the situation. A new site had to be found, and the only party that could help was the chief, the owner of all the land in the community.

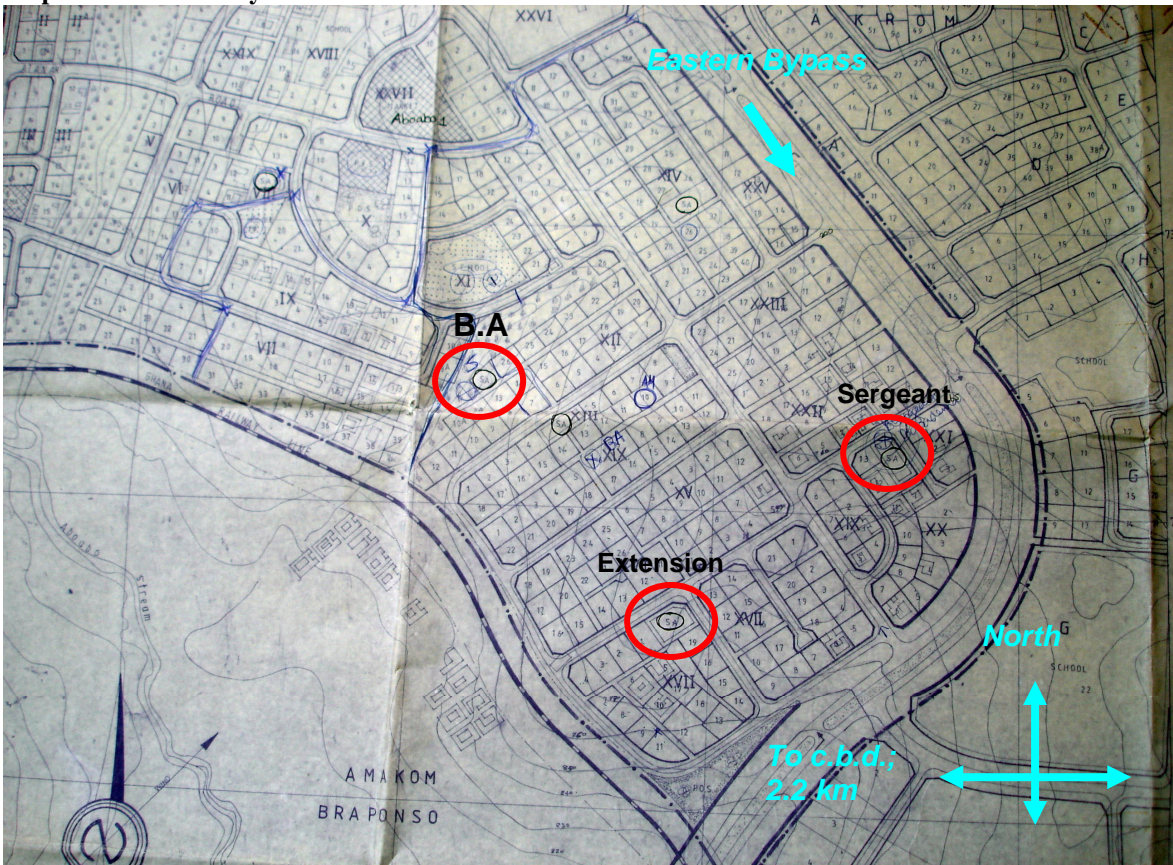
Map of the community Ayigya Ahenbronu



Source: TCPD Kumasi, Ghana. 1:25.000

In both maps, the red circles indicate the location of the sanitation sites

Map of the community Aboabo 2



Source: TCPD Kumasi, Ghana. Scale: 1:30.000

He however refused or lacked the means to be of assistance. Thus left with no other place to situate the container the assemblymen and unit committee felt obliged to choose the already small sanitation site as the new location. Until the moment of the research, no other place for the container has been found.

An accompanying worrisome fact is the manner how it was eventually decided to use this sanitation site for the container. Many people in the community, including the queenmother, did not agree or like the way it was decided to move the location from its eastern outskirts towards the more centralized sanitation site. They like (d) the previous site and found it suitable for the container system as well.

Next to dissatisfaction with the location, there also seems to be disinterest in dealing with the waste. Pictures that are taken at the new site for example show how a child carries the waste to the site, and how another child walks barefooted around the two containers while brushing her teeth. (See next page)

5.3.3 The containers in Ayigya Ahenbronu

On the site one, two, or sometimes three small skip containers can be located. These small skip containers come in three sizes of 7m³, 9m³, and 12m³. And as stated above, it is the private company Meskworld that comes to collect and empty these containers. The number of containers placed depends on the availability of empty containers of the supplier (the KMA in collaboration with Meskworld), and upon the necessity for extra dumping space.

The assemblyman of the community doesn't know the exact size of the containers that are placed but through observations and discussions with managers of the WMD it was learnt that it's mostly a 7m³ or 9m³ skip that is placed at the site.

Even if the collection of these skip containers would function up to standard, which is on a daily basis, more than one container is necessary (see box).

Calculation waste Ayigya Ahenbronu

Calculation total Amount of waste in Ayigya Ahenbronu

- There are estimated to be around 7,500 people in the community,
- In diverse calculations the Amount of waste each person produces per day is between the 0,5 and 0,6 kg, being between the 3750 and 4500 kilo wastes.
- Using the formula presented in chapter 4, the density, is on average 400 kilo per m³,
- Meaning that the community produces on average 10,3 m³ of waste per day.

However, collection mostly does not find place on a daily basis. An estimation of the frequency of collection of the assemblymen is around the 3 times a week. Thus when the containers are full and can't be emptied because of for example a technical problem on the final dumping site (the landfill) additional containers should be placed. In reality this happens only when continuously requested for, and when they are available, and when Meskworld has time to come and place them. Which, considering the current equipment and busy schedule of the company, isn't very often. Although the area representative of the company revealed her plans for the placement of more containers in the near future, the KMA and the WMD think that the likelihood of these ideas turned into reality is small. Especially the short lifetime of the containers has as result that increasing containers moreover comes down to replacing them.

A by-coming problem for the waste system in the community is that her inhabitants do not have the container for themselves. Inhabitants of the adjacent community, Ayigya Zongo, also use the container. This is mostly because they do not dispose over an appropriate collection method. (Crude dumping is still in practice in this community), and according to the assemblyman of Ayigya Ahenbronu, the assemblyman of this community doesn't take the initiative to change the situation.

5.3.4 The sites in Aboabo 2

Like Ayigya, Aboabo once new crude dumping as manner for dealing with the waste as well, furthermore, according to the communities' chief, another often-applied manner to deal with the waste was its burning which was especially popular during the rule of the English.

In the past decade the government has placed containers of different sizes on three different sites, (see also map and indication) and it is the same private company, Meskworld, that collects these on the indicated times.

The names of these sites, the frequency by which they are served and the size of containers are;

- BA is a container refuse which is served daily and has two small skip containers of 9 m² or 12m²
- Extension is a container refuse which is served every five days in seven and has one small skip container of 9m² or 12m²
- Sergeant is a container refuse that is served every five days in seven and has one large and so-called ERF container of 23m²

Calculation waste in Aboabo 2

Calculation total Amount of waste in Aboabo 2

- There are estimated to be around 20,486 people in the community,
- Recalling from the chapter on the WMD each person produces between the 0,5 and 0,6 kg waste per day, being between the 10250 and 12300 kilo wastes, average 11275 kilos a day
- The density, recalled from chapter the chapter on the WMD, is on average 400 kilo per m³,
- Meaning that the community produces on average 28,2 m³ of waste per day

If this system fully operates, an average of 34m³ of wastes can be collected a day, which shows almost 20% excess capacity, if this is compared with the 28, 2 m³ waste produced per day.

Yet in reality in this community there is always a shortage of containers. It is the assemblyman of this community that has taken a rather active role in always checking the state of the diverse containers and taking action, which mostly consists of calling the WMD, when necessary.

5.3.5 The containers in Aboabo 2

A tour via all sites in the community learns that, also in this community, the location as well as the proximity of other facilities, like shops, houses, playgrounds, etc is a problem for the users and the neighbours and therefore the general wellbeing of the people as well.

The site called BA is located on the northern border of the community along one of the largest gutters the city of Kumasi knows. The site is located at a rather wide and open area that until this moment knows no other purpose. However the assemblymen commented that at this place a new public toilet would soon be built. From time to time the site is kept clean by a sanitary worker, and pictures show that this worker sometimes uses the former method of burning in order to clean more effectively. When this was discussed with the direction of WMD it was admitted that the practice of burning waste by workers is known and is also more or less accepted, merely because it serves the purpose of cleaning the place for the eye. The surroundings of BA however can look awful. Around the containers and the gutter, waste seems to have passed the stadium of foregone and now simply belongs to the original substance of the ground.

The site called "Extension" is in a worse condition. This site is very small and is located somewhat in the centre of the community. Its location probably makes it popular among the people. Yet the fact that it's only a small container can be seen. The researcher visited the place on various occasions, and almost always the waste spilled over the container. A new public toilet has recently been constructed at the sanitary site, and this led to the same inconvenient effects as in Ayigya Ahenbronu. Furthermore, as the sanitation site is in the middle of the community, it is surrounded by buildings and people, for example a women's breakfast business is set less than 10m from the container.

The site "Sergeant" is the best maintained site the community has. The site is located around 50 meters from the eastern by-pass, the western border of the community, and is therefore very good

accessible for large trucks, this is also the reason that the container that is placed on this site can be so large. Furthermore, and like on most other sites, also on this site a public toilet is located, and also on this site this is a burden for the users. However, a full time employed sanitary worker has to ensure the cleanliness and orderliness of the site. Visiting this site on various occasions can therefore also lead to entirely different views.

Another aspect of waste and waste collection came to light while discussing the situation with the people; when the containers are overloaded people are told by sanitary inspectors that they are to spare the waste that they collect at home. Some actually do this and cause neighbours to complain about the smell, others take different measures and dump the waste where they think it's appropriate which often comes down to one of the gutters surrounding, anyplace in the community, or simply at the crude dumping place across the railways. Last not least, also in this community it is mostly the children that carry the waste to the containers.

5.3.6 Summary of the collection system in both communities

As has become obvious by the above standing analysis, the differences in the two communities concerning the waste collection system are rather small. The biggest difference is the size between the two communities and the associated number of sanitation sites and containers. However, observing the situation shows that Aboabo 2 suffers more from the waste and the resulting number of containers that are overloaded than Ayigya Ahenbronu. Furthermore, the circumstances, including the benefits and pitfalls, under which the service operates are practically similar.

It is important to stress at this time that overall the use of the communal container system has a positive effect on the communities studied. The containers from the government ensure to a large extent that (the remaining of) the community is not used as dump, and that the previous more controversial and unhealthy method of plainly dumping and bulldozing does not need to be used anymore. Waste is now removed from the site because the containers are lifted, emptied, replaced and even cleaned at times. It can therefore be said that the introduction and use of the communal container system can contribute positively towards development (of basic services) in the community.

However next to the general positive effect of the container, at this moment the use of it does bring with it quite some controversial issues.

First of all the location of the site for the communal container can be subject of discussion. For example placing a container next to a public toilet or even a school or a business can hardly contribute to the wellbeing of the population. Whereas empirical evidence for these specific situations concerning containers, health, and location can't be given and do not belong to the scope of this research, basic reasoning about especially the manner that malaria can spread leads to the above assumption that a wrong location can endanger the health and wellbeing of the population.

In the case of placing a public toilet next to the container, it becomes an issue to be solved and discussed by especially the local government and their own sanitary experts. The fact of ownership of the land, which often belongs to rather powerful chiefs, complicates this but is no reason for disregarding or ignoring the resulting situation. Yet, this sadly is, as the discussion will continue to show, one of the most often occurring manners of "solving" a problem.

Where it concerns private companies / individuals placing a building in close proximity to a container it remains the responsibility of the owner of the building and possible also that of the local government. In this context the theory of participation and joint problem solving or joint projects to improve infrastructure and increase development by diverse actors, is put to a test, for which at this moment in time are insufficient solutions.

Secondly, the container system in general knows several shortcomings as well; these include the frequency of collection, the availability of spare containers, the future prospects for collection, and maintenance of appliances. Manners to deal with these shortcomings are diverse. Firstly the WMD in close collaboration with the KMA are working on the introduction of a new method; house-to-house collection. According to its experts, this method should provide for more cleanliness and a

more frequent collection because when this is introduced the people will pay, money is made, and hereafter it will be easier to deal with appearing shortcomings. Secondly, one of the manners that is too a large extend ignored by the people or even unknown to them is the issue of recycling or composting. Other possibilities in other to limit the burden on the current container are of course better practices maybe even joint collaboration for maintenance of appliances, separate collection of wastes etc.

Concerning the issue of location of the sanitation site in general and the container in specific, it must be mentioned here that Obirih-Opareh (2002) sees this from an entire different perspective. In his research on solid waste collection in Accra he does not mention that the location of containers threatens the health of the people. Rather, he states that the location of (extra) containers, and especially the resulting discussions between the government and the residents of the community, shows that the residents display a paradoxical attitude. According to him, it is controversial that people complain about the small number of containers being placed, while meanwhile they also resist having a container placed next to their house.

Although his thoughts seem bold in first instance, they also conform to the reality of the paradoxical nature of the inhabitants of whatsoever community.

The opinion and behaviour of the people in the paragraph hereunder will continue on this subject.

In short it can be said that;

- There is not much difference between the communities, except that the three times bigger Aboabo 2 has three communal container places and Ayigya Ahenbronu one.
- For the communities, the communal container is a better system than the crude dumping system
- Location of the communal container can be a threat for diverse groups that undertake action in its proximity, i.e. visitors of the communal toilets, school-going children, businesses, and habitants
- The communal container system also has some shortcomings; frequency of collection, the availability of spare containers, the future prospects for collection, and maintenance of appliances.
- There is no evidence that the people recycle
- Placement of more containers is difficult, and hereby also reflects the difficulty of the solid waste management problem.

5.4 The behaviour & the opinion of the inhabitants

5.4.1 Introduction

The questionnaire administered under the inhabitants provides the most information for the following paragraphs. Roughly, the questionnaire can be divided in two parts; one includes the basic characteristics (see for example 5.2.3), and one includes the behaviour in and opinion on dealing with solid waste of the inhabitants.

In the table hereunder the basic characteristics of the inhabitants are summarized in a table. The results of the second part of the questionnaire are presented in the following paragraphs. They are analyzed through comparison with the basic characteristics (internal) and through comparison between the two communities (external). Finally they are commented upon.

The results, to some extend, indicate strengths and weaknesses opportunities and threats concerning the actual situation. A note of caution is that respondents might have given the answer they thought was the best instead of the answer matching their situation.

Summary data inhabitants

Summary data inhabitants questioned (in %)		Ayigya Ahenbronu	Aboabo 2
Male/ female	Male	18	29
	Female	82	71
Age	18 - 25	29	37
	26 - 40	36	33
	41 - 64	29	15
	65+	7	15

Postion in household	<i>Head of the household</i>	47	37
	<i>Child Of The Head</i>	13	21
	<i>Married To The Head</i>	29	32
	<i>Mother/ Father Of The Head</i>	2	/
	<i>Brother/ Sister Of The Head</i>	9	5
	<i>Uncle/Aunt/Niece/Nephew Of The Head</i>	/	3
	<i>Grandparent Of The Head</i>	/	1
Number of persons in the household	<i>1</i>	13	12
	<i>2 -- 3</i>	16	15
	<i>4 -- 6</i>	47	48
	<i>7 -- 12</i>	22	23
	<i>More Than 12</i>	2	3
Kids	<i>(yes)</i>	80	76
Elderly	<i>(yes)</i>	22	43

5.4.2 Where to throw the waste

Collected solid waste is a burden. It smells bad, attract mosquitoes, and takes space. Inhabitants of both communities therefore like to get rid of it as soon as possible. Based on conversations with people in the community several possibilities of where to throw the solid waste were inserted in the questionnaire.

From the collected information (see table 3), it can be concluded that in Ayigya Ahenbronu, the respondents behave normal, maybe even well, when it concerns the dumping of waste. A rather large percentage (87%) of the inhabitants state that they bring the waste to the communal container on a daily basis. Furthermore, only small percentages of the inhabitants use illegal measures in other to deal with the waste.

In Aboabo 2 the results (in table 3) reflect that the waste is dumped regularly in the containers. However, 18% of the respondents throw the waste at another dump, i.e. at the Dagomba line, a settlement next to Aboabo 2.

This site is still a legal dumping place, however, the inhabitants of Aboabo 2 shouldn't go to this dump; they should use their own waste service. This is something for which a solution needs to be found.

Concluding from the table, it can be said that, next from the already mentioned dumping at the Dagomba line of respondents in Aboabo 2, the dumping places frequented and used by the respondents are moreover the same. The container is hereby the most used and frequented place.

Disposing over solid waste

How do you dispose over your solid waste? (Results in %)	Everyday		> 2 x per week		> 1x per week		> 2x per month		> 1x per month		Never	
	Ay	Ab	Ay	Ab	Ay	Ab	Ay	Ab	Ay	Ab	Ay	Ab
<i>I go to the refuse container</i>	87	93	9	5	/	1	/	/	/	/	4	/
<i>I throw it at the former / another dump</i>	/	1	2	3	/	9	/	5	/	/	98	81
<i>I burn the waste</i>	4	/	/	/	4	/	/	1	/	1	91	97
<i>I dump it someplace else than appointed</i>	/	/	2	/	/	/	/	/	/	/	98	100

Concerning burning waste, it must be noted that, some respondents that said they never burned waste do have a pile of waste mixed with ashes lying on the back of their yard. Further, some respondents denied burning but added that, when necessary, they did burn leaves lying around, especially in the dry periods. One respondent commented that he would like to burn waste if he'd have the ground / land, but since he didn't have the land he couldn't burn the waste.

5.4.3 The communal clean-up campaigns

Behaviour

Community clean up campaigns, whereby inhabitants of the community clean their surroundings in particular and the community as a whole, are a popular method in order to clean the community and to activate the population. The idea stems from an old tribal tradition of cooperation and working together. Articles and announcements in the media confirm that many organizations, schools, clubs, unions, etc organize or participate in these. The government stimulates these type of activities; they are trying to oblige every town council (where a group of A.M. and their unit committee meet) to hold a clean up campaign every month. When whoever organizes a clean-up campaign, it is the government that comes to collect the waste, or orders a private company to pick up the waste. However, as the town councils are not yet well enough developed, the government has not succeeded in well promoting the clean ups (see also next chapter)

In the research preceding this paper Post *et al* (2003), states that in Ayigya the organization of and participation in such clean up campaigns is widespread. However, during the period of the fieldwork, no such campaigns could be observed.

Nevertheless, in the questionnaire the inhabitants where asked if they participated, how, and how often. The results are printed in table 4; they show that 60% of the respondents actually participate in the projects.

In his research Post (2003) has not mentioned (the participation in) clean up campaigns in Aboabo 2. Yet Among the inhabitants the concept was widely known, which is also reflected in the results, where a large part of the respondents indicated to participate; i.e. 72%. Further, of the respondents that indicated that they participate, a slightly larger part than in Ayigya Ahenbronu also participates always; i.e. 80%. (In Ayigya Ahenbronu 74%)

The reasons why respondents decide not to participate have also been asked. They can be categorized in two groups applicable to the situation in both communities;

- One group does not participate because they are either too old, or sick. This group comprises around fifty percent.
- The other group does not participate because they are either unaware that there are clean ups, are busy, or have never been asked. This group also comprises around fifty percent.

According to the respondents, there are rules set up who can and who cannot participate, and these rules apply to age and health. Therefore, the group first mentioned is exempted from participation.

Opinion on the community clean up campaigns

In order to analyze the indicated behaviour of the respondents more deeply, the opinion on the campaigns (including perceived benefits, the willingness to cooperate, and several other points) was measured. The results are summarized in the table hereunder. They reflect that the majority of the respondents think that the clean ups benefit them, and are in their neighbourhood. Furthermore 76% of the respondents in Ayigya Ahenbronu indicate that the clean-ups are held only on specific occasions, and 24% finds that the campaigns are regular. Whereas in Aboabo 2, 61% finds that the clean-ups are regular, and 39% only on specific occasions.

The clean-up campaigns

When there are clean-up campaigns; (results in %)	yes		no	
	Ayigya	Aboabo	Ayigya	Aboabo
<i>I participate</i>	60	72	40	28
<i>I always participate (% based on 60% participation)</i>	74	80	26	20
<i>I supply labour (% based on 60% participation)</i>	93	94	N/A	N/A
<i>I supply a combination* (% based on 60% participation)</i>	7	6	N/A	N/A
<i>My household benefits</i>	82	91	18	7
<i>They are in my neighbourhood</i>	82	89	18	11
<i>They are regular</i>	24	61	N/A	N/A
<i>They are on specific occasions</i>	76	39	N/A	N/A
<i>It's my duty to help</i>	84	95	16	1

*combination includes money, or equipments, or drinks, and labour

5.4.4 On cleanliness and keeping the community clean

In the last question of the research, the respondents were asked to comment on the level of cleanliness in the community. The comments of the respondents were divided in 5 categories of cleanliness; 1, Very dirty, 2, Dirty, 3, A bit dirty/ a bit improving, 4, Not dirty, and 5, No opinion. (See table 5, or, for the exact statements see appendix 4)

Since the categories differ from very dirty – to not dirty / clean, it reflects the differences of perception of the inhabitants of the community. An explanation for this difference, like for example linking the opinion with age, location, income, etc has not been found, and can therefore not be given. It can thus be said that the differences in opinion on the level of cleanliness are extraordinarily large.

Opinion level of cleanliness

Opinion on level of cleanliness in the community	Ayigya A.		Aboabo 2	
	Freq	%	Freq	%
<i>Very dirty</i>	11	24	11	15
<i>Dirty</i>	12	27	11	13
<i>No opinion</i>	3	7	2	3
<i>A bit dirty / a bit improved</i>	9	20	26	35
<i>Not dirty / clean</i>	10	22	25	33

In contrast to this, is the opinion of the inhabitants concerning keeping the community clean. 100% of the respondents in both communities find that (a) it is important to keep the community clean, and (b), it is also their duty as inhabitant of the community to keep the community clean. Thus nevertheless the current level of cleanliness, it is indeed found necessary by all respondents to keep the community clean!

5.4.5 On throwing waste on the ground

In order to measure the consistence of behaviour and opinion of the people towards the waste, the respondents were asked what they thought of throwing waste on the ground. The respondents could state if they strongly agreed to throw waste on the ground, agreed, had no opinion, disagreed, or strongly disagreed. Table 6 & 7 show the responses.

In Ayigya Ahenbronu, 9% of the respondents agrees or strongly agrees to the practice of throwing waste on the ground. This does not seem very high, however, the fact that 9% of the respondents agrees to this means that of the total population of 7.500, 675 persons agree or even strongly agree to throwing litter on the ground, which does say something about their attitude towards waste. (Luckily 91% disagrees with the practice.)

In Aboabo 2, 7% of the respondents strongly agree with the practice of throwing litter on the ground. Another interesting aspect is that 4% of the respondents withhold their opinion on the issue. Altogether also in this community a large percentage; 89% disagree to strongly disagree to throwing litter on the ground.

Behaviour on waste throwing waste on the ground

Opinion on behaviour (results in %)	Agree – strongly agree		No opinion		Disagree – strongly disagree	
	Ay	Ab	Ay	Ab	Ay	Ab
<i>People can throw their waste on the ground when a container can't be found.</i>	9	7	0	4	91	89

Analyses of the respondents that agree or strongly agree to this practice shows that *in both communities* (a) the position in the household cannot be related to this; it is a mixture between child of the head, married to the head, and the head of the household. Further, the gender (b) can also not be related to this. Both women and men agree to the practice. From this it can be concluded that it is

impossible to identify certain basic characteristics to the persons that agree to throw waste on the ground.

To continue, as the analysis hereunder will show, the opinion of the respondents on throwing waste on the ground and their opinion on other aspects of hygiene is not very consistent. No relation between the opinion on other subjects on keeping the community clean and the opinion of throwing waste on the ground could be identified.

The outcome of the analysis and the conclusion are similar for both communities; i.e. that the opinion of the respondents is not very consistent as it comes to ensuring a clean community.

Relation between opinions

"people can throw litter on the ground when they can't locate a dustbin"	Positive relation		No relation		Negative relation	
	Ay	Ab	Ay	Ab	Ay	Ab
1. "The waste in this community worries me";			x	x		
2. "We are educated by the government on waste and hygienic matters";					x	x
3. "The waste is properly taken care of";			x	x		
4. "The government should provide more dustbins"	x	x				

Explanation relations Ayigya & Aboabo 2

1. Some respondents that agree to waste being thrown on the ground do worry about the waste, whereas some also don't worry.
2. **Some** respondents that agree to waste thrown on the ground, all strongly agreed that they were educated
3. Some respondents that agree to waste being thrown on the ground do think the waste is properly taken care of, whereas some also don't think that the waste is properly taken care of.
4. A rather **positive relation**, i.e. the people that throw waste on the ground all agree that the government should provide more dustbins.

5.4.6 Opinion on participation

Participation is said to be the linking tool in creating a better and cleaner environment. It is therefore logical to want to know if the inhabitants think that participation (in its general meaning) is important. The results of the questionnaire summarized in the table 8 show that in general respondents are very positive about the concept.

In Ayigya Ahenbronu, 96% of the respondents like to participate, and of all respondents another 87% thinks that through participating they create good relations with other inhabitants. Last not least, an extremely great number of respondents (i.e. 91%) find that they should set up a system in order to clean the community regularly, which in fact can be a starting point for participation. Somewhat disappointing is the fact that 44% of the respondents state that they mostly don't have time to contribute.

In Aboabo 2, the situation is almost similar. Here 95 % of the respondents indicate they like to participate, 89% find that participating enables good relations with other inhabitants, and 88% find that they, as inhabitants, should set up a system to clean the community. However, an even larger percentage than in Ayigya Ahenbronu (56% of the inhabitants) state that mostly, they don't have time to contribute.

One worrisome fact concerning creation and execution of participation concerning (for example) cleaning the community, is the division of tasks between the actors (inhabitants – government – civil society). As it is difficult to organize something, or to set up a system, decisions about who plays which role have to be made.

The only collected information that can provide an insight in this situation is the opinion of the respondents on the role of the government. In the following chapter the exact role of this actor (the government) will be explained. Here the results of the question are summarized in the table 8 and are analyzed hereunder.

In Ayigya Ahenbronu, 91% of the inhabitants agree that the government educates them, and 98% finds that the government should provide more dustbins. However, a (re-appearing) level of inconsistency among the inhabitants is shown when discussing whether the government should clean the streets; 47% agrees that this is the government, and 53% disagrees.

In Aboabo 2, the opinion on education and on providing more dustbins is more or less similar (87%, 93%). However, a large part of respondents, i.e. 84%, thinks that the government should clean the streets in the community.

In fact, the answer to who should clean the streets in the community is not easy. The government should to some extent ensure that the city is clean; it are so-called sanitary workers who should seek to this. However, the budget of the government does not always permit this. Furthermore, the government has also issued a by-law on cleaning. In this bylaw (see appendix 9) residents are demanded to clean the frontage of their store, and house, including the gutters.

Therefore the answer to who should clean the streets lies in between the factors of availability of money and taken responsibility. However, the answers of the respondents in both communities show that inhabitants of Aboabo 2 are more inclined to have the government clean the streets. As can be recalled from previous analysis in 5.2.3, respondents in Aboabo 2 tend to think that the government should help towards development, more often than that the inhabitants of Ayigya think this.

Opinion on participation

Opinions	Agree – strongly agree		no opinion		Disagree – strongly disagree	
	Ayigya	Aboabo	Ayigya	Aboabo	Ayigya	Aboabo
<i>I like to participate & contribute</i>	96	95	/	1	4	4
<i>Trough participating I create good relations with other inhabitants</i>	87	89	/	3	13	8
<i>I mostly don't have time to</i>	44	56	/	9	56	35
<i>We should set up a system to clean the community regularly</i>	91	88	4	1	4	11
<i>We're educated by the government on health and hygienic matters</i>	91	87	2	4	7	9
<i>The government should clean the streets in the community</i>	47	84	4	1	49	15
<i>The government should provide more dustbins</i>	98	93	/	1	2	5

5.4.7 Opinion on the house to house collection method

The communal container system discussed above is the method used in other to service the two communities. The commonly agreed upon opinion of both the government and the civil society is that this system is an improvement over the crude dumping method of dealing with solid waste. However, especially the government in cooperation with the WB has other ideas concerning dealing with the solid waste in the community. One of these ideas is setting up the so-called h2h collection, an idea of the government again in cooperation with the WB, in which every house is to buy a container and this container is emptied on given times. The second and associated idea is setting up a tax system, also an idea of the government, which requires the households to pay a fee to the company collecting the waste. Both these ideas have been introduced in chapter four.

In earlier research on the waste management in the city of Kumasi and in the city of Accra, Post (1998, 2001) concluded that the opinion of the people should be asked and taken into account. First of all because this is also what urban management is about; in urban management popular participation is strived for and popular participation includes a role for the people. Secondly knowing the opinion of the people may make it is easier to gain access to them which also can make it easier to introduce systems to them.

In the questionnaire inhabitants were asked what they thought of the h2h collection scheme. Here it must be noted that through observation inhabitants have sometimes already formed an opinion on the system, its advantages and disadvantages. In New Ayigya, a middle to high income community on the east border of Ayigya Ahenbronu, and in Asawasi, a middle to low income community built by and for state employees in the 30s and 40s, on the west side of Aboabo, the system has already been introduced.

The tables 9 and 10 reflect the opinion of the inhabitants. This opinion is split in two parts. The first part concerns the opinion on buying the necessary private container (and why), the second concerns the opinion on the fee for the collection (and why). The opinion concerned the most important argument of the respondent.

In Ayigya Ahenbronu, 29% of the inhabitants don't want to buy/rent the container, necessary for the system. Of those who don't want to buy / rent the container, 33% finds that the government must pay it, 33% cannot afford this, 25% thinks the waste will not fit in the container, and 8% prefers the current system. Of the 71% that want to buy the container, the largest part likes to either rent the container or pay for it in 20 terms. To continue, the largest part (78%) indicates that they will buy/rent the container because they like this system.

In Aboabo, 41% of the inhabitants say that they do not like to buy/ rent the container. This is ten percent more than in Ayigya. The indicated reason to why they do not want to buy the container are more diverse, i.e. a combination of all possibilities (see table).

On buying the h2h container

Opinion on buying the household container (results in %)	Ayigya A.		Aboabo 2		
<i>We buy the container for 65,000</i>	13		16		
<i>We buy the container for 40,000 in 20 terms</i>	27		9		
<i>We rent the container for 5,000 per month</i>	29		33		
<i>None of the above</i>	29		41		
Why? (Results in %)	Cross Table Opinion * Why		Cross Table Opinion * Why		
		Yes (71%)	No (29%)	Yes (59%)	No (41%)
<i>I think it is a good system</i>	57	78	-	45	77
<i>I find that the government must pay this for me</i>	14	6	33	7	16
<i>I think the waste will not be picked up</i>	7	-	25	12	19
<i>I cannot afford this</i>	16	9	33	12	16
<i>I like the current system</i>	2	-	8	9	23
<i>I think that the waste will not fit in the container</i>	0	-	-	1	3
<i>Other reason, please specify</i>	4	6	-	13	23
Totals (numbers are rounded off)	100	99	99	99	100

Other reasons; In Ayigya; the elders should decide, waste is important. In Aboabo; I don't like the system (3x), can find own place, police has to arrange this, we live near the current container, we need a bigger container for the system, the containers are too small (2), the government should help by subsidizing, we already pay taxes, the government should therefore pay for this system!

In table 10, the opinion on the payment of a fee for the collection is summarized. In Ayigya, the majority (64%) of the people agrees to pay a fee. In Aboabo, a little over the majority does not like to pay a fee. Of those that agree to pay a fee, the inhabitants of Ayigya Ahenbronu are inclined to pay more than the inhabitants of Aboabo 2.

In Ayigya Ahenbronu, the reason for a certain choice concerning payment of a fee is quite similar to the reason given concerning the payment for the container. The only difference is that more respondents think that the government should pay the fee, and less think that waste will not be picked up. In Aboabo 2, the choices "I don't want the system" and "I want the government to pay for me", are the most popular. Furthermore, it is again a combination of reasons. The table shows this more in depth.

A remarkable point is that the inhabitants of Ayigya Ahenbronu who do not want to pay for the container or for the collection, often find the government must pay for them (respectively 33% and 50%), whereas in Aboabo 2 the percentages are smaller (16% and 30%). This is quite contrasting with earlier analysis, in which the inhabitants of Aboabo wanted the government to pay / do more.

On paying a fee

Opinion on the fees for the house-to-house collection service (results in %)	Ayigya A.		Aboabo 2	
<i>pay as much as is needed</i>	9		8	
<i>pay 25.000 a month</i>	25		12	
<i>pay less than 25.000 a month</i>	30		29	
<i>none of the above</i>	36		51	
Why? (Results in %)	Cross Table Opinion * Why		Cross Table Opinion * Why	
	Yes (64%)	No (36%)	Yes (49%)	No (51%)
<i>I think it is a good system</i>	57	89	33	68
<i>I find that the government must pay this for me</i>	18	-	15	30
<i>I think the waste will not be picked up</i>	2	6	7	11
<i>I cannot afford this</i>	11	31	8	11
<i>I find the Amount too high</i>	5	7	-	-
<i>I don't want the system</i>	-	-	13	26
<i>I think that the waste will not fit in the container</i>	-	-	3	3
<i>I like the current system</i>	5	12	9	18
<i>Other reason, please specify</i>	2	4	12	3
<i>Totals (numbers are rounded off)</i>	100	100	100	102

Other in these cases include; Ayigya A.: we cannot afford more, we must initiate and the government must supplement it but they have to come everyday! Aboabo 2 ; we already pay tax, we want to pay the right Amount, its economical, we have no money, that is what we can afford (4), I rather want my child to carry the waste that me paying for it, the government is not doing it right now, in Asawasi it is not working

In the last table (11), the percentages of both, the inhabitants that want to buy the container (or not), and the inhabitants that want to pay a fee (or not), are compared via the use of a cross tabulation. From this table it becomes clear that the fee collection seems to be the point with which the inhabitants have the most trouble.

Furthermore, it is obvious that inhabitants of Aboabo 2 are less willing to adapt to the system than the inhabitants of Ayigya Ahenbronu. A possible reason is that in Asawasi, the community next to Aboabo, the h2h system seems not to work. The containers are not picked up / emptied often, waste is often spread around, and the inhabitants of Asawasi complain. The h2h system in Ayigya is used by the somewhat richer part of the population, and problems with the system are less obvious. Another reason concerns the role and opinion of the leaders in the community. This will be explained more in depth in chapter seven.

Cross tabulation container * fee

Cross tabulation on fee & container for h2h (results in %)					
Ayigya A.	container "yes"	container "no"	Aboabo 2	container "yes"	container "no"
<i>fee "yes"</i>	64	9	<i>fee "yes"</i>	49	9
<i>fee "no"</i>	0	27	<i>fee "no"</i>	0	41

5.4.8 *In summary*

Opinion and behaviour are difficult to analyze. Yet in the above standing paragraphs it is tried to analyze a multitude of topics concerning inhabitants and waste. First of all it must be said that despite it has been tried to find links between the basic characteristic of a respondent and his behaviour or attitude, no relation could be found. I.e. it is not the position in the household, the age, etc that can be linked with a certain type of behaviour / opinion.

Secondly, the following can be said in summary about the inhabitants;

- On disposing over solid waste;
 - o Respondents of both communities indicated to use the communal container often, this behaviour is normal to good
 - o Some respondents of Aboabo 2 indicated that they use the dump at the Dagomba line, outside their community, for this a solution needs to be found.
- On community clean ups
 - o Whereas the majority of the respondents participate in the clean ups, the participation & the frequency is larger in Ayigya Ahenbronu than in Aboabo 2
- On cleanliness
 - o The differences in opinion on the level of cleanliness are extraordinarily large.
 - o 100% of the respondents in both communities find that (a) it is important to keep the community clean, and (b), it is also their duty as inhabitant to keep the community clean
 - o It can be said that the opinion of the inhabitant **in both communities** is rather contradictory and inconsistent, half of the people finds that the community is clean and the other half finds that the community is not clean
 - o A rather large percentage of the inhabitants find that the government should clean, at least the roads, for them. The argument they use most often is that they pay taxes
- On throwing waste on the ground
 - o Whereas the percentage of respondents that agree to throwing waste on the ground is small, it still is striking that there are respondents that agree to the practice
 - o The opinion of the respondents on throwing waste on the ground and their opinion on other aspects of hygiene is not very consistent.
- On participation
 - o Almost all inhabitants **in the two communities** state they like to participate
 - o In both communities a group of respondents state that they mostly don't have time to participate; in Aboabo 2 this group is larger (56% state so), than in Ayigya Ahenbronu (here 44% state so)
 - o Of all respondents 47% in Ayigya Ahenbronu finds that the government should clean the streets, whereas in Aboabo 2, 84% finds this.
- On the h2h system.
 - o It becomes clear that the fee for collection seems to be the point with which the inhabitants have the most trouble. Respondents often find that the government should pay this fee as they already pay the tax.
 - o It is obvious that inhabitants of Aboabo 2 are less willing to adapt to the h2h system than the inhabitants of Ayigya Ahenbronu; in Ayigya Ahenbronu 64% agrees to both paying a fee and paying for the container, in Aboabo 2 this is 49%

5.5 **Summary on the role, vision, and opinion of the inhabitants**

Upon the role of the inhabitants in the community

- The main difference for the inhabitants between both communities is the size of their community, the location of the community, the background of the inhabitants, and the religion of the inhabitants
- Overall, both communities are low income communities, and as a result its inhabitants suffers from a general lack of means, services, and income
 - o In both communities many basic services, such as infrastructure, electricity, and water, need to be developed
 - o Of mayor concern is the lacking development of infrastructure (roads & gutters) in Ayigya Ahenbronu
- The system for solid waste management has been improved since the adoption of the communal container system, but this system also has its shortcomings for the population
- Location of the communal containers is difficult

- The number of containers placed and the frequency of collection is too low

Upon the vision and opinion of the inhabitants

- The inhabitants have formed a paradoxical opinion on the waste in the community yet no relation with any type of character can be linked with this paradoxical opinion.
 - o Because the inhabitants pay taxes to the government, they also find that the government should play a role in cleaning and in providing service for cleaning
- The inhabitants furthermore indicate that they like and are prepared to participate and to set up a system for cleaning the community, however, half of the inhabitants says to have no time to actually contribute
- In Ayigya Ahenbronu 36% does not like to adapt to the h2h system and all the given consequences, in Aboabo 2, this is around 51%.

6 Actor 2: The local government

6.1 Introduction

In this chapter the role that the local government plays in the field of waste management is explained. It is evident that the management of waste, and in this case solid waste, in a poor country such as Ghana is no easy task. It is mainly via the 1993 neo-liberal promoted decentralization of governmental authorities and the resulting quest for more valuable partnerships with businesses as well as civil society organizations that the government is trying to manage the situation.

In setting up and working along these newly imposed structures, many factors that influence the success or the failure of the new form of management come to light. Examples of factors of influence are the establishment and maintenance of the partnerships with first of all civil society organizations such as; development institutions as the World Bank (WB) and the United Nations (UN), non governmental organizations (NGO's), community based organizations (CBO's), and business, secondly the communication for new projects and policies to the inhabitants (mainly via the use of the A.M.) and thirdly the use of technologies, experience, education, money - income, and equipment.

In the here following chapter the way that the government manages waste and relates to the above mentioned factors, both on paper and in reality, is described. The results will enable a discussion on the effect of partnerships from the side of the government.

6.2 Organization Waste Management: Who is responsible?

As the name indicates, it is largely via the Waste Management Department (WMD) that the government manages the waste. In Kumasi this department falls under the supervision of the local government, i.e. the Kumasi Metropolitan Assembly (KMA), and the there above lying Ministry of Local Government and Rural Development (MLGRD). The KMA controls the performance and the budget of the department via the so-called environmental health subcommittee (EHC), and the MLGRD sets the guidelines for management of the waste.

This organizational structure exists since the late eighties, when the Metropolitan Assembly of the country's capital, Accra, (AMA), commissioned her Waste Management Department, which was followed suit by the other cities and communities throughout Ghana, and was established as policy in 1993. The commissioning of the departments, and the resulting structure of management, was one move towards the decentralization of the management functions of important services. (Danso, 2004) The figure on the decentralization process will enable a better understanding of the entire situation.

However, the mere act of commissioning a department will not ensure a better management per se. With population still on the increase but no effective means to collect or dispose over the waste, its management became an even larger burden for the cities in the nineties. The generally heard quest for more effective management led to a nation wide workshop in may 1999 during which a general policy, the Environmental Sanitation Policy (ESP), was established. The most recent version of this policy dates November 2001 and is still in use. As this policy provides the general guidelines it is clear that both the KMA and the WMD are supposed to follow it.

Next to this guideline the KMA (and later also other Metropolitan Assemblies) with the help of the World Bank's (WB) Regional Water and Sanitation Group (RWSG-WA) have set up their own strategy for sanitation along which the WMD should work; the so-called Strategic Sanitation Policy (SSP). At this moment the city of Kumasi follows the Second Strategic Sanitation Policy, which runs from 1995 – 2005, and this is in-line with the principle of the SSP which says that priorities change over time and strategies can be refined as experience is gained. (Salifu, 1998). However according to its director, for the WMD the SSP consists of many specific issues and has proved to be difficult in execution especially due to the limits of the budget.

In direct relation to this strategy is the Urban IV project that aims to improve the sanitary situation and is sponsored by the World Bank. Part of the project has already been carried out under the name First Urban Environmental Sanitation Project, and recently the Second Urban Environmental Sanitation Project is launched. Under this project specific urban parts of the city are being upgraded, constructed, or renewed in order to improve the level of general services under which the waste disposal. Popular in the project is the privatization and individualization of the picking up of waste via house-to-house collection. (Salifu, 1998)

It becomes clear that the nation has established a policy that needs to be executed mainly by local governmental forces which thus ensures the decentralization of management tasks. Also help and structures from (international) donor institutions such as the World Bank play an important role in renewing management and tasks. The main questions to be answered in this chapter thereby become; (1) how the local government manages the solid waste (2) what can be stated the effect of this management.

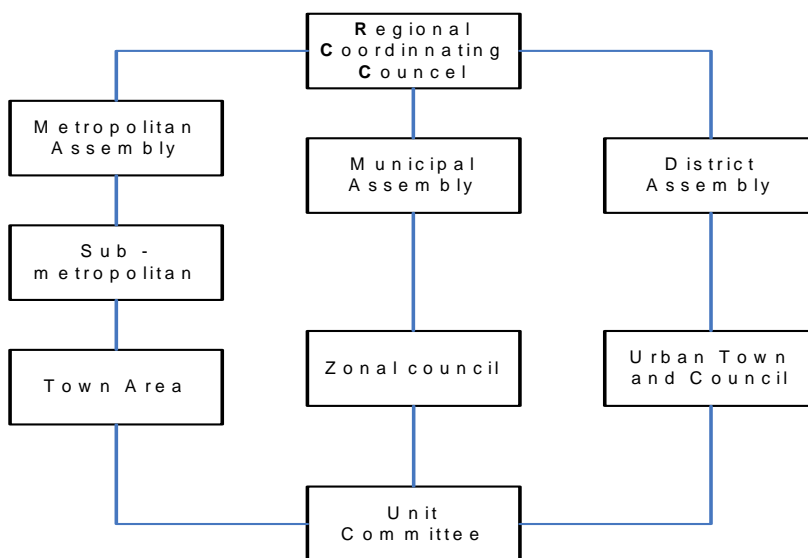
6.3 About the local system of governance

Before continuing the discussion on the role of the WMD and KMA, the local system of governance will be shortly explained. In the previous paragraph, it was mentioned that the Ministry of Local Government and Rural Development (MLGRD) oversees the WMD. This is only one of her tasks as in fact this ministry over sees the entire structure of local governance.

In its daily functioning, the KMA is overseen by the Regional Coordinating Council (RCC), which stands on top of the Ashanti district. Rather than political and policy making, this council is an administrative and coordinating body, part of the larger civil service which through time has always been in charge of creating ministries and departments. (1996, MLGRD). The figure shows the RCC and its decentralized councils.

The decentralization structure

Structure of Regional Co-ordinating Councils in Ghana*



(Source: Inkoom et al (2001))

The manner of decentralisation for a **metropolitan area** can be found on the column on the left. Kumasi would fit in this column. Accordingly the middle column shows the situation for **municipalities** and the right column shows the decentralisation for districts. The last row of decentralisation is the Unit committee this committee exists in every **community** in Ghana and is the lowest form of decentralisation.

The legislative and executive/administrative organ of the Kumasi Metropolitan Assembly is the Assembly (the metropolitan assembly in the figure). This Assembly is made up of 87 people in total; 60 represent a community in the city of Kumasi and are elected by the people of the cities many communities, the other 27 are appointed by the central government.

The Assembly is led by the chosen presiding member and is overseen by the Metropolitan Authority (MA). This Authority consists of several Assembly members and is the executive function of the Assembly. The Metropolitan Chief Executive (MCE) is on top of this authority. In official terms, his role is *“to provide efficient, effective, political, administrative and development management leadership to ensure balanced and sustainable development of the district.”* In reality, it has become obvious that a lot of power lies with this man. He determines where he puts his signature and which actions he likes to see executed.

Next to the MA there are a number of subsidiary committees that oversee locally controlled departments, these committees are called “sub committees” and are made up of assemblymen. A good example in this case is the **Environmental Health Subcommittee**. As discussed in the previous paragraph, this committee sees over the work of the WMD. (1996, MLGRD) the role of this committee will be explained more in depth in a following paragraph.

Another important person, next to the MCE, is the District Coordinator. He is appointed by the Ghana civil service and stands on top of the so-called Office of District Assemblies (ODA). His function is described as being *“at the nerve centre for the administrative activities of the Assembly, the key role is to ensure that Assembly policies and bye-laws and that of the country are operated and complied with in the most effective and efficient manner through effective coordination, organization, advise and supervision.”* Important to note in this case is that all departments that fall under the metropolitan assembly have to implement decisions of the assembly and have to submit quarterly reports to the metropolitan authority and appropriate subcommittee, through the ODA. The WMD is one of these departments and thus has to comply with the ODA terms. (1996, MLGRD)

To elaborate more on the assembly, its members, and further structure of managing / governing the city of Kumasi, it is necessary to envisage the entire city. Kumasi, counting at least 1, 2 million inhabitants, can be subdivided in 4 zones; Bantama, Asokwa, Subin, Manhyia. These four zones each have a separate council, called the Sub Metropolitan District Council (see figure above). The idea behind this is that the socio economic, urbanization and management problems are easier to cope with on a sub metropolitan level. The sub councils can be split into several town councils, of which Kumasi counts 24 in total. Under this division of town councils the city’s many unit committees presenting all its communities can be found. Especially the last mentioned town councils are at this moment still at their infancy; at the time of the research not all 24 have been installed.

Each community counts an elected assemblymen and a unit committee (recall from the last chapter that both Ayigya Ahenbronu and Aboabo 2 have such an assemblyman). As discussed above a total of 60 assemblymen make up the largest part of the city’s Metropolitan Assembly. The unit committee together with the assemblymen forms the base structure of the new Local Government System. (1996, MLGRD) the role of the assemblyman and to a smaller extend his committee will be explained later in this chapter.

The main obligation all these government officials have, in parliamentary language called the “Standing Order”, is made for the orderly conduct of business of any formal organization to guide the members as well as the officials. This Standing Order valid for District and Sub District Assemblies, Town Council and Unit Committee relates to the venue of meetings, times for meetings, notification of meetings, and agenda for meetings and rules and manners for discussion at meeting among others. (Training A.M., EU HR development program). Yet however well imposed, in reality especially the members of the unit committee do not comply with this order. It is a therefore a good question to which extend this influences the effectiveness of the local governance structure. But this can only be done ones we have analysed the roles of the actors more in depth.

At this point it can be concluded that the council of the city of Kumasi is built around the assembly, and that the assemblymen and their controllers are the principal parts of the local government structure. The MCE can be seen as the centre point of all actions; his decisions determine to a great extend what can be accomplished. However, because the structure of first of all the Metropolitan Assembly, secondly the Sub Metropolitan Council, thirdly the town council, and fourthly the unit committee the system extends to all inhabitants of Kumasi. Thus to conclude, the system can, in theory, be called truly decentralized.

6.4 The waste policies and projects

6.4.1 *The Environment Sanitation Policy in short*

As stated in the introduction of the Environment Sanitation Policy (ESP); the Ghanaian government finds environmental sanitation an essential factor contributing to the health, productivity and welfare of the people, and it is therefore a key element in the program of economic and social development “vision 2002”.

According to the ESP, the current environmental sanitation status of Ghana leaves much to be desired. It is for example mentioned that less than 40% of the urban residents are served by a solid waste collection service. The underlying causes for a weak sanitation have been summarized in eight points, ranging from a lack of a clear national goal or vision to a lack of manpower. Yet despite this, the targets for the year 2020 are very high. One of its targets is for example “All solid wastes generated in urban areas are regularly collected and disposed of in adequately controlled landfills or by other acceptable means”, and more of such targets are included. This means that the attendants of the workshop and the MLGRD must see a bright future.

The role of the community is also included in the policy. The government is of opinion that ensuring a good sanitation is the responsibility of all citizens, communities, private sector enterprises, NGOs and institutions of the government. She continues by saying that all these actors have an essential part to play in maintaining a high standard of environmental sanitation so that domestic and commercial activities have no prejudicial effect on the health or the living and working environment of others. Hereby the role of the community is split in individual and communal responsibilities.

The individual responsibilities include cleansing of immediate environs, storage of waste, disease-breeding prevention, prevention of pollution from activities, hygienically disposing of all wastes, and participating in all communal environmental exercises. All individuals, institutions and establishments are demanded to respond to them, and in case of failure, competent authorities shall take any necessary action. Collective responsibilities are separated in community programs and community based organizations. Hereby the programs of the community are aimed to provide for a clean environment.

The roles and responsibilities of the institutions are also explained. There are two principal government sectors responsible for the management of sanitation; the MLGRD and the KMA. However, there are also some (*so-called*) allied sector governmental institutions that carry some responsibility concerning guidelines and education. Next to this the private sector is said to provide the bulk of environmental sanitation services. NGOs and CBOs are mentioned to be part of this. But it's also stipulated that the public sector shall always maintain adequate capacity to provide not less than 20% of the sanitation services. Emphasis is further put on adequate human resources (know-how, support, advice). Whereas the word partnership is not mentioned here, it becomes obvious that it is aimed to establish valuable relation with other actors.

Lastly, the ESP emphasizes that an important part of ensuring proper sanitation is through the protection of the environment, which is a joint responsibility of all actors. Especially by use of by-laws, the people are to come to understand and accept their responsibilities. When people are found not to act in correspondence with the law they can face legal action through the court, as system of legislation and law enforcement is set up to regulate the rules. In reality this system lacks strength and has to deal with corruption and bribing factors.

6.4.2 *The Strategic Sanitation Plan*

In the above ESP it is mentioned that every city or district should have a Strategic Sanitation Plan, and that this plan needs to be updated when possible. The Strategic Sanitation Plan (SSP) of the city

of Kumasi was one of the first in its sort and has gained much notoriety, merely for these reasons the plan has been analyzed many times.

Time and experience learned that the first version of the plan was not very good, mainly because it lacked financial back up of the actions that were mentioned. Because the government came to understand that she needed to financially support the diverse municipal and metropolitan assemblies, the second strategic sanitation plan was received better.

However, according to the actors involved, the problem of funding is still the major concern for the SSP. In a recent newspaper article of August 2004 it was announced that the fund for the local government, (DACF), will increase from 5% of the income of the central government to 7, 5%. (Mainly as result of the benefits from the HIPC) According to local government officials this will contribute to the effectiveness of their system and hence their actions.

6.4.3 The Urban Environmental Sanitation Project

The Urban Environmental Sanitation Projects are executed by the World Bank and fall under the greater Urban IV project. The first Urban Environmental Sanitation Project ran from 1996-2002. Currently the second Urban Environmental sanitation project is being executed.

For the scope of the first project, which sought to try to privatize and individualize the picking up of waste by house-to-house collection, Kumasi was divided in seven zones. (See map in appendix 8) WMD, KMA and the WB selected the zone that was most suitable to the implementation of the privatized house-to-house collection. Because the project would include fee collection for the house-to-house pick up of waste by a private company, the selection of the zone was largely based on the criteria of average income per household.

The project showed positive results. The waste was successfully collected and the people paid for the service. However, there was one major constraint; the private company picking up the waste, in this case Waste Group, worked under franchise to carry out its work and was therefore to be paid for its service by the KMA, and since the fee collection did not equalize the expenditures the KMA needed to make up the deficit herself.

Despite the general shared opinion at the local government is the house-to-house collection system is a good manner to dispose over the waste of the households. Therefore under the Second Urban Sanitation Project a new zone is selected and dustbins are provided to the households. Plans are to introduce the house-to-house system to all communities in the city. Experience by the direction of WMD learned that the first year of service is mostly quite stable which allows for the people to embrace the system.

6.5 The larger context: Urban Management

In the previous paragraphs, plans to manage the waste in Kumasi made by various government authorities in cooperation with third parties such as the World Bank are described. As might have become clear, the plans for the improvement and management of the sanitation are written with a certain philosophy in mind. Decentralization, privatization, and responsibility for the inhabitants and all (associated) civil society organizations, are reoccurring themes throughout the plans. For example the entire manner of seeing and coping with sanitation in the ESP is very much in line with the thoughts of the WB, UNESCO, and other large international organizations, who all urge for effective governance.

The plans can therefore be related to the neo-liberal principle of development where the market is said to be an effective instrument to lead to development, and they can also be linked to the concept of urban management. Whereas it is not within the scope of this research to analyze the use of urban management in depth, a mere understanding of the concept and its context enables a better understanding of the role of the government and its departments, especially when speaking about participation.

To recall; Urban Management and associated concepts of importance have been analyzed and interpreted by many and there is no generally shared definition of how urban management should be executed. Yet the most important feature of this new concept is its dynamic nature. The three dimensions that Post has distinguished, i.e. the object, the objectives, and the actions, are allowing this new method of planning to be both flexible and focused. In the box hereunder these are explained by linking them to the actual situation of waste management.

Here it must be stressed that on the one hand the role of the government becomes increasingly more facilitating, i.e. she is involved in setting up structures and policies and institutions, while on the other hand, she moves away from her involvedness in projects.

Object-Objective-Action

Management of Waste by Object, Objective and Action

Where in theory the object refers to the collection of activities that take place in an urban arena, in this thesis *the object* can be limited to one type of activity; i.e urban sanitation, and more specifically the treatment and management of solid wastes in the communities Ayigya Ahenbronu and Aboabo 2.

As the principal of urban management is to prioritize the objectives in order to prevent from wanting too much or striving for conflicting objectives, this also needs to be done for solid waste management. The objectives are *project objectives* that take on meaning because they are connected to a substantial propose (plan), for example, the provoking “introduce house to house collection of waste to households in qualifying communities”.

Actions, the last part of the concept, differ from time to time. In our case actions is for example an experiment with the house-to-house collection scheme

In conclusion; urban management is a manner the government can use to literally manage the city. And in order to manage she divides the activities that are going on in the city into objects from which realistic objectives can be formed and where after action can be taken.

The challenge is to define new roles and responsibilities in specific urban situations for all the actors involved notably the public sector, the private sector, and social non governmental sector. This philosophy can very well be found in the environmental sanitation plan, where the government stresses that participation must be sought in the private as well as non-governmental sectors.

In the beginning of this paragraph privatization, decentralization, and responsibility are mentioned as recurring points in the planning of sanitation in Kumasi, and these concepts seem to part of the contents of the concept of urban management as well. Yet, these are not the only points around which urban management is analyzed to be made up. In total Post (1997) identified six reoccurring principles that apply to urban management. In these principles many similarities with the plan for management of Kumasi can be found.

The six reoccurring principles for urban management and their links with the ESP and SSP are the following;

1. The approach insists upon using local representation. In Kumasi this is done by using an assemblyman in every community to coordinate and manage its neighbourhood, this will increase awareness of the role of politics.
2. The approach includes the plan popular participation (empowering type of planning). This reoccurs in the above standing policy.
3. The approach insists on the strengthening of local government, it is obvious that this is done in Ghana as a whole and in Kumasi more specifically.
4. The approach is based on reappraisal of economic significance of cities in national development. Through using partners and opting for privatization the government influences this. And she probably has many more tools in use.
5. The approach involves a plea for a resurgence of the market. Again through using partners and opting for privatization the government influences this.
6. The approach recognizes importance of urban management per se. This is often stressed in the plans and policies of the government and also of donor institutions as the WB

It can be seen that much of what is now happening on the field of planning for sanitation fits in the frame of the concept (and above mentioned principles) of urban management on paper. The reality

of the waste management situation will help to come to understand the effect of the manner of planning for solid wastes in Kumasi, and more specifically in the two communities.

People, objectives, and urban management

People, objectives, and urban management

Following basic principle number two of urban management, i.e. popular participation, setting project objectives needs to follow this principle. Meaning that when discussing about objectives participation must be sought.

During the interviews with the WMD it became clear that their primer objective is to introduce h2h to all communities. The director commented that other parties such as the private market, and the civil society were asked for their opinion.

In a household questionnaire inhabitants were asked if they'd like a new system and if they would pay for it. They said they would. But according to the WMD director the fact that people say yes does not mean they actually agree, he added that "when the time is ripe they usually resist". The analysis of the opinion of the people in chapter 5 shows what the people actually think of the system. The opinion of community leaders will be discusses later.

6.6 The role and position of the Waste Management Department

6.6.1 Organization of the WMD

Organization by object, objectives, and action

The waste management department has to ensure that the solid waste in the two communities is managed. The above introduced classification of urban management can be used here to show exactly what role the WMD has. The thereupon following description and analysis will show the accompanying tasks, and the advantages and disadvantages in practice.

The OBJECT:

- In official terms the mission statement of the WMD is **"to keep the Metropolis clean and healthy, by ensuring the efficient and effective removal and safe disposal of Solid and Liquid Waste from all premises and public spaces, to create an enabling environment for development and recreation."**

The OBJECTIVES: (according to an existing list of tasks)

- Keep the metropolis tidy
- Clear away mess and nuisance
- Develop and continuously update a metropolitan environmental sanitation plan
- Educate the public on how to keep the local environment clean
- Provide conveniently situated refuse disposal points
- Remove solid waste
- Dispose of waste safely
- Identify needs for public toilets
- Manage public toilets
- Manage promotion and subsidy programs for household toilets
- Evacuate liquid waste from homes and public toilets
- License and enforce standards on private liquid waste haulers
- Manage silage disposal
- Cleanse and carry out routine maintenance of drains.

The ACTION: these are diverse and can include the following;

- It is the solid waste manager that has to ensure the chosen system for waste collection works
- A private company will ensure that the collected solid waste in the communities is collected and disposed.
- Workers will ensure, to the extend that the budget allows it, that the surroundings of the community are kept clean.

The organizational chart

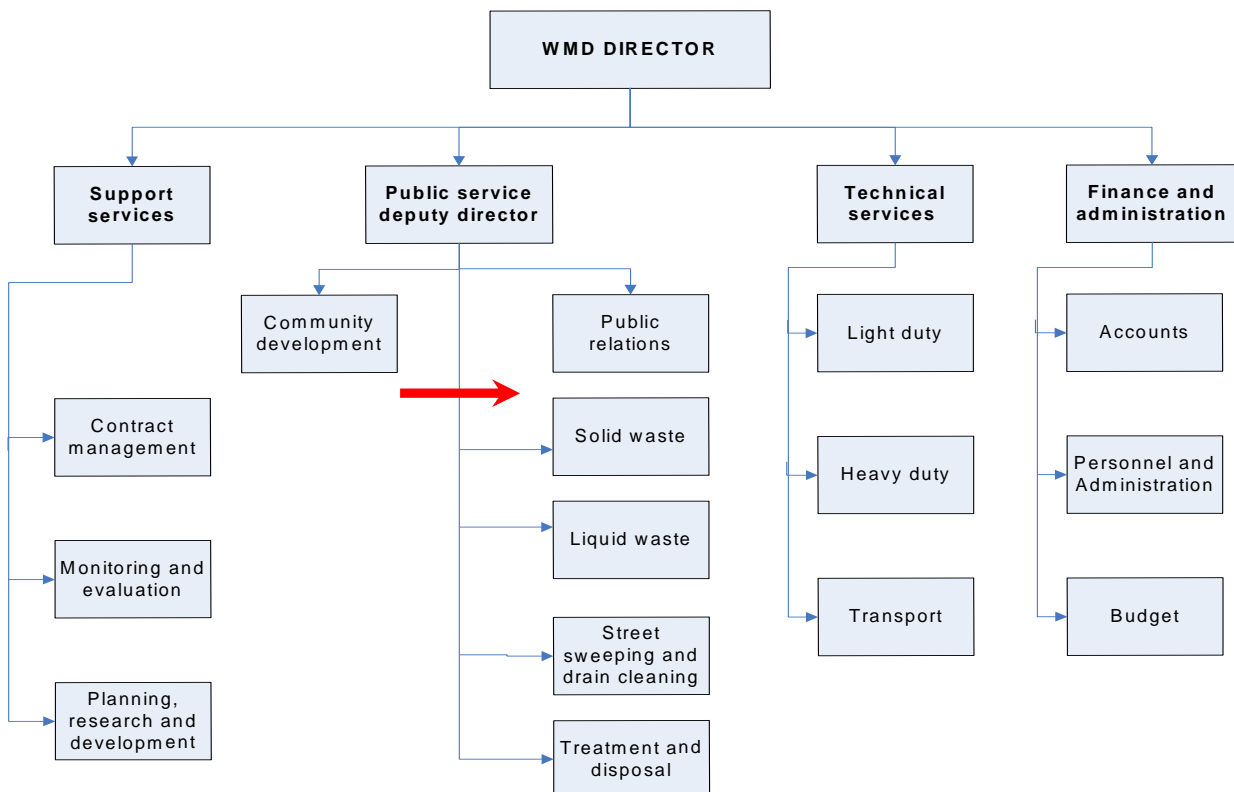
Via the organizational chart of the WMD it can be found out who should do what. The chart in use by the WMD is identical to the chart included in the Environmental Sanitation Policy. The picture hereunder is a replicate of the chart of the WMD.

At the top of the WMD stands a director and hereunder four separate divisions are placed. It is estimated by the direction that a total of 400 persons are working in the entire department. About 150 of these are communal sanitation site guards, 50 are sweepers, 50 are labourers that handle liquid waste, and 150 are mechanics, drivers, officers, top managers and other employees.

The division of public services is estimated to be the largest division of the four. It can be split into six separate units, and one of these units is the management of solid waste. Here a general solid waste manager is responsible for all affairs concerning solid waste, under him four line officers are each responsible for a separate part of the city. The exact role of the solid waste manager and of the line officers will be described later.

In Kumasi many of the solid waste collection services are contracted out and it is the division of support services that is responsible for the handling of the contracts and the administration. The budget for the department is controlled by the finance and administration division, but much more than calculating the income and expenses is not possible since the budget is tight and is strictly over sought by the environmental health subcommittee. The technical services division literally provides technical management.

Organizational scheme WMD



6.6.2 The employees and their tasks

Introduction

Most of the 400 employees of the WMD are directly hired by the KMA. However, the director and the managers are hired as well as paid by the central government.

The current situation at the WMD pleases all the managers and line officers. But upon visiting the department at various occasions it appeared that the situation was quite complex. In absence of the actual director, the public services manager had taken over his responsibilities and was also still acting as public service manager. This meant that he was very busy and seemed to be running out of

time and energy. In absence of the solid waste manager one of the four line officers was taking over his responsibilities. He, along with many of his colleagues, had time enough to be reading the news paper and to be chatting.

About the responsibilities of the director, solid waste manager and the line officers

The director of the WMD is overall responsible for the functioning of his department. He is responsible for every employee and all the work executed in the name or under the contract of the department, including the private companies (that collect the waste). Further more he discusses issues of policy, and brings it back to the department.

The solid waste manager should seek that the private companies execute the disposal and collection of solid waste as conform the contract. His duty is that in the morning he comes to the bureau and dispatches the workers. With the reports the solid waste manager receives, he will plan the trucks, and ensure that work is carried out.

A line officer must report to the solid waste manager on a daily basis and present reports of all communal container and dumping sites he is responsible for. He must further more write reports about problems, so these can be solved on a higher level. (I.e. illegal dumping) Further he must also promote and educate waste management at the churches or at the communities. Every officer makes its own planning.

The secretary of the solid waste manager is responsible for the maintenance of a complaints box. Any person can come in and report problems on a transfer station/ communal container sanitation site. The assemblymen of both communities use this option for complaining about the service.

About the responsibilities of the workers

Many of the 400 workers are working in the field to clean & sweep, and to guard communal sanitation sites. These employees are either casually employed or working on a permanent basis. They earn little and are often paid too late. Both factors cause them to not always do their job. Especially the last named activity, sanitation site guarding, can cause problems when pressure from inhabitants or tipping of the inhabitants or governmental employees is used.

Of the 400 employees it is estimated by the director that 50% works on a casual basis. For the WMD the advantage is that the casuals work hard and effectively. Advantage for the workers is that they have a job to do and income for some time, the thereby belonging disadvantage is that their income is not stable at all. As can be recalled from the preceding chapter, Aboabo 2 has one community side guard that works via a contract. Ayigya Ahenbronu does not have a steady guard.

6.6.3 The equipment and the budget

Limited means

The means of the WMD are limited. A walk on the terrain of the department shows immediately that the equipment that is owned by the department is in a very bad shape. This is also what is being told by all the managers interviewed. There is no money for new equipment, nor enough money for repairing the broken. The income that the WMD receives from the KMA is 4.1 billion cedis (around €410.000,-). WMD is hereby said to consume 1/4th to 1/3rd of the budget of the KMA and is therefore regarded as the biggest burden for the local government.

Yet, looking at the wide range of activities in which WMD is involved explains largely why she “consumes” so much of the budget. The 400 people employed by the WMD are for a large extend responsible for keeping the city clean by sweeping public spaces and supervising sanitary sites. Furthermore they are also in charge of the maintenance (including providing money for fuel) of all vehicles (inclusive maintenance) used by the KMA. On top of that the costs for the communal container system must also be paid from this Amount.

Implications

The fact that the budget and the equipment for the WMD is managed by the KMA and not by the WMD itself, is often mentioned as one of the most tiresome and bureaucratic practices. After the initial budget of the WMD is used, every time there is a need for spending money the WMD has to

fill in her request for money which than has to be approved by the cities deputy director. Allocation of money can than take as long as 2 years to be improved.

6.6.4 Partners

Policy

According to the policy of the MLGRD, ensuring a good sanitation is the responsibility of all citizens, communities, private sector enterprises, NGOs and institutions of the government. All these actors have an essential part to play in maintaining a high standard of environmental sanitation so that domestic and commercial activities have no prejudicial effect on the health or the living and working environment of others.

Hereunder it is explained whom are the major partners of the WMD. The link with the inhabitants of the communities is not described here, but can be found in paragraph 6.8. The Assemblyman of the community is the intermediary between the two parties.

Relations WMD – Civil Society

In practice the WMD (and also the KMA) is working the closest and the most with the World Bank. I.e. the Urban Sanitation Project has led to development of several communities and also to the introduction of the h2h collection scheme, furthermore it was with the help of the WB that the recently opened landfill site could be built and taken into existence. The managers and director of the WMD indicated that the WB will continue to play an important role, whilst advisory on future matters as for example privatisation of the landfill site, whilst as policy setter for yet another sanitation project. In the next chapter, the role and influence of the WB will be explained more in-depth.

Furthermore, since 1996 the WMD works closely with the NGO the Catholic Action for GrAduates (CAGA). The CAGA can be linked with the World Bank and the h2h collection system because it is this NGO that has tested and is still working on the collection system in one of Kumasi's communities (Atonsu). Furthermore the relation with the CAGA has also led to the partnership with the city of Almere in the Netherlands. Almere has donated some containers for the house to house collection experiment in the community Atonsu, and is staying in contact with the cities authorities.

Relation with the private market

In line with the urban management, the ESP suggests that the KMA and the WMD should privatize up to 80% of the collection of waste, and keep 20% of the collection activities.

Reality proofs different; at this moment private companies are performing all collection activities in the city. This means that the collection of the waste is entirely privatized.

The main reason why the WMD has privatized the entire collection system is because the general shared opinion of the government is that this way the service generates income instead of it costing income. (See box). Therefore the ultimate goal of the KMA became to privatize the entire collection system, and provide each house with a dustbin for the house to house collection.

Why Kumasi's waste collection is privatised

Part of the Urban IV project of the World bank involved introducing the h2h collection of waste in the city. Furthermore the project involved introducing the (anonymously decided upon) policy that all inhabitants should pay for refuse collection.

To test the project it was decided to divide Kumasi in seven parts and to select the part with the highest average income as test zone. The private company Waste Group would provide the h2h collection of both the waste and the fees. Results were positive. The service of Waste Group proved to be regular and fees were collected without any problems.

The following companies are currently working in the city:

- | | | |
|---------------------------|------------------------------|---|
| - Kumasi waste management | 4/7 th of Kumasi | 2000 |
| - Sak-M: | 1/7 th of Kumasi | 200?, doing the central business district |
| - Waste Group: | 1/7 th of Kumasi, | 2001, directly under the world bank, |
| - ABC: | ?? | 2001 |
| - Meskworld: | 1/7 th of Kumasi | 2003, Also Ayigya and Aboabo |

The case of the private company without contract

As already mentioned in chapter four, some companies work without an officially signed contract. This means that the company does not receive income for its work. Of the above mentioned companies, Meskworld is the only company that does not have a contract. This same company is “responsible” for the collection of the waste in the (*low-income*) communities of this research. The company came to the city of Kumasi in 2003 and was assigned zone 5. At that time the contract was prepared but the MCE never signed the contract.

Trough other interviews and trough evidence in the literature it became clear that the position the MCE takes is a true problem in the way to effective local governance. The relation with the MCE has often been constrained by the quest for power by the latter

To the question why Meskworld continues to work in Kumasi, the company replies that they have good hope that, as they continue to do the job of collecting waste in the communities they now serve, they will be assigned a contract soon. Getting a contract is not easy in such a big city as Kumasi. In order to have a chance the company must show they can achieve valuable results. They are a middle sized company based in Accra with subsidiaries in other cities of the county. Through experience they hope to grow, and they hope that they are assigned a contract soon.

When private companies want to work for the WMD they have to apply and write a proposal. In the proposal, they must show to have fulfilled the following points:

- Register at the registrar general department
- Be registered at the Social Security Initial Insurance Trust
- Describe the Income task
- Dispose over labor certificates (so that they can register as workers)
- Must have at least 5 years of experience
- Register at the KMA

6.6.5 Opinion of the director and managers on the strategy

Opinion of the Director

The director is rather negative about the current manner of working. His department cannot control the frequency of collection because of a lack of money and equipment. He adds that not the WMD, but the KMA exercises control over the means and the collection, and hereby politics play a large role. He furthermore adds that he finds that there is no equal partnership; it is the KMA that decides when enough money or equipment is enough.

“At this moment it is useless to design schemes and calculate our capacities unless the system will change. When we design we work backwards and run behind facts. In order to design you need to know the number of vehicles and the by coming maintenance costs, the number of labourers, the total Amount of refuge to be collected and the income. We don’t control this and thus is designing extra difficult for us. Therefore we serve the area suiting the vehicle. Adequate or not we need to manage.”

“They want us to deliver a service but they don’t give what comes with it to deliver it. When the government has decided she does not want to invest more she doesn’t. There is no partnership. City authorities are irresponsible. Non payment is a national problem. Especially the MCE is not fair. First of all he refuses to give some companies a contract. Secondly, large and hierarchical companies refuse to offer a complete service, but do receive a contract.”...

“Personally I think that many colleagues are discouraging local companies from doing the job. And strangely foreign companies are often stimulated to come and built. Ghanaians think that foreign is better. The image of the people will be damaged and there are many reasons for this; tipping of employers and labourers, blaming the weather, and working with bad equipment.”

The opinion of the managers

The opinion of the managers is different and more positive than the opinion of the director;

Support Service Manager:

“Under urban IV it was decided that people should pay for refuse collection. This went well. The service is regular and fees are collected without any problems. So the ultimate goal has become to privatize the whole system, and provide each house with a dustbin. People should understand that they have to pay for refuse collection that is all. As of 1993 the central government is paying 1, 2 billion on refuse collection a month for Kumasi only. This is too much. The costs KMA makes are on top of it! That is ridiculous”

Solid Waste Manager

“I think that the households should all adapt to a house to house collection scheme. This is better for everyone. Despite the high costs, it will enable people to live a healthier life.”

Line officer:

“It is an advantage to work with the private companies. Kumasi has grown too large for the WMD to handle. Now that we have adopted the local government system and the KMA can give out contracts we can do more.”

6.6.6 Summary

The most important points are;

- WMD has to ensure Kumasi is being kept clean. To do this she has;
 - o A set up structure imposed via the ES policy
 - o many workers of whom 50% are regulars and 50% temporary employed
 - o little equipment
 - o low budget
 - o many private companies working under franchise and one private company not working under a contract
 - o So far little cooperation with civil society has been found. There are only a handful of efforts of the civil society, which never originate in the communities.
- The director of the WMD stresses that he does not like the current manner of functioning of his department

6.7 The role and position of the environmental health subcommittee

As became clear in the first paragraph of this chapter, in order for the KMA to control its departments, she uses committees made up of assemblymen. Hence the Environmental Health Sub Committee (EHS) has been indicated as the controller of the WMD and the there above standing district coordinator has the final say so.

The main task of the committee is to ensure the WMD is working in line with his contract. This contract is set up between the KMA and the WMD and determines the role and function of the WMD, its future plan, its budget, etc. For example checking the monthly and yearly reports of the WMD EHS is one of the methods. However, as the contract is strictly personal, it could not be accessed.

Information about the precise role of the subcommittee could not be found on paper. Therefore the main source of information was the members of the Environmental Health Sub Committee (EHS). In summary the EHS is functioning accordingly;

- EHS consists of 38 assembly man, and is thereby one of the largest committees in the assembly.
- The main task is to supervise the work of the WMD
- Meetings are called for by the Kumasi MCE
- EHS also sees to the contract of contractors hired to work for the WMD and KMA.
- EHS prioritizes the h2h system
- EHS Deals with the complaints of the people by discussing them and proposing solutions
- EHS discusses new policies and plans in their own meetings and in the appropriate communities

The interviewed member indicated that he was content about the functioning of his committee. He commented that the WMD worked in line with the contract with the KMA, and that the existing worries of some, about the consuming of the KMA budget by the WMD, were ungrounded and already calculated. He didn't want to comment on the contract between the private company Meskworld (the company that is in charge of the two communities of this research), the KMA, and the WMD. However he indicated that workers needed incentives and needed to get paid for their services. Hereby leaving some questions about how it all should be financed and who is responsible for this.

To continue, he stated that all meetings of the EHS were going well, relations between both the KMA and the WMD were smooth and ok, and relations with other cities, mainly Accra, were maintained on a rather regularly basis. However, when the relation with other (civil society) parties was discussed he commented that he did not know about any other parties than the World Bank, a good partner. He didn't know if it would be possible to find other partners but thought of this as a task of the Metropolitan Chief Executive (MCE). In the final stage of the interview, the interviewed member commented that indeed WMD should have partners that would come and help, for example with recycling, and with providing resources. But the WMD director should work on this.

Lastly he said to be especially pleased with the followed policies of privatising the waste collection, introducing h2h, and finally disposing the waste on a privatised landfill, since these measures relieved the KMA and the WMD of some of its burdens.

Especially the way that the interviewed member talks about finding partners shows that both finding and working together with partners in the everyday management of in this case the waste is not one of the core objectives in the contract between WMD and KMA, otherwise the EHS should certainly know more about it. Furthermore the rather blunt opinions about who should find partners seems to indicate that the EHS, or at least its interviewed member, doesn't feel jointly responsible for ensuring possible solutions for the management of the waste, and thereby doesn't work up to the standard of appropriate urban management, were this responsibility can even be seen as a precondition.

Finally, it is strange that (also) the interviewed member approves of the contents of the followed waste management policies, including the privatisation, mainly because it relieves the burden of the KMA and the WMD. In an ideal picture of urban governance, the main priority for opting for privatisation should be an improvement of the service were management and action can than be complementary.

6.8 The role and position of the assemblyman

6.8.1 The double function of the Assemblyman

The assemblyman (A.M.) has the most clarified double role. First of all he is a member of the assembly and has to fulfil his responsibilities as general assembly member. This includes many activities; from promoting productive activity and social development, to initiating programs for the development of infrastructure, etc. Part of this role includes generating income in the form of taxes from the stores in his community

Secondly he is the local representative of the government and should work together with his unit committee and town council to "ensure the sustainable and balanced development of the committee/council, trough efficient planning coordination, implementation and monitoring of development programs."(p 21 EU human resource development programme.)

6.8.2 The assemblymen of the two communities

Opinion on waste & the community

The A.M. of both communities consider the development of proper sanitation for their community to be a very important aspect. The A.M. of Ayigya Ahenbronu is glad that the community is

currently using the communal container system, but worries about the fact that the container is located at the sanitation site, close to the public toilets and the school. However he adds that due to some problems with the chief (see next chapter) it is recently impossible to find a solution for this problem.

The A.M. of Aboabo 2 is also content with the actual container system. It has helped his community in dealing with the waste. However, he is specifically worried about the worsening attitude and displayed behaviour of the inhabitants concerning the solid waste and concerning cleaning the community. He stipulates that he together with the chief and the Imam have always put time and energy into educating the people on the waste and on the manner how to deal with the waste. However, as time passes inhabitants seem to choose to follow the people that display a careless attitude. Or like he commented; *“if one sheep leaps over the ditch all the rest will follow”*. According to him this is most obviously showed by the influence of the clean up campaigns which benefit the community, but not for long; within days of the practise, the inhabitants have already succeeded in filling the gutters with their wastes.

Differences between the A.M.

In the field there are a lot of differences between the A.M. of the two communities. (See also box 15 for an illustration) The A.M. in Ayigya Ahenbronu is in his thirties, has three jobs, (i.e. a hairdresser, fulfilling his year of civil service at the local government, and being the A.M.) and a college degree. He is married but has no children. He was elected as A.M. mainly because he promised the people to bring tarred roads and cemented gutters to the community. He sees being an A.M. as an interesting and enjoyable experience but prefers being higher in politics in the future. He has little time for other activities than his jobs, whereby he is often away for his second job at the KMA.

The A.M. in Aboabo 2 is 54 years. He is married and has grown up children and grandchildren. He has done his civil service for the radio service and has finished a training college. This is the third term he is A.M.; the first two terms were end eighties- beginning nineties, the last time elections were held many, including the chief and the Imam, put him forward. Next to his function as A.M. he has no other job. Inhabitants have no trouble contacting him. He finds the role of A.M. rewarding, and he likes to arrange things in the community.

Also the relation that the A.M. has with his unit committee differs quite a bit. In Aboabo 2 some members of the unit committee are often around the A.M. and the A.M. comments that he uses and consults them often, others have taken a role more to the background, but according to the A.M. do attend meetings. In Ayigya Ahenbronu the A.M. is not happy with the unit committee. His unit committee members often do not show up. Or, as he mentions; there are but a few that have taken their task serious. He expresses the hope that this will improve as soon as the functions of the decentralization are all put in place.

The above are not the only differences. During the research participants of both the questionnaire and the in-depth interviews, added that the assemblyman in Ayigya Ahenbronu is most of all concerned with his status at the government, whereas the assemblyman in Aboabo 2 is first of all concerned about the community and its people.

Differences concerning (actions for) solid waste

In Ayigya the A.M. contributes to the sanitation in the community in the following ways;

1. He has ensured the community could use the container system by gathering enough money for a tarred access road. (necessary for a truck that has to lift the container)
2. When the communal containers are full or there is another problem of some sort he calls the WMD.
3. He has set up a system for cleaning the markets in the community. The system consists of the payment of a monthly contribution to the cleaners by the owners of the stands.
4. He tries to revive the community cleaning campaigns in the community, mainly by announcing this on fm stations
5. He pays the company that comes to pick up the container money so that the company comes and cleans around the site.

Some points have comments; concerning the tarring of the road; a dubious question is the role of the owner of the newly constructed hotel. This owner profited from the fact that the place for the

dump was changed from next to the hotel to the current location. Some parties assume that the hotel owner has given the A.M. money. The A.M. himself commented that it was the city major that handled the contract with the owner of the hotel, and that it was a good contract.

Concerning the system for cleaning of the market; via his job at the KMA the A.M. was able to obtain 8 wheel barrels for his community.

The community cleaning campaigns are less frequent than some time ago. To revive this, the A.M. promotes **Saturday cleaning day** on the radio. However, this has little effect. As the radio stations are for a region, not only for the inhabitants of Ayigya Ahenbronu. A better manner would be promoting this via a loud speaker (public address system) that can be rented. (In practice sellers and promoters have often been seen using this manner)

In Aboabo 2 the A.M. contributes to the sanitation in the community in the following ways;

1. When the communal containers are full or there is another problem of some sort he calls the WMD.
2. He pays the company that comes to pick up the container money so that the company comes and also cleans around the site
3. He has established a good relation with the NGO ADRA and has requested that in return for the inauguration of the aids project, they as community want media coverage for a big clean up campaign
4. He together with the chief and the religious leader ensures via the public address system of the mosques that people are educated and reminded on their behaviour with the waste, and are reminded to come and help with the clean up campaigns the A.M. has announced.
5. He has ensured that the population had gathered at a central point in the community for the explication of the government of the new service for waste collection; i.e. the house to house collection

The general comment that can be made here is that not all of the inhabitants in the community are Muslim, those that are not can miss the information pronounced via the public address system of the mosque.

Last not least a point that applies to both A.M. concerns the tipping. It should not happen, yet it improves the situation. Especially as the company that collects the waste is currently not paid by the KMA.

Opinion on the house to house collection

The A.M. of Ayigya Ahenbronu thinks that the house to house system for solid waste collection is the best system. He adds however that it has some implementation difficulties, as for example the size of the container for the compound houses, and also the payment of a fee. He comments that at this moment the community is not very participatory, and that at this moment the roads are also not developed. Finally he expresses his hope that this will change and that the system can be introduced in the near future.

The A.M. of Aboabo 2 has a different opinion, namely that in Aboabo 2; the system can not be introduced at this time. The reasons are;

- Waste will not be collected (as is seen in Asawasi)
- Waste of one house will not fit in the container
- The system is too expensive for a household

Furthermore, the A.M. commented that the WMD is only trying to introduce this system now as showing that they care a lot about the people, because it is election time. The fee for the service will only be introduced until after the election.

In summary

- There are major differences in motivation between the A.M. in both communities, shortly it can be said that; the A.M. of Ayigya Ahenbronu cares about status and the A.M. of Aboabo 2 cares about the community and its inhabitants
- There are some differences in types of action in the field of waste between the A.M.
 - o Most obvious is that the A.M. in Ayigya Ahenbronu uses contacts at the government in order to ensure better equipment, whereas the A.M. in Aboabo 2 works more with the other leaders in his community and with one NGO.
 - o Another point is that the A.M. of Aboabo 2 promotes information via the public address system of the mosque, whereas not everyone in the community is Muslim. Whereas in Ayigya Ahenbronu a common loud speaker is used.
- Both A.M. are of opinion that the method of h2h is not appropriate for the communities. However; A.M. of Ayigya Ahenbronu thinks that in future, when the roads are tarred and the h2h containers are

bigger the system can be introduced. A.M. of Aboabo doesn't like the system, and even if the containers are changed he thinks the inhabitants will not be able to afford it.

Differences between the A.M.

Difference between both A.M. illustrated;

Do you like the way that Kumasi is governed?

Assemblyman Ayigya Ahenbronu: Yes. I like the current manner. However I don't know too much because I haven't participated for very long in the system. It has helped some areas to be involved in planning and in developing themselves. Right now we don't depend on the initiatives from the ministers but we can execute more ourselves. But concerning the initiatives, it must say that the system is bureaucratic. When we want to buy something for our area, such as a toilet roll, chemicals, etc, we have to go and write a request. The Money that has been allocated to us is worth 20 million cedis. We are to use this money for the construction of the town council and the equipment. Its not enough. Recently Kumasi has been granted another 90 million to invest in developmental projects. Hopefully this will help

Assemblyman Aboabo 2: I like the concept of the idea; it's nice. I like the system. I think that it's effective. It stimulates participation"

Do you enjoy being an assemblyman?

Assemblyman Ayigya Ahenbronu: Very much. I have the chance to meet many influential persons and to build up my own record of friends in influential positions. For example, we are many doing our national service at the KMA, but together with another A.M. I'm the only one that can step into the office of the mayor. By virtue of doing this I can accomplish things. For the Ghanaian Ivorian week, the mayor of Treichville will sleep in the treasure land hotel in Ayigya Ahenbronu!

Assemblyman Aboabo 2: Yes, I enjoy it. I'm proud of my position. I can really mean something to the people. When there is a fire or something, and I can bail people out when they are arrested. Over a fight, over theft, or any situation I can help them.

6.9 The role of the KMA

6.9.1 Introduction

Between lines, the opinion of the KMA has been expressed. However, since the KMA stands on top of the local government institution in Kumasi, understanding its role per se will enable better analysis of the situation

The public relations officer / office (PRO) is responsible for all sorts of communication of the KMA body. As advised by the metropolitan coordinator, the PRO was contacted and asked about the policies and vision on participation and solid waste. The following summarise the general shared belief of the local government in Kumasi (including his personal vision)

6.9.2 The opinion of the KMA on participation

Relation with NGOs and CBOs

At the KMA there are two desk officers for NGOs. One is for issues concerning aids, and the other one is for issues concerning child labour and child trafficking. Whereas there used to exist beneficial tax collection schemes, loans that were given out, and several working projects for the unemployed, these have ceased to exist because they were misused by organizations.

However, the opinion of the KMA on the contribution of the many organizations is that the existence is positive for the society in general. It enables people to lean upon each other and gives some form of social security.

Last not least, the WB and other international organizations are embraced by the Ghanaian government. It is mainly because of the national followed policies that these organizations are playing such a role. However, the KMA agrees to its neo-liberal principles.

Relation with the traditional and religious leaders

As will be described in the next chapter, next to the A.M. there are two types of leaders on the community level.

When asked directly the relation with KMA has with the traditional leaders, i.e. the chiefs, in particular, could not be described as very effective. In economic terms the contribution of chiefs towards development is even indicated as poor. The chiefs control all the land in Kumasi and environment. This land is called stool land. And the Ghanaian constitution protects this stool land as property of the chiefs. Chiefs can rent the land to any other party and ask money for this. They often do this and use the money for personal development.

In the political context chiefs are contributing averagely towards development. Whereas in the past it was impossible to find educated chiefs at this moment it is impossible to find chiefs that are not educated. As a result they often occupy a position in the assembly, and are in many instances also elected as presiding members of the assembly. However one indicated result of the growing level of education among chiefs by the PRO of the KMA is the associated rising level of chieftaincy disputes. On social grounds chiefs at times do invest in schools or communal centres, and the Ashantehene even has his own Educational Trust Fund. Yet the KMA is of opinion that the partnership with the chiefs and especially the role that the chiefs can play in developing the nation and in smaller views Kumasi are much greater than so far played. In the cultural context chiefs are contributing greatly toward development and cooperation. The historical background of the Ashanti's and their king has caused tradition to remain important and valued among many inhabitants

There are many churches in Kumasi, a few large ones and many small ones set up by individuals. Religious leaders have no relation with the KMA per se. At times the leaders of large churches are asked to contribute or to attend meetings. Most of the time this is followed trough. KMA admits that cooperation can contribute to a more effective manner of communication. But also thinks that as there are so many different leaders it is difficult to set this up. The more negative aspect is that there are many churches that are set up by individuals who only contribute to an increase of nuisance.

6.9.3 The opinion of the KMA on Solid Waste

Concerning what should be done

- The government should make it a national policy that in all the big cities h2h collection is used.
- The town councils are obliged to communicate to the communities to do a monthly clean up campaign as they are told by the MCE of Kumasi. However they are not enforcing these. This is because they have been inaugurated not very long ago.
- At this moment the money that is spend and is received on waste management by the government is not equal, the gap is too large. 40 million cedis is spend on the landfill site a day. It's very expensive.
- The minister agreed to do something in order to force the people to adapt to the system.
- Here in Ghana you have to do things gradually. Especially in the communities that are occupied by a large number of illiterate people. These people have many worries.
- Its common sense that people become sick when waste is scattered. But not everyone understands this. Therefore we educate them and we set up laws.
- Companies collecting the waste should charge economic rates
- The problem is the attitude of the people. It's a mind.
- We (government) cannot push too hard because there are political implications. Politics will cause us to be more careful. You risk being voted out if you do many unpopular things.

Concerning the costs

"In Kumasi we are not charging *economic rates* for the collection of the waste. We are charging households that are making use of the house to house collection system 25.000 cedis (€2,50) a month, in Accra they charge 80,000,- cedis a month. In Tema it is 50.000. Cedis. Therefore the contractors in Kumasi are neither competitive nor able to break even. This is very serious. They are not modernizing their equipment, they are not very efficient. If the people will accept to pay more, than contractors can do more. Maintain their cars regular, expand there service, and offer better services."

Concerning the waste in the city

"One other thing is the manner that the entire city is maintained. The city is not kept clean. If you go to central market at night you will find the waste piled up. The problem is the attitude of the people. They are careless and just dump everything around. Not all of them are legal but that's not even the real problem. The problem is how to keep the city clean. And shops moving closer and closer to the streets are not helping us very much. On the contrary they are making the city even dirtier!"

Here, one achievement should not be neglected. The fact that Kumasi has won the cleanest city award indicates that the city is rewarded for its dealing with the waste and the management of the waste.

6.9.4 The policies and tools

In general the contribution of the KMA to waste management is largely indicated from above (i.e. from the central government). The opinion of the employees at the KMA is in line with the government followed neo liberal policies, whereby trying to introduce the h2h and the associated taxes is one of the main goals for the future of waste management.

There are currently two tools she uses to influence the people; the first tool is **creating awareness through education**. Every week debates on diverse radio stations about issues of concern are held, and solid waste is such an issue. People from the WMD are invited and discuss current issues and the public can react to it. Next to this the KMA publicizes newspaper articles, debates on TV, visits to the community, and used the public announce system to address the people on the topic.

Here the PRO commented: "They know the facts and arguments however they don't take their responsibility."

The second tool is to **use and enforce bylaws**. These byelaws tell the people how they have to deal with the waste and what are their responsibilities. Recently the KMA (re)started announcing the byelaws by means of a poster (see appendix 9). Drawbacks are bribes and a lack of court space. "The sanitary inspectors that are to see after the byelaw rather accept bribes than to take the people to court. And if people are taken to court the violation is often adjourned because of a lack of space."

Personal vision of the district coordinator

Personal vision of the district coordinator on waste and the future

The district coordinator is the second most important man of the local system of governance. His opinion is therefore important. In an open interview with him he commented the following;

"At this moment 1/3 of the income of the KMA is spent on the labourers and equipment and management of waste. This is too much! A solution needs to be found how this can be handled in the future. A popular manner of dealing with this is PPP Public Private Partnership. This way the management and the KMA can concentrate on developing the structure and the private companies can deal with obtaining money from the public, or rather from the houses that they serve. The terms of contract signed with the private companies determine how, if, and what is paid to the company. Private contractors should thus ensure that enough income from the houses is collected. This is an important feature of the future vision for waste management. As the WMD director often says: "people should start to pay for the waste!" Secondly the people also have an attitude problem which needs to be changed! This is difficult but needs to be done. We have some policies, like for example extra education, etc. the Public Relations Officer is in charge of this. The PRO knows the policies we have more in depth and is responsible for the distribution to the people."

6.10 Summary of the Role, Policies and Visions of the Local Government

Upon the role and policies of the local government

- The implemented system of local governance in theory truly extends to all levels of society, in reality, this also causes problems, and conflicting goals (i.e. of the A.M.) are the most obvious ones.
- The implemented system of urban management has influenced the execution of managing the solid waste in many levels, i.e. by;
 - o Introduction and use of new systems for waste collection and also for the final disposal
 - o Use of private partners
- Whereas there are policies established for everything, the execution of these policies is not functioning up to standard, often occurring problems are;
 - o There is much bureaucracy
 - o There seems to be question of "favourism" when it concerns selecting private partners
 - o Lower income communities do not experience advantages of the new system

- It is unclear how problems concerning lacking equipment must be solved. The solution of the government is often to do NOTHING
- The lack of partners of the government
- The lack of projects executed to better the sanitation in the communities
- Despite the system of participatory development and the current partners (WB, CAGA, and the city of Almere), in reality the local government (including the WMD, KMA, and the A.M.) seem not to work on finding partners.

Upon the visions of the local government

- The local government strives for a clean city, where polluters pay for the collection and disposal of the waste
- The local government finds that every actor in the field should feel responsible in developing the community. In the field of solid waste, this means that all residents should clean their house or business, in front of their house or business, and the gutter in front of this.
- People should be educated. This is done via publicly addressing the people via radio, TV, newspaper, and through announcements made in the community by the A.M. and by loudspeakers.
- Those that do not comply to the laws concerning cleaning are taken to court
- Whereas the vision is that actors should participate, little is done to involve the civil society in this

7 Actor 3: Civil society; organizations and (community) leaders

7.1 Introduction

In this chapter the role of the third actor, i.e. the civil society, will be analyzed. In the previous chapters the role of the first and second actor, i.e. the inhabitants and the government, concerning waste have been analyzed. It became clear that the inhabitants of the communities display a rather paradoxical role concerning cleanliness and waste, and that the solid waste management service in the two communities has improved over the years but still knows some mayor shortcomings.

In this chapter the role concerning waste and development of the organizations and the community leaders will be analyzed. As the theory goes, the prevalence of community based organizations and actively involved people indicate the presence of a vivid civil society, which lead to more participation, development, and action undertaken. The results of the analysis will show if this theory is valid.

7.2 The organizations in and around the communities

7.2.1 *Classification of organizations*

One of the main questions is what types of organizations exist in the field, and what their core function is. The reality showed that there are, incontestably, a plural number of organizations and clubs in and around both communities.

Diversifying between types of organizations requires some sort of classification scheme that distinguishes groups of organizations.

Here it is chosen to divide the types of organizations in the following categories (as the analysis will show; to some extend these categories already show the core function of the organization);

- Developmental
- Social
- Cultural
- Economical & Political
- Rest

Per category the types and numbers of organizations in the communities are mentioned. When in-depth interviews with members / leaders of organizations have been held, the role of the organization will be explained more in depth. It is tried to at least comment upon the means of the organization, its level of democracy, and the waste related aspects.

Furthermore analysis of the membership of respondents (of the questionnaire), about which type of organizations they join, how long, and why (cultural, social, political, or economical reasons), will shed a light on the popularity of the organizations under the inhabitants in the communities.

Last not least, in the analysis most attention is devoted to the so called Social clubs. This is, as evidence will show, the category with the most organizations in and around the community.

7.2.2 *Development organizations*

The World Bank

The World Bank (WB) is an international development organization, of 184 members. According to themselves they are; “**Not a bank, but rather a specialized agency**” (www.worldbank.org). The organization is rich and influential. For all countries, their assistance is directed to four key priorities for growth and poverty reduction: (Rowland: 2004)

- Macro stability
- Private sector development,

- Human development
- Governance

These neo-liberal principles are also used when project are carried out in Ghana. For example, it can be seen that especially the second and fourth principle apply to a large extend to the current situation concerning urban management in Kumasi discussed in chapter six. I.e. private sector development, especially in the field of waste collection (and in the future also the waste disposal) and governance, actually in all levels of society; i.e. there are projects on the community level, local level, and the nationwide level. (See box). From this it can be concluded that the WB plays an important role in the country.

In Ghanaian society, radio debates and articles on the level and nature of cooperation between the WB and the government are available. Although questions are raised about the influence of the WB, the general shared opinion by at least the majority is that the cooperation is in the benefit for the country. The following quote from the book “the Worlds Banker”, says more or less the same;

Mallaby (2004) “The bank was telling Africans what to say to donors, it was telling donors what to give to Africans. If its advice failed to bring progress, both sides would resent it. By the time Wolfensohn’s arrival (at the WB) in the mid-1990s, the resentment was boiling; with a few exceptions like Ghana, structural adjustment had failed to revive Africa’s economies, and the main thing that donors had to show for their efforts was a large mountain of debt that the Africans could never service.”

K.B. Asante (2004), an academic that has its own column in one of Ghana’s news papers writes; “*It is time for Ghana and other developing countries with serious economic problems to realise that they alone can fully solve their problems*”. He adds that the WB and the IMF have its ideology, but they cannot be blamed for that, the government of Ghana should focus on the aspects they find important, and pronounce these strongly.

WB on all levels of society

The presence of the World Bank on all levels of society

- On the communal level infrastructural problems are being solved; of the two communities of this research it is Aboabo 2 that has profited from the Urban IV upgrading project.
- On the local level there are the projects that ensure further infrastructure and sanitation development; It was with assistance of the World Bank that the creation of a new system for final waste (liquid and solid waste) disposal i.e, the landfilsite could be constructed.
- On the national level the WB plays an important role for (future) relief projects on diverse levels. For example, on 10/07/2004, Ghana was proud to announce she reached the completion point of the HIPC (Highly Indebted Poor Countries), a series of changes in her national budget expenditure, starting in 2001, and implemented by the World Bank. As result of this Ghana will receive more relief from the World Bank.

As the role of the WB is so omnipresent and moreover so influential it is difficult to see her as a part of the civil society of Ghana, or more in specific of the inhabitants of Aboabo 2. But as the organization is not part of the government, in theory she belongs to the civil society. Furthermore, the role she plays does add to the debate, and besides that, all projects that are completed bring development closer. The price that has to be paid concerns the implementation of the Banks principles and philosophies in the (roots of the) country.

Non Governmental Organizations (NGOs)

NGOs are benevolent and developmental organizations set up for the (benefit) of the people. The activities that NGO’s are involved in are very diverse. In Kumasi, they range from micro credit schemes to aids relief and child care program’s, and from rural projects to urban projects.

In the whole community of Ayigyia three NGO’s were identified, but none were found to benefit either one of the communities; one of the NGOs is working on solid waste collection via the house to house method, but in a different community, one is working on financing projects outside Ayigyia, and the other is working on aids relief.

In Aboabo 2, no NGOs were identified. However, during interviews the assemblyman mentioned that the NGO ADRA (Adventist Development and Relief Agency), is playing a role in the

community. Although her role is not in the field of waste management but on aids relief for a target population, the NGO has contributed one time to the level of sanitation; they have arranged for television and radio coverage and refreshments for all participants in a great communal clean up campaign that found place august 1st 2004.

Additionally to the non-presence it can also be stated that none of the respondents questioned in the communities, is a member of an NGO.

From the above can be concluded that NGO's are not part of the civil society in the field of waste management in the communities of this research.

7.2.3 Social Organizations

Introduction

There are two types of social organizations in the community. The first one concerns the so called social club, the second the sport club. Both types of organizations are analyzed hereunder.

The Community Based Organizations (CBOs) in general

In contrast to NGOs, CBOs are omnipresent in the two communities. In the everyday language in Kumasi they are referred to as social clubs, which says much about the core function of these organizations; i.e. they are formed by the people and for the people. If present, sanitation and community development are minor tasks some organizations have taken up.

Interviewing leaders of CBO's has led to an accumulation of facts concerning both the nature and the activities of the organizations. These are presented in the list hereunder.

Characteristics of a CBO

- Members of the CBOs find it important to attend meetings, and to attend parties, funerals, and weddings of members or of family of members.
- The CBOs identified in the field (both in Ayigya Ahenbronu and in Aboabo 2) have as **core tasks** women empowerment, or helping the poor in the society, or helping each other develop, or helping each other in general. These tasks show a direct link with the above-mentioned term "social club".
- The average number of members of an organization lies between the 30 – 100
- Membership to a club is open to all people that agree to comply with the clubs' rules and requirements and can identify themselves with the general reason of existence of the CBO (which means that when is spoken of women empowerment, it are women that should join the organization).
- The goals of the organization are decided upon in the meetings. Decisions find place trough voting democratically; every present member has a say-so. When there are problems the board of directors meets and brings forward a new proposal.
- Most CBOs are set up formally; they have a written constitution in which the policy, the mission, and the requirements of members and of the club are explained. (see appendices for example) These rules and regulations include;
 - ❖ *A compulsory monthly payment of around 2000 cedis per member*
 - ❖ *Attendance to the general meetings where absence or being late on meetings results in a fine,*
 - ❖ *Donation of a set Amount of money for members that marry and members that are bereaved because of the death or illness of a family member.*
- Next to ordinary membership, the more formally organized organizations usually have some patrons (benefactor, sponsor); this sponsor is exempted from the requirements.
- The means of the CBO depends on the contribution of the members, the mission of the organization, and the income from donations are other activities

Presence, membership, functioning in the communities

Based on the information presented in the previous research it was obvious that there were at least five large CBOs present in Ayigya Ahenbronu. According to the assemblymen of the community, four of the already indicated five CBOs have grown in membership with about 20% and one CBO lost around 20% of her members. Furthermore, at present, the community counts about ten CBOs in total.

The analysis of the results, visible in the table shows that of all respondents, 18% is a member of a CBO. All respondents that are a member indicated to do so because of social reasons. About the effect of the organizations the A.M. of Ayigya Ahenbronu is short; they exist only for pleasure reasons!

In first instance the assemblyman of Aboabo 2 claims that there are no CBOs in his community, however in later interviews he admits that there are an unaccountable number of small organizations. Also the information that inhabitants provided point out that there are several of such organizations. Analysis shows that 15% of all respondents are a member of a social club. Furthermore, in around 73% of the cases the location of the social club is in Aboabo 1 or 2 or on the edge of the community.

The A.M. of Aboabo 2 commented that he thinks that the organizations have not contributed to the development of the community in any way. Unlike in Ayigya Ahenbronu, not all members join the club for social reasons, yet the 92% reflects that “the social reason” is the main reason for being a member.

Per club, the functioning, goals, and means differ. However in general, as stated before, the organizations exist for social reasons. What can be remarked here is that the social function of the clubs is to a certain extend; most clubs require its members to pay a certain Amount of money as monthly contribution. Some respondents commented that they no longer participated because they did not like to or could not pay this contribution. Other respondents commented that in true times of need they would always help someone.

In general the clubs assist members or family of members that are in need, attend weddings and funerals, and sometimes they also aid the non-members that are more needed. Furthermore, they participate in community cleaning campaigns, or other community events, by donating refreshments and helping with the labour when they are asked (often in writing) to do this. However, no recently shown initiative or action for a long term project for the development of the community could be identified.

History on CBO's

Story on the history of CBOs

In an interview, the Queenmother of Ayigya Royal explained that “*these types of organizations*” have always existed. They existed before she was born, when she was little, and now that she has grown up. Her story was backed by many participants of in-depth interviews, including the leaders of the CBOs spoken to and the ordinary inhabitants of the community. There are also several authors that refer to the tradition of clubs being formed, being Post (2001, 2003), Chazan (1988) etc.

The Queenmother hasn't noticed any change in the manner of working of these organizations. She could only recall that the organizations know a certain process of fluctuation; sometimes they are very popular, and at that time many people form organizations or like to join existing ones, at other times there is a general decline in membership. However, according to her there is no specific reason for this decline.

Conclusion

From the above standing information it can be concluded that CBOs and membership to a CBO is omnipresent. The requirement is agreement to the common goal and the payment of the contribution. The omnipresence and the stories of the participants to the in-depth interview indicate that the social organizations are embedded in the life of the inhabitant of the communities. This leads to the conclusion that the available level of social capital is high. Furthermore, based on the collected information, it was impossible to discover differences between the two communities. But although it can be stated that there is not much difference between the communities, and that the level of social capital is high, the actual benefit of the organizations in terms of community development and action is little.

Membership social club

Membership Social club	Membership of all respondents		Mean	Located in / around comm.	Benefit	Cult	Social	Political	Eco
	Freq	%	In years	% of freq	% of freq	% of freq	% of freq	% of freq	% of freq
Ayigya A.	8	18	5.25	75	88	63	100	0	40
Aboabo 2	11	15	8	73	83	50	92	8	42

Sport clubs

Sport clubs can be categorized as social clubs. In Ayigya Ahenbronu, there are currently no such organizations, nor respondents that join such an organization. In Aboabo 2, there are at least six football clubs. The table hereunder shows the membership and the reasons for membership in the community; 7% of the respondents are a member of a sport club, and in 50% of the cases the club is located in the community.

Sport / Football clubs per se do not contribute to the development or an improvement of the level of sanitation in the community. However, the existence of the clubs does contribute to the social capital.

Membership Sportclubs

Membership sport club	Membership of all respondents		Mean	Located in / around comm.	Benefit	Cult	Social	Political	Eco
	Freq	%	In years	% of freq	% of freq	% of freq	% of freq	% of freq	% of freq
<i>Ayigya Ahenbronu</i>	0	/	75	/	/	/	/	/	/
<i>Aboabo 2</i>	5	7	73%	50	60	20	80	20	20

7.2.4 Cultural organizations

Introduction

Cultural organizations exist of a combination of religious organizations and traditional organizations. The religious organizations stem from the two different types of religions; the Muslim religion, and the Christian religion, and can therefore also be divided in two different types of organizations. Within the mosque or church that people attend, there is a possibility of joining some type of study group or choir, etc.

The nature of tribal organizations lies in family structure and tradition. I.e. tribes are large families, some with a special background or history, which are omnipresent and often large in quantity. Tribe members can be found in both Ayigya Ahenbronu and in Aboabo 2. However, as Aboabo 2 is a migrant community with residents with many different backgrounds, there are more tribes (and hence tribal organizations) found in Aboabo 2.

When common meetings are held current affairs are discussed. When there is a necessity to meet, for example in case of illness, death, marriage, etc. these matters are discussed. Of origin tribes are geographically structured, but migration has caused changes in the time, the number, and the place of meetings.

Membership, means, and contribution to the community

The results of the membership in the table show that especially the Christian organizations in Ayigya Ahenbronu, and the tribal organizations in Aboabo 2 are popular; the first one is attended by 22% of all respondents, and the second one by 24% of all respondents. The analysis furthermore shows that all members indicate they benefit from the organization that they join, and that they join the organization for cultural reasons.

The means of these organizations differs very much and often depend on the larger umbrella institution (in case of the religious organizations) or the tribe (in case of the traditional organizations).

Of the religious organizations it can be said that a so-called board of directors of the institution decides on the use for funds and the decision to participate in activities as a group.

Concerning their role on development projects it can be mentioned that especially the churches do contribute; i.e. they construct schools, learning centres, etc, but these are almost always for members only. They can do this because in every church members are supposed to pay a so called "tight", a percentage of their income to the church. Often, this tight is around 1/10th of the income of a family!

The contribution to the sanitation is identical to that of the social clubs; i.e. organizations / institutions sometimes decide to participate in cleaning campaigns. However, long term projects in the community have not been discovered.

The tribal organizations have not been investigated in depth; therefore no comments can be made in this field.

Conclusion

The mere fact that members come together for a certain activity means that these members dispose over a certain level of social capital. Furthermore the institutions with money can permit themselves to construct buildings and other type of projects. Based on the fact that especially members of churches contribute a large part of their income to the institutions, it is obvious that the institution they have chosen to belong to is very important for them. However, all of the organizations and their associated constitutions seldom contribute to sanitation projects per se.

Membership cultural organization

Membership Cultural organizations		Membership of all respondents		mean	benefit	Cult	Social	Political	Eco
		Freq	%	years	% of freq	% of freq	% of freq	% of freq	% of freq
Christian	Ayigya A	10	22	6.4	100	90	80	/	/
	Aboabo 2	3	4	15	100	100	67	/	/
Muslim	Ayigya A	1	2	2	100	100	100	/	/
	Aboabo 2	3	4	9	100	100	100	/	33
Tribal	Ayigya A	4	9	3	100	100	75	25	50
	Aboabo 2	12	24	12	100	83	83	8	28

7.2.5 Economic organizations

Unions and trade organizations are set up for the people and by the people that own a business or are an employee in a business. In his research on civil society in West Africa, Koning describes the role of the union, and he contributes the contemporary existence of plural unions (and also political parties) to the background of the country. The organizations in the field in Ayigya Ahenbronu and Aboabo 2, although smaller, are part of this as well.

In the research not much time has been devoted to the analysis of businesses and their organizations. However, in both communities two cases (businesses) have been selected at random (i.e. four in total). Of those cases, three actually belonged to a union or club, and one did not.

Furthermore, during the questionnaire respondents were also asked if they belonged to a union. Only a few respondents indicated to belong to such an organization. The results of this question are summarized in the table.

The nature and core function of the organizations differs. Of the three organizations, two are part of a national network, and represent a part of the city of Kumasi; the other organization is set up locally. Examples of national organizations are Ghana National Tailors and Dressmakers Association; GNTDA, Ghana National Caterpillar Organization; GNCO, Ghana National Hairdressers Organization; GNHO, etc. Experience shows that the bigger and more formal the business, the greater the chance that the business belongs to a national organization. Furthermore, one man businesses often do not belong to an organization. In this case it concerns traders or food sellers who prefer to work independently.

The organizations that belong to a national network are formal and have as core function collecting taxes and spreading product information. Furthermore, when they are asked to assist, they participate in the local development projects and clean up campaigns. The other organization is less formal. It is set up via networking and mouth to mouth promotion of people working in the same type of business. Networking and the spread of information are its core functions. This organization furthermore intends to set up a system for community clean ups. All three organizations have in common that, like the social clubs, they look after the members, especially in times of bereavement.

Membership Union / economic organization

Membership Union	Membership of all respondents		Mean	Benefit	Cult	Social	Political	Eco
	freq	%	years	% of freq	% of freq	% of freq	% of freq	% of freq
<i>Ayigya Ahenbronu</i>	2	4	5	100	50	100	0	50
<i>Aboabo 2</i>	3	4	8	67	33	33	0	100

7.2.6 Political organizations

The year 2004 is election year in Ghana. Many of the participants of this research have mentioned the influence politics play in the everyday life, especially since the election is close. Parties are putting forward its best face and organize for example community clean up campaigns and other types of events. As a result people are sooner inclined to join a political organization, and to a certain extend, the communities benefit.

It is not only in election time that membership to a political party matters. Again it shows that people are inclined to come together to represent a general shared need / want.

Information collected in this research shows that a small percentage of the respondents actually join a political organization.

Membership political party

Membership political party	Membership of all respondents		mean	benefit	Cult	Social	Political	Eco
	Freq	%	years	% of freq	% of freq	% of freq	% of freq	% of freq
<i>Ayigya Ahenbronu</i>	2	4	12	50	0	50	100	0
<i>Aboabo 2</i>	5	7	20	40	20	60	100	20

7.2.7 Other types of organizations

In Ayigya Ahenbronu one other type of organization was discovered. It concerned a so-called a group that has organized voluntary guarding of the community during the night. The people that were asked about this group commented that they really liked the initiative and that in fact the guarding has helped to decrease the number of unrests in the community at night. The group that has organized this goes around the houses it guards to collect money for the equipment they need. Furthermore the service is completely voluntary. It is estimated that around 25 community members are voluntary guards.

Another type of organization includes the so-called opinion leaders. These leaders are influential inhabitants of the community that have taken up the task to educate the inhabitants in the community on the everyday aspects of life. They are appointed by the community leaders (see 7.4) and meet with them to come to know what issues are at stake. Consequently they often spread the information via an unstructured way; i.e. walking around in the community and chatting.

7.2.8 Summaries

Table of the situation

The table hereunder summarizes the facts concerning a selection of organizations in and around the two communities, which have been subject to in-depth interviews. As the role of this bank is so large, it is chosen to include it in the table.

Overview table civil society organizations

Category	Core function	Name of organization	Means of organization*	Democratic (yes / no)	Level of Independence *	Relation with waste & sanitation*
Develop Mental	Development of infrastructure and general wellbeing of target population	WORLD BANK	High	Yes	High	High
		ADRA	High - Somewhat high	Yes	High	Not much
Social	Ensuring trust and a social network for members	ROYAL SOCIETY	Not much	Yes	Middle	Nothing (yet)
		SOCIAL CLUB	Little	Yes	Not much	Nothing (yet)
Economical	Striving for economical and social benefits	MA.M.A LU FASHION	Middle	Yes	Middle	Middle
		TIE AND DIE	Not much	Yes	Middle	Not much

(High- somewhat high-middle- not much, little nothing)

Summary

In summary the following can be said about the organizations and their involvement;

- It is obvious that there are quite some organizations present in and around **both communities**. Information in the questionnaire shows that 50% of all respondents in both communities are a member of one or more organizations. (Hereby excluding membership to a church, which is 100%)
- According to a number of respondents, it are not only the clubs in the community that increase social cohesion, but it is actually in the nature of the people to help each other; people like to help each other and to feel united.
- Combining the above statements, it can be said that the level of social capital in both communities is quite well developed.
- Nevertheless, despite the means of a particular organization, the core functions of all social, cultural, economical, political, and rest organizations contribute little to any projects aimed to develop or to better the level of the sanitation in the community. It is the World Bank that contributes the most to the level of sanitation.

In the next paragraph the role and opinion of the community leaders concerning how they can and are changing the waste situation in specific and community development in general are looked upon.

7.3 The role and the opinion of community leaders

7.3.1 Introduction to community leaders

Literally community leaders are those that are chosen to lead the community. Often, the opinion of these leaders is respected and considered important by the inhabitants of the community. Next to this fact, each leader in his kind should represent the wants and needs of the group to the outside and, visa versa, present the group with new ideas and actions. It is via his triple function that a leader can facilitate participation between his actors and those in the field. Yet in reality there are complications considering the goals, power, motivation, etc of the leader. Exactly how leaders are able to influence the participation, development, and action for sanitation is the central question that will be answered in the paragraphs hereunder.

Currently, there are three types of important leaders that could be identified inside the communities of this research;

- *The elected local government representative*; the assemblyman (A.M.) (see chapter 6)
- *The traditional leader*; the Chief, accompanied by its sub Chiefs and by the Queenmother
- *The religious leaders*; Christian or Muslim leaders

Next to these leaders, the leaders of any type of civil society organization or institution also play an influential role within their organization and so also in the community.

In the previous chapter the role of one of these leaders, i.e. the role of the locally elected assemblyman, has already been explained. In this chapter the role of the traditional and religious leaders (i.e. those that belong to the civil society) will be explained.

7.3.2 The traditional leaders; the chief and the Queenmother

The chieftaincy institution explained

The second type of leader is the traditional leader; the chief. As may have become clear in previous paragraphs the chiefs and the associated chieftaincy institute (rather institutions) still play a prominent role in the everyday social, cultural, political, and even economical life of the people. (For example in July 2004 it was announced that the chief Osei Tutu would receive a huge amount of money from the World Bank.)

Chiefs are nominated by royal members as the leader of their area. Hereby they become the custodian of all of the areas property, and being the leader they have many tasks. The most important are: preventing calamities like epidemics and deaths, being the war general of the people, serving as judge of his people, making laws for him and his subject, and initiating development projects. (Kwadwo: 2000)

Principal advisers for the chief are the elders, the wives, and the queenmother. The queenmother, who performs the duty of the biological mother of the chief, even has the right to reprimand the chief when he refuses to heed her advice. (Kwadwo: 2000)

In reality it can be seen that the traditional authority and all accompanying rules and traditions are only common practice in a large number of villages, however, in the city people are no longer purely traditional.

Originally Ayigya is a village of the Ashanti kingdom, the largest and most powerful kingdom in what is now called Ghana. Ashanti's in this community (and elsewhere) are still very proud of their history and of the fact that they are Ashanti, and will tell so to any foreigner they meet. However at this time almost all Ashanti's in Ayigya have turned to Christianity and are no longer practising the tradition beliefs. In Aboabo 2, where the inhabitants do not come from one special tribe or kingdom, the same tendency is visible; i.e. the inhabitants now attach more value to the Islam. Than to the traditional beliefs and practises.

Despite this, a large proportion continues to respect the wisdom and superiority of the chief in public and private matters. Furthermore, during major festivities, weddings, and funerals people become traditional and put their cultural practices in reality. The existence of the tribal organizations for example, point to this direction.

Taking the above in consideration it becomes obvious that the role and power of the chief and his queenmother can't be ignored in the search for information concerning joint action and development.

The situation in the communities

In Ayigya Ahenbronu the situation at the time of the research was a little bit complicated. It became known that within the community there was a chieftaincy dispute. Such disputes can have considerable effects on all processes going on at the community; i.e. chiefs can set up families against families, stop developmental help, stop trade, stop the practice of getting married, buried or (simply) together, etc. With as consequence that villages or communities become torn, relations disrupted and tensions arise.

In Ayigya Ahenbronu the situation didn't look and feel this dramatic. However the mere fact of the story of the dispute caused people in the community to form an opinion. The story is constructed in the box hereunder as accurate as possible.

The impact of the dispute on the population of the community is difficult to measure. The most problems involve the question concerning land; i.e. *where can we build a new sanitation area or toilet block? Can we settle ourselves / our business here?* Other questions concern the function of the chief: *What do we do when someone dies or marries? Which chief do we ask to come? Where can we bury the dead?* Is it because there is no chief that few people or organizations ask for his advice? Is this why there are little joint community projects? Or is it the other way around; did the people rely less and less on the chief and his advice and does his power slowly disappear?

As may become obvious by the story in the textbox; there is not really a right or a wrong.[•] However, the mentioned difficulties are rather crucial for community development. First of all *the* chief is in control of the land and without his permission, nothing can be done about the place for the solid waste nor for any other planned community building such as the new toilets, etc. Secondly clean ups previously organized by the chief and his family, seem not to take place anymore. (This is too bad, especially since the community used to have such a good name mainly because of the clean ups and joint projects.) However, based on (maybe selective) conversations held in the community, few people are bothered by the dispute. The largest proportion of the people spoken to said that they would consult either the sub-chief, or no chief.

As was mentioned in the beginning of this paragraph, the role of the queenmother is also important. Since the chieftaincy dispute was going on and *the* chief was impossible to reach, the queenmother was contacted. As can be recalled from chapter five, the queenmother descends of the queenmother after whom the community of Ayigya is called. She seems to be a prosperous woman that is involved in many projects and committees. She for example has set up a private school in a well constructed and decorated building next to her private house. Furthermore she is the patron of quite a number of social clubs.

In Aboabo 2, the situation of the chief and queenmother is quite different. Both the chief and the queenmother live in the community, and had time to speak to the researcher. However, in contrast to the situation in Ayigya and almost all other communities, the land of the community does not belong to the chief or to the queenmother of the community. Rather, the land belongs to the real owner of the land. The chief and the queenmother do not dispose over many means. They descend from a migrant family. When they contribute to the community it is in deeds.

[•] Based on personal experiences with contacting *the* chief I must admit that I'm inclined to believe that this chief is truly difficult to reach..

The contribution of the queenmother and the chief to a clean environment

In both communities, the traditional leaders work together with the A.M. of the community. They meet to discuss and plan issues of improvement.

However in Ayigya Ahenbronu the participation and the results of the participation are not so positive. The internal cooperation and the cooperation of external parties are not easy to accomplish. Furthermore, results are not always obtained either; For example; there used to be a plan to develop the roads in the community. To do this the chief, queenmother and A.M. made up a budget, and contacted the associations that were thought to have the means to contribute. This was a united project. However, the plan was not carried out because there was not enough money collected. Especially the churches refused to contribute.

In Aboabo 2 the internal cooperation between the leaders is good. Cooperation with external partners is not always found or up to satisfaction.

Participation between the traditional and elected leaders in the field of waste in both communities evolves mostly around the organization of cleanup campaigns. In Ayigya Ahenbronu, the A.M. and the queenmother and chief try to revive the clean up campaigns. They do this by announcing it on the fm stations and by telling the people. In reality little evidence points to the fact that the clean up campaigns are hold. In Aboabo 2, when the grand cleanup campaign with media coverage was organized, it was the chief that assisted the A.M. in setting up the campaign and in actually executing the cleaning.

Furthermore, normally when cleanup campaigns are initiated it is a joint effort of the A.M., the Imam, and the Chief. Also in this community, little evidence points to the fact the cleanups are actually carried out. Next this there is no action undertaken.

The role and therefore the contribution of the traditional leaders to a clean community is more spiritual. As the time of the research was limited, it is impossible to conclude further upon the level of influence of these leaders.

The Chieftaincy dispute

The chieftaincy dispute and its consequences in Ayigya Ahembronu

In Ayigya Ahenbronu there is one officially appointed chief, and one (also officially) appointed sub chief who wanted to have more power than he was entitled to have. The chieftaincy dispute is between both these chiefs and is exactly about the point of power.

The land over which the chief rules includes much more property than Ayigya Ahenbronu alone; as discussed before Ayigya Ahenbronu is part of the larger community Ayigya and even outside the borders of Ayigya there is land over which the chief rules.

As the stories go, the chief is a busy, educated and rich man who's almost impossible to reach or to get in touch with. He is both a doctor and a trader who passes most of his time in the city of Accra. In order to ensure that people have a place to go when they have a problem, the chief asked the sub-chief to manage his affairs. This way the people of the community could still decide to visit the sub chief if the real chief was absent. In any other case the Queenmother could be asked her for advice.

In many villages or communities similar situations occur. And the taken solution seemed to function until about one year ago. At this time the sub chief decided that he wanted more power and control over affairs. He therefore stood up and told the inhabitants of Ayigya that they should consider him chief of the community.

Most of the inhabitants that I have spoken to didn't have anything against this; they never saw the other chief anyways. Thus exactly how this changed the situation over the previous is unclear. However the decision of the sub chief had upset the family of the original chief. They announced that *the* chief was still the chief. And consequently a chieftaincy dispute was born.

Disputes between chiefs are a rather common practice. After the current king (the highest possible chief of the Ashanti kingdom) was installed on his stool, he decided that he wanted to have all disputes solved. Therefore he erected a special court where chiefs that are in dispute can come and present their case.

In an interview, the queenmother, that backs the story and role of *the* chief, said that the case had been called in court recently and since *the* chief wasn't in town she was asked to represent his case. Until the time of the interview no judgment was given.

In summary

- The chieftaincy dispute in the community Ayigya Ahenbronu influences the current role of the traditional institution and its leader in the community. In the scope of this research, the fact that finding a new location for the communal container is slowed down, influences the situation negatively. However from stories it also became known that not very much people are bothered with the conflict.
- It became evident that the queenmother does not trust the A.M.
- In Ayigya projects that are set up as joint collaboration between the queenmother and A.M. to improve infrastructure and sanitation do not seem to work
- In Aboabo 2 the chief does not control the land
- In Aboabo 2 the chief works well together with the A.M. and other leaders in the community
- There are not many projects set up in the field of sanitation in Aboabo 2
- The role of the traditional leaders is most of all spiritual

7.3.3 The religious leaders; Christian and Muslim leaders

Introduction

Last not least is the description of the role of the religious leaders and their associated institutions. As mentioned already, Ayigya Ahenbronu can be called a Christian community, and Aboabo 2 can be called a Muslim community. This does not mean that the population is entirely Christian or Muslim. According to the results of the questionnaire (see also chapter 5) the percentages are 91 %, and 87%.

Before starting the description it must be stressed that religion is very important for the inhabitants of both communities. The prevalence of churches and mosques is very wide spread. To give an indication, it is estimated by the A.M. that in Ayigya Ahenbronu there are at least 10 churches, excluding the charismatic churches set up by individuals, and it is estimated by the imam that in Aboabo (1 and 2) there are at least 100 mosques! Furthermore, the simple fact that all inhabitants of the communities that participated with the questionnaire are a member of a church or mosque illustrates this.

The situation in the communities

As time did not permit an in-depth research of the role of all institutions in the field, it was chosen to select one of the many religious leaders in Ayigya Ahenbronu, and the main Imam in Aboabo 2.

Membership churches in Ayigya Ahenbronu

In Ayigya Ahenbronu, the religious leader chosen is the Reverend of the Bethel Methodist Church. It is a large church that is spread throughout the entire country of Ghana, where it counts around 2000 Methodist societies. The headquarters is the Wesley house in Accra. At the headquarters the leaders for all different societies are chosen. The notorious Methodist Wesley College in Cape Coast is the church's Ghanaian pride. The society in Ayigya Ahenbronu is situated at the south east border of the community and counts around 500 members. According to the Reverend, 40% of the members are residents of the whole of Ayigya, 30% of the members are employees at the KNUST, and the rest comes from various places. He stresses that when people move to a different community they usually still travel to the church in Ayigya. Fact that in the 1960s employees of the KNUST founded the society of Ayigya explains the large percentage of members from this place. All members donate at least 1/10th of their income to the church, furthermore when there are contributions the members contribute again. Because of the income the subsidiary church

The churches inhabitants of Ayigya A. attend		
name of the church:	nr	%
Apostils Continuation of God	1	3
Assemblies of God	2	5
Bethel Assemblies of God	1	3
Bethel Methodologist Church	4	10
Calvary Charismatic Centre (CCC)	1	3
Christ Apologist Church	4	10
Church of Pentecost	7	18
Cornerstone Bible Church	1	3
Devine Healers Church	1	3
Family Chapel	1	3
King Chapel	1	3
New Apostolic Church	1	3
Roman Catholic Church	10	25
Seventh day Adventist Church	1	3
Trinity Foundation Ministry	1	3
Victory Baptist Church	3	8
Total	40	100

in Ayigya Ahenbronu has been able to invest money in the construction of a new church, and in several projects, largest of which a vocational institution, placed next to the church.

The Reverend and his surrounding leaders (which can add up to 70) meet when possible one time a week. At this meeting the state of all affairs, including the bible clubs and the church's many committees, are discussed. On the urban level, leaders meet and decide on common investment goals; currently this is the construction of a large training centre.

On the national level the Reverend of the church participates in two manners. First of all, every two years a delegation of Reverends of the Methodologist church meets and discusses policies for the years to come. Furthermore, every year the Christian Council of Ghana celebrates the Christian week. During this week the leaders of the Christian churches come together, and talk about their responsibilities. This can be in any type of field. The Saturday of the week is used for practical activities. For example, adding the hospital or an orphanage, or doing a large clean up campaign.

The Reverend relates well to all actors in the community. According to own saying he has a complementary relation with the government institutions. When there are problems he informs them, and when he knows solutions he does the same. With other actors in the community he has a cordial but no deep relation.

The Imam in Aboabo leads inhabitants spiritually; he's an Arabic teacher and leads the prayers. He has been elected as Imam by the community on basis of likeliness, and has been officially appointed by the chief of the community. The Imam has its own mosque; however via a public announce system, all mosques in the communities Aboabo 1 and 2 can hear his prayer.

Membership Mosque Aboabo 2

Research Among the inhabitants pointed out that 82% of the respondents goes to the mosque in the community of Aboabo.

The Imam commented that inhabitants meet with their particular tribe, but that the punctuality of these meetings varies from every Sunday to one Sunday in a month. He assists those that ask or need it.

In contrast to the Christian practice, the contribution of the members of the mosque is a fixed Amount of 1000 cedis per child per month (equivalent to around 1 euro), and a variable Amount of others willing to give. Money is foremost used in the construction of the mosques and the public address system.

Where inhabitants of Aboabo 2 go to the mosque		
<i>location</i>	<i>nr</i>	<i>%</i>
Aboabo	53	82
Akwatia line	7	11
Asawasi	3	5
Dogomba line	1	2
Sabo zongo	1	2
total	65	100

Furthermore, the Imam has been elected vice president of the Uloemau, Muslim leaders in Ashanti region. This organization seeks to create harmony and order in current affairs. They are responsible for solving conflicts, scheduling the funerals and dividing the properties of the people. The function of the Imam basically is ensuring the communication between the different organizations of the tribes. Meetings are every 1st Wednesday for an executive meeting of the council only, and every last Wednesday for a general meeting. At meetings there is time for prayers and preaching of the word of God and discussions of current affairs, including problems. The chief of Aboabo 2 always attends, and furthermore there are uncountable people coming to these meetings. According to the Imam there are many tasks and it is a lot of work.

He also comments that his role and function are appreciated and valued by all governmental and civil society actors. He's always treated with respect and consulted upon important aspects. However he also comments that he'd like to receive some form of material appreciation for his position. This has not happened yet.

The opinion on waste and the community

The opinion of both the Reverend and the Imam concerning waste and the community can best be illustrated by the following quotes out of the interviews;

Opinion of the Reverend:

On the community: "Ayigya is a peaceful place so far. But more attention should go to its development of especially the road and the gutters. In Ayigya in general there is a lot more that needs to be done. We would

embrace the h-2-h container system. However not everyone likes this. Finding a solution lies within the task of the A.M.”

As to cleaning the environment: “This is the responsibility of the inhabitants of the community; it’s the people that make the place dirty. But they are not ready to accept this. (1) The argument they sometimes present is that the municipal council makes them pay taxes and than this tax money should be used. (2). the people are not conscious, and because of that they make the place untidy.”

We need education to make the people conscious on the aspect of actual polluting. When people perform certain task they do it without thinking. People don’t like to be told how to do that. It is human nature. We don’t want to be recollecting. But we need to be told.

Opinion of the Imam:

On the container system: “I embrace the current system. The container system is definitely an improvement over the former. However the problem remains how frequent it is all collected and how the people behave.”

On the people: “The attitude is not good. People know very well what they should and should not do. We pray all the time and we keep telling them. However the people do not want to change their behaviour. When the container is full and they come and see this they consequently start to act indifferently and throw the waste everywhere. The attitude has deteriorated especially because of the increase in population. The question for the people is where they should go.

Help that we receive is not sufficient. When the British where here they could help. This government is different. There is much waste, no infrastructure. The government should get money to invest and give it to us, the people. However the government is not the only one that we can blame. The private companies are also not working up to standard. The government at this time should seek assistance and help abroad in foreign countries and from institutions.

Both religious leaders are worried about the behaviour of the people. Where the Reverend says that this is human nature, the imam of the community says that the behind laying reason for the behaviour is the growth of the population.

Further, from the opinions it becomes clear that the Reverend is less involved in the activities that go on in the community. He’s concerned by the displayed behaviour of the people, gives a reason for this behaviour, but also stipulates that the A.M. should find a solution for this. Whereas the A.M. in Aboabo, finds that it is within the task of the entire government to find a solution for the problem.

The contribution of the Reverend and of the Imam to a clean environment

In light of the problems concerning the attitude and the behaviour towards the waste, that both religious leaders see, they have both taken up the task of educating the people within their “target group” via their prayers.

But whereas the target group of the Reverend does not extend further than all the members of his church, the target group of the Imam includes everyone that listens to his daily prayers, which is a much larger proportion of the population.

Furthermore, where the Reverend only once in a while organizes clean-up campaigns, the Imam is involved in all cleanup campaigns that find place in the community.

To continue, the means of both leaders are not the same. The Reverend, whose church relatively disposes over a lot of means, comments that they are often asked to contribute to any type of project carried out by any type of organization in his community, and they often refuse. He names the example of the construction of the roads in the community, where the queenmother, chief and A.M. had constructed a plan and wanted the churches to contribute 30 million cedis (3000 euros). But he also adds that when the government wanted to construct a small road to the sanitation site, his church contributed to this.

When asked about the means of the Imam, he comments that they have many investment needs and can use extra money, but they lack funds.

In conclusion

- Instead of contributing to the entire community, the religious leaders only contribute to their target population.
- It can be concluded that the target population of the religious leader in Aboabo 2 is greater
 - o In the case of the Reverend, this “target population” is limited to those that attend his church. According to the questionnaire results, this is 10% of the Christians, and 9% of all inhabitants in the community.

- In the case of the Imam of Aboabo, this is limited to those that listen to his prayers According to questionnaire results, 82% of all Muslims, and 71% of all inhabitants in the community visit the mosque.
- The Imam of Aboabo works closely together with leaders of the community, i.e. the A.M., the unit committee, and the chief. The Reverend works closely together with the leaders in his society.
- Through announcing values about cleanliness and proper behaviour in prayers both religious leaders try to educate the people and influence their behaviour and opinion.
- Both leaders participate in or organize clean up campaigns of their target population.
- According to the Reverend in Ayigya Ahenbronu, his society receives many requests for contributions; however, he almost always turns them down.
- The Imam has made several requests for future help for his community.

7.4 Summary upon the role and opinion of the civil society

- It can be concluded that there are many different types of organizations involved in a great number of activities, **in both communities!**
- From the results of the research and from the fieldwork it can be concluded that the pure existence of these organizations contributes to (an increase in) the level of social capital in both communities
- Except from the role of the WB, the involvement of the civil society in waste related aspects is very meagre. The only identified activities are;
 - The trials of the CAGA to introduce h2h (in other community)
 - The clean-up campaign with Media coverage, organized by the A.M. of Aboabo, and the NGO ADRA
 - The meagre contributions of the clubs towards the community clean up campaigns
- In contrast, the international developmental organization, the WB has played a large role in influencing the policies of the government, and the systems that the government uses for solid waste collection and final disposal.
- The participation between leaders is streamlined in Aboabo 2, where the chief, the A.M., and the Imam., come together and share ideas and opinions
- In Ayigya Ahenbronu the participation between the leaders is not good.
 - The chieftaincy conflict does not cause much trouble but does lead to some unsolved situations
 - Fact that the queenmother does not like the role the current A.M. plays does not stimulate participation (and visa versa fact that A.M. finds that Queenmother should do more with her means for the community)
 - One visible result is the current state of the community clean up campaigns and development projects that have not been carried out anymore.

8 Summary: The participation between the three Actors & solid waste

8.1 Introduction

In this chapter the participation and the level of participation, especially concerning the management of solid waste for the two communities of this research, is brought forward and concluded upon.

The model of the actor approach introduced in chapter two presents the framework for the analysis in this research. In the chapters five, six, and seven, and to some extent chapter four, the role of each actor and its relation with other actors and solid waste management is described and analyzed as accurate as / when possible.

In this chapter these results are summarized and put in an overview-table. It is chosen to concentrate on the nature of the relation that exists between the actors, and the involvement of the actor with solid waste management.

8.2 Relations and actual forms of participation in the community

8.2.1 Introduction

Existing relations between actors determine to a large extent what type of partnership exists or can be accomplished. This is backed up by the opinion of Mitlin (2001), who, (as can be read in 2.7.3) finds that the institutions of civil society reflect the society and social processes in which they are embedded.

As the research shows, reality proves that any type of partnership is bound to the dimensions of the relations between the actors involved. Hereby the definition of a partnership given by Hordijk cited by Post *et al* (2003), states that a profitable partnership includes at least an enduring relation between two or more actors, that these involved partners must all bring something to the partnership, and must all benefit from the accomplished results.

Mutual beneficial relation?

In the table 20 the relation that exists between the actors in the field has been qualified. It has been decided to differentiate between (a) a mutual beneficial relation, or (b) a non mutual beneficial relation, and (c) no role between the actors. In case the relation is non mutual, the power of the relation lies with the actor that has the littlest to gain or lose from the relation, and therefore the outcome of an eventual partnership largely depends on the role of this actor.

Role in solid waste management

Determining the involvement per actor in the field of solid waste management, is done by selecting three types of actions in which the actors can be involved i.e. actors can be involved in actions centred around the communal container system, actions centred around communal cleanup campaigns, and actions centred around communal waste projects.

Firstly, the communal container system is the current collection system in use in the communities, and in order for the system to work many actors play a role. Secondly, the communal cleaning campaigns are the only real form of bottom up community action in the field of solid waste that could be identified. Thirdly, actions centred on communal waste projects are actions that are initiated in order to improve the current sanitation situation in the community. There are two examples to this. The first one concerns the (already finished) Urban IV sanitation project, set up by the World Bank, and carried out in cooperation with all levels of government. As a result, the infrastructure and the sanitation in the community Aboabo 2 has improved. The second example, illustrated in the text box, includes the introduction of the house to house collection system, a joint

effort of the WB, the CAGA, and the government. In the box hereunder these three examples are worked out and in the table they are concluded upon.

8.2.2 *On the inhabitants of the communities*

The role that the inhabitants play is first of all influenced by the context within the inhabitants find themselves, and secondly by their attitude and behaviour. The analysis of the role of the inhabitants in chapter five showed the different dimensions of their role per se. Here under the relation the inhabitants have with other actors and with the waste are summarized.

The relations with other actors

The relations that the inhabitants have with the other actors in and around the community differ from person to person, whereby every person has its personal 'luggage'. Yet, overall it can be concluded that in both communities, the inhabitants seem to have mutual beneficial relations with the religious institutions and the social clubs of whom they are a member. The reasons why inhabitants decide to join these organizations are social and cultural reasons, whereby finding comfort and support from one another and from God is the main benefit. As the mere reason for existence of these organizations concerns social and cultural care (see 7.3.3 & 7.3.4), it can be concluded that the relation is mutual beneficial. The same type of mutual benefits exists between the inhabitants and the businesses in the community; as the businesses enable the inhabitants to foresee in their everyday living, and the inhabitants foresee the business of income.

When it concerns the relation that the inhabitants have with the local government representative, the A.M., it can be concluded that in Ayigya Ahenbronu this relation is not mutual beneficent, while in Aboabo 2 it is. Whereas there is no hard evidence to accompany this, in Ayigya Ahenbronu a large number of respondents commented that they don't know what the A.M. is doing for them. In Aboabo 2, by contrast, many respondents commented that they like the manner that the A.M. helps them.

The relations with solid waste management

In both communities the inhabitants can make use of the communal container in order to dispose over the solid waste. In the questionnaire submitted, the inhabitants declare to do this. However, it also became clear that the capacity of the system is insufficient for proper waste collection. Whereas the inhabitants, again in both communities, state that they like to participate and contribute and to find a manner in dealing with the waste, maybe even setting up a system, about 50% state that they do not have the time to do this. Also their opinion on the actual level of cleanliness is paradox.

Furthermore when it concerns the community clean-up campaigns it becomes clear that the respondents do participate in these event, but only as they are organized for them. It is embedded in their culture to contribute with everyone else. Yet initiating the campaigns is not within their reach or role.

In Ayigya Ahenbronu, it can be seen that at least half of the inhabitant find that cleaning the community is their responsibility; when it concerns the cleaning of the community half of the population finds that the government should do this, and concerning the collection of the waste, a majority of inhabitants is prepared to pay for this. This indicates that when time and energy is spend in promoting concrete manners to improve sanitation inhabitants are prepared to contribute. In Aboabo 2 inhabitants seem to take less responsibility for cleaning the community, over 80% of the inhabitants finds that the government must clean the streets, and furthermore a small majority does not want to pay for waste collection. Here it must be added that they probably don't like this because they have seen that even if people pay, collection still does not function on standard.

8.2.3 *On the role of the government*

Relations with WB

The government of Ghana as a whole stands for a difficult task; how to provide proper sanitation without disposing over the proper means to stimulate this? Luckily for them they do not stand alone. The government of Ghana is helped by donor and development institutions as the WB, the IMF, the UN, and the EU, who value proper sanitation, and see this as a step towards development. However, along with the help come the obligations. The use of urban management and the thereby belonging concept of popular participation are the tools they have indicated to improve the situation. Taking the above into account, it is difficult to conclude whether the relation between the government and the WB in terms of solid waste management is mutual beneficial. However, as both have agreed on the projects and its conditions it seems as if there are mutual benefits. Hereupon will be elaborated in the concluding chapter.

Internal and external relations of the KMA and the WMD

The government as a whole can be split in several parts which are most of the time hierarchically dependent. The relation the KMA has with the central government is mutual beneficial to the extend that the KMA has power over local projects and receives means to execute these projects, and the central government has less tasks to do but must give away more means. Here, it must be mentioned that one of the major difficulties of the decentralization is the lack of means to execute the projects up to standard. But although there are still efforts to obtain more means, information obtained during the research shows that the KMA is capable to work with the current means, accepting the policies and working along them. The existing relation between the WMD and the KMA show the same drawback of a lack of means. The largest part of the employees of the WMD has accepted this and is also working along the policies. However the director of the WMD declares he's unable to execute his tasks because of the lack of means and on top of that the manner that the KMA uses to decide over the means (on the one side very bureaucratic and on the other hand very dictatorial especially because of the power of the MCE)

According to the policies, the solution for the lack of means should be found in the field. The participation between the government and the civil society should contribute to an improvement of the service. However, when looking at the actual results in the field, it is seen that next to the mentioned relations with the WB and all, there are no other mutual beneficial relations. The local civil society organizations are often too weak to actually contribute to development. The relation with the traditional and religious leaders is cordial, but not more than this.

Dual relations of the A.M.

Last not least is the difficult role of the A.M. He must promote the policies of the government on the one side, and on the other side, he needs to represent the needs and wants of the people.

In the previous paragraph it could be seen that the inhabitants of the community of Ayigya Ahenbronu have no mutual beneficial relation with their A.M., and the inhabitants of the community Aboabo 2 do seem to have a mutual beneficial relation.

When it concerns the mutual beneficial relation that the A.M. has with the KMA, it must be concluded that the A.M. of Ayigya Ahenbronu is more capable to establish such a relation than the A.M. of Aboabo 2, as the A.M. of Ayigya also works for the body of the KMA.

The relation the A.M. has with the bottom up civil society organization (i.e. largely the social clubs) is in both communities very meagre. The A.M. in Ayigya Ahenbronu comments that it is impossible to form a partnership with any of these organizations, because especially the nature of the organizations does not support higher developmental goals than providing social and cultural comfort.

The relation the A.M. of Ayigya Ahenbronu has with the religious and traditional leaders is not often mutual beneficial. For example, the A.M. does not like the role of the Queenmother (he finds that she should contribute more towards the development of the community in kind). Furthermore he finds that there are too many religious leaders to deal with, the ones belonging to a larger institution

sometimes have contributed to development projects, but goals of the charismatic are doubtful, and do not contribute to development.

In contrast, the A.M. of Aboabo 2 has a mutual beneficial relation with the religious and traditional leaders in his community. The three leaders, together with other important people in the community and beyond, discuss matters often and try to reach joint agreement and joint goals. And on top of that, he has also established a mutual beneficial relation with the NGO ADRA.

The relations with solid waste management

The communal container system is used but not preferred by the government. It is clear that the preferred system is the h2h collection system. The role of the KMA concerning the current collection system is providing enough new equipment and means for the system to be running. The role of the WMD is to ensure that the waste in the containers is lifted by the private company in charge, and disposed over at the proper sites. The role of the A.M. is to ensure that the waste in his community is lifted on time.

The role of the government concerning the cleanup campaigns is still in its infancy. Currently the KMA has started to erect the town councils throughout the city, where a group of communities can meet, presided by one of the A.M. of the communities. One of the tasks of the town councils is to organize a monthly clean-up campaign. However, since the town councils are not functioning up to standard, the cleanup campaigns can also not be promoted as how they should. A.M. is supposed to take-over this role. In Ayigya Ahenbronu the A.M. has not succeeded in doing this. What he accomplished was setting up a system for cleaning of the markets. In Aboabo 2, the A.M. works together with the religious and traditional leaders in promoting the cleanup campaigns. But as they comment themselves, people seem to be more and more difficult to motivate. The fact however, that the three leaders, in cooperation with ADRA have organized a clean-up campaign that even appeared on the national television is in their advantage.

Last not least is the introduction of the h2h. It is the stance of the government to introduce the system to the community. They have already started the system in a selection of the communities, but they have decided that before introducing it to the lower-income communities they want to promote the system, and come to know the opinion of the inhabitants of the community themselves. As the text box will illustrate, in Ayigya Ahenbronu this meeting has turned out to be a failure. In Aboabo 2, the meeting per se was a success, as many parties attended and expressed their vision. However, the outcome of the meeting reflected future problems because many inhabitants were sceptical about the h2h system.

8.2.4 On the role of the civil society

On the relations with other actors

The core task of the organizations in and around the community reveals much about the relations they have with other actors.

The WB has, as discussed, a mutual beneficial relation with the government. The social, cultural, economical, and political clubs have mutual beneficial relations with their members, but have almost no mutual beneficial relation with any other actors, and especially not in the field of waste management.

The traditional leader of the community Ayigya Ahenbronu has at this moment no mutual relation with the A.M. The current chieftaincy dispute and its beyond laying causes is one of the reasons for the current absence of a mutual relation. Another reason is the fact the queenmother does not like the role of the A.M. (she distrusts his goals). The only mutual beneficial relation the traditional leader (In this case the queenmother) has, that has been discovered in this research, is between the queenmother and the clubs of whom she is a patron. The religious leader of the Methodist church in the community Ayigya Ahenbronu has cordial relations with almost all actors in the communities. However, he only has mutual beneficial relations with the members of his church. To a lot smaller extend they have a mutual relation with the government, for example the leader passed information of the government on to his members and visa versa, and when a road needed to be constructed he contributed.

As has already become clear, the traditional and religious leaders, i.e. the Chief and the Imam, of the community of Aboabo 2 have a mutual beneficial relation with the A.M. and with each other. Both leaders also comment to have a mutual beneficial relation with the inhabitants of their community. The Imam adds however that he is disappointed about the reflected behaviour that the inhabitants display concerning the waste. The relation the leaders have with the social clubs in their community is cordial, but does not extend further than providing and giving information. As the Imam is vice president of the Uloemau, (i.e. of the Muslim leaders in Ashanti region), his relation with people and their organizations extends the community. The relation both leaders have with the government authorities is cordial, but not mutual. Especially the Imam complains that they, the leaders of the community, are not given anything in return for the information and the introduction to their inhabitants and customs that they provide the government with.

The relations with solid waste management

The relation the civil society as a whole has with the solid waste management is very meagre. In fact the only civil society organization that has really contributed is the WB. Some of the many social, cultural, political, and economical organizations in the communities and the NGO ADRA have either organized or participated in a community clean up campaign, but that is the furthest their contribution to a clean community has gone.

The contribution of the queenmother of Ayigya Ahenbronu is currently almost non existent. She does not like the current location of the communal container but seems not to undertake action to change this. Her input in the cleanup campaigns is non existent at this moment; according to her, her family is busy restarting the campaigns, but here off no evidence could be found. Finally, her input in the introduction of the h2h is little. She is against the introduction of the h-2-h in Ayigya Ahenbronu but she does not undertake action.

The involvement of religious leader of the Methodist church towards a clean community is meagre; it includes the organization of a yearly clean-up campaign, and sometimes the positive decision to participate in other projects when they are requested.

The involvement of the Imam and the Chief in Aboabo towards the management of the waste is average to good; they back up when he complains to the WMD about the container system, and assist him in his trials to organize clean up campaigns y promoting them and constantly educating the inhabitants on waste and hygienic manners.

On the container system

Attempt to participate in solid waste management 1; The use of the container system

Precondition and financing: In the community that the system is introduced there should be a tarred access road. The government currently pays for the collection and disposal of the waste, and the container.

Current state: The system is currently in use in both communities. The major shortcomings are the location, the number of containers placed, the frequency of collection of the containers, and the fact that the government pays for the system

The involved actors: WMD, KMA, and the A.M. of both communities, Meskworld, the inhabitants of the communities, all other civil society actor that use the system.

Initiator: The government

Promoters: The government, especially the A.M.

Executers: The WMD and Meskworld and the A.M. in both communities

Benefactors: The communities, their inhabitants, and all civil society groups because they have a proper place to dispose over their solid wastes. The government, because the communities dispose over a proper system for the waste they are kept clean.

On the communal clean up camp

Attempt to participate in solid waste management 2; The clean up campaigns

Preconditions and financing:

There are no preconditions or a manner for financing. The government tries to enforce the town councils to organize a monthly clean-up campaign, but as the structure of the town councils is only in its infancy, the government cannot enforce them. When campaigns are organized the government must be informed so that they can ensure the collected waste is disposed over, and when necessary and available they borrow this to the ones organizing the campaign. Furthermore, volunteers give equipment and drinks.

In Ayigya Ahenbronu

Current state: Since 2003, the community clean up campaigns in Ayigya Ahenbronu have not found place anymore. The most likely reason is the current chieftaincy conflict. In order to revive the campaigns the A.M. has announced that people should come on the radio. Furthermore, a group of businesses has lately organized one, but only around the market.

The involved actors: The inhabitants of the communities, all civil society actors present, the A.M., WMD

Initiator: none (A.M. tries)

Promoters: The government to some extent, the chieftaincy institution to some extent, the civil society organizations to some extent.

Executers: The inhabitants and the organizations in the community

Benefactors: The communities, their inhabitants, all civil society groups in the community, and the government..

Special note: the A.M. of the community has accomplished that there is a system for cleaning the Two market places in the community

In Aboabo 2

Current state: The clean-up campaigns are held regularly, i.e. around one time every three weeks, but on a small scale. The organization is a joint collaboration of the A.M., the chief, and the Imam.

The involved actors: The inhabitants of the communities, all civil society actors present, including the chief and the Imam, the A.M., WMD.

Initiator: A.M., in cooperation with the Chief and the Imam

Promoters: especially the A.M., the Chief and the Imam, and furthermore the government to some extent, the chieftaincy institution to some extent, the civil society organizations to some extent.

Executers: A.M., in cooperation with the Chief and the Imam and the inhabitants and the organizations in the community

Benefactors: The communities, their inhabitants, all civil society groups in the community, and the government.

Special note: on august 01 2004, the A.M., in cooperation with his leaders has ensured that the NGO ADRA helped setting up the clean up campaign by providing media overage

On the introduction of the h-2-h system

Attempt to participate in solid waste management 3; Introducing the house-to-house collection in the communities

The situation: as has become clear, it is the vision of the government to introduce the house to house collection method to every community in the city. In order to do this they have decided to organize a meeting in every community to explain their ideas and to ask for their opinion on the idea.

In Ayigya Ahenbronu

The meeting and the results: The meeting was organized by the A.M., at the request of the KMA and the WMD. However, it did not turn out to be a success. Almost no inhabitants of the community attended the meeting. Many commented they were not aware of the meeting. The queenmother did not attend the meeting because she did not have time.

The involved actors: Very few inhabitants of the communities, the A.M., WMD, KMA

Initiator: The KMA and WMD

Promoters: The A.M.

Executers: The KMA, WMD, A.M.

Benefactors: in this case almost no-one

In Aboabo 2

The meeting: The meeting was organized at the request of the KMA and the WMD by the A.M., again in cooperation with the Chief and the Imam at the central mosque in the community. According to the actors, there was no place for more people to attend the meeting. There was plenty room for discussions. The inhabitants clearly announced their stance on the house-to-house system and especially their stance on the failure in Asawasi.

And the results; According to both parties, the meeting turned out to be a success. As facts are now, the government still wants to introduce the house-to-house collection scheme, but is thinking about setting up a different scheme especially for communities where there are many inhabitants per house.

The involved actors: Inhabitants of the communities, the A.M., WMD, KMA

Initiator: The KMA and WMD

Promoters: The A.M., in cooperation with the chief and the Imam

Executers: The KMA, WMD, A.M.

Benefactors: To some extent both parties, one the one hand the community with its leaders the A.M., chief, and Imam, on the other hand the WMD and KMA

Relations and participation

TABLE OF RELATIONS AND PARTICIPATION							
list of actors and activities		Relation between actors		Involvement in managing the waste			Overall role solid waste
		Mutual beneficial relation with	No mutual beneficial relation with	Communal container System	Communal clean up campaigns	Intro h2h	
ACTOR 1	<i>Inhab. Ayigya A.</i>	Some civil society groups, local businesses, religious leaders and their institutions	Assemblyman	Average role (5.4.2)	small and paradoxical role (5.4.3, 5.4.4)	No role yet	<i>Small, paradoxical role</i>
	<i>Inhab. Aboabo 2</i>	Some civil society groups, local businesses, religious and traditional leaders, Assemblyman		Average role (5.4.2)	Average & paradoxical role (5.4.3, 5.4.4)	No role yet	<i>Small, paradoxical role</i>
ACTOR 2	<i>KMA</i>	central government	chieftaincy institution, comms, WMD	Average role (see 4.2.4)	No role	Small role	<i>Small role</i>
	<i>A.M. Ayigya A.</i>	KMA, workers of Meskworld	Inhabitants	Average & dubious role (see 6.8.2, 7.4.2)	Wrong role, (see 5.4.3, 6.8.2, 7.4.2)	Small role	<i>Small & dubious role</i>
	<i>A.M. Aboabo 2</i>	KMA, the inhabitants, the chief, Imam., ADRA, workers of Meskworld		Big role (see 6.8.2, 7.4.2, 7.4.3)	Average role (see 5.4.3, 6.8.2, 7.3.2, 7.4.2, 7.4.3)	Average role	<i>Average role</i>
	<i>WMD</i>	CAGA, Meskworld, the communities		Average role (4.2.4, 6.1, 6.2 6.6,)	Average role (5.4.3)	Small role	<i>Average role</i>
ACTOR 3	<i>WB</i>	??Government, Aboabo 2, CAGA??		No mentioned role	No role	Big role	<i>influencing role</i>
	<i>ADRA</i>	Assemblyman and Community leaders Aboabo 2		No role	Average role (see 7.3.2)	No role	<i>Almost no role</i>
	<i>Social club</i>	Its members		No role	No role yet	No role yet	<i>NO ROLE</i>
	<i>Royal Society</i>	Its members	The Assemblyman and the queenmother	No role	No role yet	No role yet	<i>NO ROLE</i>
	<i>Mama Lu fashion</i>	Members of organization, customers, A.M., church leader		small role (see 7.3.5)	Average role (see 7.3.5)	No role yet	<i>Small role</i>
	<i>Tie and die shop</i>	Members of organization, customers, A.M.		Small role (see 7.3.5)	No role yet	No role yet	<i>Almost no role</i>
	<i>Meskworld</i>	Some communities, WMD	KMA	Big role (see 4.2.4 6.6.4)	Obligatory role (see 4.2.4 6.6.4)	No role	<i>Average but outstanding role</i>
	<i>Queen-mother Ayigya A.</i>	The chief and some civil society organizations	Assemblyman	No role	Almost no role (7.4.2)	Almost no role	<i>Almost no role</i>
	<i>Chief Aboabo 2</i>	The inhabitants of Aboabo 2 A.M., Imam., some civil society organizations		Almost no role (see 7.4.2)	Small role (see 7.4.2)	Small role	<i>Small role</i>
	<i>Methodist Church leader</i>	The chief, target population, the government	Some civil society organizations	Small role (see 7.4.3)	Almost no role (see 7.4.3)	Almost no role	<i>Almost no role</i>
<i>Imam. Aboabo 2</i>	The inhabitants of Aboabo 2 A.M., Imam., some civil society organizations	the government	Small role (see 7.4.3)	small role (see 7.4.3)	small role	<i>Small role</i>	

8.3 Post's popular participation drawbacks tested on the current situation

In the paragraphs above it became clear that participation is actually weak and meagre as it comes to managing solid waste. That participation is difficult has been concluded before. As can be recalled, in the second chapter of this research Post's drawbacks on the concept of popular participation, for the country of Ghana, are summarized. Hereunder his drawbacks are compared with the actual situation found in this research.

Table 21 shows that many of the drawbacks still seem to apply to the current situation for waste management. Whereas this research does not include evidence to comment in detail on the points two and three of the table hereunder, evidence has been collected that shows that point four and five, concerning the role and position of the MCE and the difficult and dual role of the assemblyman, apply to the situation.

However, concerning point one, it must be noted that the results of this research do not imply that CBO's and their activities are deteriorating. Despite a change in the socio-economic and ethnic heterogeneity of the population, people continue to feel the urge to come together and support each other. The collected information on the opinion and behaviour towards the waste, participation in projects, membership to an organization, does not reflect any relation with a certain household situation. The fact is that in both communities the CBO's do not feel jointly responsible for the community and its waste.

The "no-pay for taxes attitude" can be closely linked with the expectations and confidence (*or the lack thereof*) inhabitants have in projects of the government to improve the waste management. In general; people are willing to pay for a good system for waste collection, but if they doubt the system is good they refuse to pay. (See also text box on the following page)

Drawbacks on participation

Identified weaknesses of popular participation by Post (2001)		Ayigya A	Aboabo 2	
1	CBO's and their activities are thought to deteriorate	Changing socio-economic and ethnic heterogeneity of the population and the rise of individualistic attitudes.	To a small extend	
		A 'no-pay for taxes and services' attitude (see chapter 5.4.7)	i.e. There are 13% single households	i.e. there are 12% single households
		Very difficult to restore popular confidence in community projects	To some extend	A small majority
		Strong link community institutions - political patronage.	36% does not want to pay for the h2h tax	51% and the A.M. do not want to pay for the h2h tax
			Difficult to restart cleanups but the probable reason = the chieftaincy conflict	People distrust the service of the government in terms of solid waste
		i.e.*	i.e.*	
2	The actual development spending versus popular priorities	True! Community wants roads and gutters etc and money is first of all spend on creation of town council	True to some extend	
3	Centrally appointed officials continue to exercise great influence on local decision making	To a certain extend, but not much evidence found		
4	The chief executive (MCE) of the district often is too powerful	Yes		
5	The elected local representative of the community, the assemblyman, is in a difficult position	Yes. He enjoys the network. Others comment he doesn't do much for the community	Yes. He enjoys his function and is respected in the community but does not agree with all KMA policies	

* I.e.; No evidence found

(Bonus) The case of the company A.S.I. zip code

(Bonus) The case of the company A.S.I. zip code

The case of the company A.S.I. zip code illustrates both the no-pay attitude of inhabitants and the bureaucracy of the current system of local governance in Kumasi.

Mister B. directs and manages A.S.I. zip code, a company officially registered in Kumasi. Mister B. is a Ghanaian that has migrated to the United States around 20 years ago to enjoy benefits of a scholarship he was offered. After obtaining his master degree in environmental economics, he started an international career in business, and especially focused on marketing and developing computer engineering systems. In 2001, J.F. Kufour was elected president of Ghana. He requested "successful" Ghanaians to come back to their country to aid the development processes and execute projects they specialized in.

Mister B., at the time living in Belgium, came back to Kumasi, his hometown. His specialty was working with computer systems to design networks and consequently to sell public places and develop them. Therefore, he wrote a proposal to deliver Kumasi with a digital system for street names and zip codes. This proposal was received with much enthusiasm by the KMA. A so-called PPP (public private partnership) was signed, and the go ahead was given.

November 2001 Mister B. started the company A.S.I. zip code. He invested a lot of his personal capital. He hired personnel to draw maps of the city and all its buildings, personnel to promote the idea to all inhabitants and homeowners, personnel to sell the name and number plates for all the houses and street, personnel to insert data and manage data, etc. In his proposal, he had made a balance of expenses and income, and if the government would keep her promise, and if the people would receive the project positively, he would easily be able to break even.

Especially the inhabitants of the lower-income areas were thrilled by the idea of the addresses. These people were willing to pay for the service without any problem. In contrast to this, the KMA, once thrilled by his proposal, now wanted to back out. Especially the MCE refused to stick to the once made agreements. He simply refused to pay. Furthermore, there were voices in the assembly that announced the Amount agreed upon was too high. Despite this, until this day the KMA (is said to) use parts of the A.S.I. zip code promotional presentation in their video presentation that they send to other cities such as Almere in the Netherlands.

Mister B. has not turned into a deceived man. He's now promoting his project in other cities. As he says himself; *"I'm not disappointed. I seek for future opportunities. I don't regret coming back to Ghana. I know that I have developed a system that the people like and that can develop them in the future. So right now there is Takordi. Also Accra wants to do it. You see that others will like it."*

However, the story reflects the statements made concerning the will of the people to pay for systems and products, and (to some extent) the current functionality of the KMA.

9 Conclusion: The theory and the realities

9.1 Introduction

In this chapter the main research question is recalled and answered. Hereby difficulties with the theory of participation, in general, and per actor are explained. Lastly, the situation is concluded upon.

9.2 The question

The central question of this research is if “**the development of the solid waste management in the communities Ayigya Ahenbronu and Ayigya 2 in 2004 are an effort of joint collaboration between multiple actors.**”

In order to provide an answer to the research question the actors in the field have been identified and information concerning the role and opinion of a selection of the most important actors was gathered and analyzed upon. These actors could be divided in three types of categories; firstly the inhabitants of the communities, secondly the local government, and thirdly identified civil society forces with links to the communities of this research (i.e. Ayigya Ahenbronu and Aboabo 2).

9.3 The outcome

The analysis showed that via the policies (*where the MLGRD ensures that a good sanitation is the responsibility of all citizens, communities, private sector enterprises, NGOs and institutions of the government. And that all these actors have an essential part to play in maintaining a high standard of environmental sanitation so that domestic and commercial activities have no prejudicial effect on the health or the living and working environment of others.*) The government tries to implement the system of **popular participation**. However, the implementation is difficult and the results in the field of solid waste management in the communities of this research are meagre. To some extent the three indicated parties complement each other in their tasks. Yet participation is hereby restricted by two main problems;

1. Agreement to a common goal
2. Even if these three parties have as common goal improving the solid waste management, the interpretation of the goal / solution will always be different.

Overall development of the solid waste management is low, and the proposed and implemented solution is to combat this by working together, each actor with its own responsibilities. However, the responsibility of a mother of four children lies first most by taking care of her children, her job, the food, and the home, instead of taking care of the solid waste in the community. (This is a general agreed upon assumption for which evidence can be found in the pyramid of needs of Maslov.) When the mother of the children has ensured the above, she starts to think about improving sanitation. Research results showed that if the mother would live in Ayigya Ahenbronu, she would strive for finding a new place for the communal container, and if she would live in Aboabo she would strive for having more containers at the sites.

The responsibility of the government lies first most in setting up the institutions and ensuring that these institutions work. Solid waste management is worked on; for so far the means and the current followed policies allow and guide it. This means for example that when the means are lacking, the government cannot permit to hire workers to clean the streets. At this time, either the inhabitants have to do it, or nobody will with as result that the streets are not cleaned at all. Furthermore, it means that the collection of solid waste is privatized, that fees are charged, and house to house collection is strived for.

The multitude of existing organizations shows that inhabitants are concerned with the formation and creation of participation. This, according to the obtained information, seems to be a practice that is embedded in the Ghanaian culture. It can be concluded that social capital is available and that helping each other out is thereby of major importance. Disappointingly, evidence collected during the fieldwork shows that apart from the WB and the NGO ADRA, and the community leaders in Aboabo 2, organizations are not active in setting up projects in the field of solid waste. The reason for this is that the formed groups do not find that solid waste management is their responsibility.

9.4 The difficulties concerning the role of the Actors

Analysis shows that the role of the identified actors also leads to **internal** contradictions, problems, and frustrations.

First of all, the role of the inhabitants in the community is dubious. From this research, it can be concluded that inhabitants display a paradoxical attitude towards waste and their opinion on waste, cleanliness, and participation. Especially their opinion on the current level of cleanliness can be called astonishing. For joint developmental community projects in the field of solid waste to come about, it is necessary that at least every party involved sees the pitfalls of the current situation and has a common goal to work towards. As the inhabitants do not even agree that the level of cleanliness is worrisome, this common goal does not seem to exist.

To a certain extent, the particular approach of the fieldwork of this research influenced the respondents and could have led to inconsistent results. However, the contradicting opinion on the level of cleanliness, what is in fact the basic principle of waste and waste management, shows that waste is not a general shared issue.

The role of the local government is the second role to comment upon; The ESP (environmental sanitation policy) emphasizes the important role that partnerships between the public and private sectors play in order to deliver an effective service. However, when looked at the real situation it is seen that these partnerships are not always equal, nor do they always have the strived for effect, or do they exist at all.

First of all, the bureaucracy of the system of local governance influences the vigour and decisiveness of the institution. Furthermore, the role of the MCE, the man with the most influence within the KMA, is found autocratic and domineering. This has not only been found in this research;

Aké cited by Post (1997) in his article on urban management in an unruly setting states that: "Although popular participation is on many African leaders' lips, genuine commitment to the concept is rare. Part of the explanation lies in the unrepresentative and elitist nature of African governments, whether civilian or military. The cadres of the political elite have overwhelmingly been concerned with their own survival and the use of power for the accumulation of private wealth".

Secondly, the assemblymen have a difficult and double task, of on the one hand setting about development in their community, and on the other hand contributing to the fact that governmental income is generated and policies executed.

A solution would be to spend time on developing and equalizing roles and responsibilities in participation. For example, maintaining equal relations with all businesses, or allowing the town councils to develop themselves sufficiently. At this moment, the town councils that are recently created are "scarcely out of the egg". At the same time this also brings the difficulty of popular spending versus development spending to the light. When the government spends money on institutions, money can not be spend on extra containers for waste collection.

The civil society organizations and institutions in the community actually do not cope with internal contradictions, problems, and frustrations. The members of the organization are moreover satisfied. They benefit from the organization and enjoy being a member.

Concerning the role of the WB it must be said that this bank does has it difficulties concerning the decisions of her own policy. Over the last few decades the role of the bank and its principles have

changed from liberal and strict structural adjustment, to promoting participation, to investing in infrastructural projects again. Whatever the outcome, its policies stay liberal oriented, and Ghana has implemented these.

9.5 In conclusion

The waste management is currently not an effort of joint collaboration between the actors, mainly because each actor has a different goal. This has been shown in the above paragraph, whereby the major reasons for a lack of actual participation between actors in the field of waste management in both communities have come to the light.

At this moment it can be said that the current system of solid waste management in the community is not sufficient. The government does not have the capacity to deliver the right system to the population. Furthermore, the attitude of some inhabitants contributes to the fact that the communities even become filthier. There are no effective projects set up that ensure that waste is managed. Furthermore, in this particular research civil society is not so much a battleground, of which Hearn (2001) is afraid (see 2.7.3). Rather the forms of organizations present seem to be embedded in Ghanaian history and (therefore) in the deeper roots of society, as if they are a part of the identity of a Ghanaian. Yet its contribution is not aimed at improving sanitation. It is aimed at ensuring cultural and social care for members.

Especially the situation for the community Aboabo 2 is worrisome. There are an ever increasing number of people living in this community. The majority of these inhabitants think that the government should bring the development, and thus also solutions for a clean environment to them. They are prepared to clean but they are also prepared to make the community dirty again.

Ayigya Ahenbronu is a smaller community, with more possibilities for growth to the eastern border. But also in this community, a continuation of the current manner of managing waste will be in the disadvantage of the community. Whereas no other visible results than a “messy” environment are obvious, deeper threatening results were health of inhabitants is endangered do exist.

A possible solution can be found when looking at the management function of the government. As has become obvious, the current system of governance, including the concept of popular participation, as how it is set up, provides both communities with some type of management for solid waste. Yet the management is not sufficient. As could be seen above, the major problem is a lack of a general agreed upon goal. What is proposed here is that the government should set goals that are inline with the reality and provide solutions fitting the identified problems. I.e. the government should manage waste by object, objective and action that fit the situation of the community.

Setting up a house to house collection system in the low income communities, where houses include sometimes more than a hundred persons, and there is no place or money for a container, is not a good object for low-income communities.

Instead, the government should prioritize improvement of the current communal container system in the communities. This system is liked by the majority of the respondents in the community, yet does not function as how it should.

The challenge would be to: (a) find a save and health location, and (b) set up a pilot, where inhabitants pay a fee and the container is emptied regularly. As the previous chapter showed, the government is prepared to come to the communities. Thus, when leaders of the community (the organizations present in the community are found not strong enough to do this), ensure that a meeting is set up between all the inhabitants that want to come, and the government, ideas can be exchanged.

Setting this up will show if the inhabitants react to it, and will behave better when they have a manner to dispose over their waste.

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