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"It just is..."

A case study of the relationship between the City Council of Nairobi and Community Based Waste Management Organisations

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Abstract

This purpose of this study was to examine the relationship between local governments and community based waste management organisations and the sustainability of voluntary organisations providing basic services. Drawing on analytical concepts of participatory development it investigate factors contributing to a successful relationship. More specifically how cooperation, communication and collaboration relate to the success or failure of community based initiatives. The concept of sustainable development provided analytical tools to measure how used for investigating the level of social sustainability. The thesis draws on an instrumental case study approach using community based organisations in Kibera, Nairobi and the City Council of Nairobi, Kenya. Data was collected through semi-structured and informal interviews together with non-participatory observations. The findings shows a relationship that lacks in cooperation, communication and collaboration and a case where social factors related to income, priority and motivation challenges the sustainability of the community based organisations.

Word count: 15173

Key word: Participatory Development, Sustainable Development, Community Based

Organisations, Solid Waste Management

List of Abbreviations

CBO - Community Based Organisations

CCN - City Council of Nairobi

EPM – Environmental Planning Management

GoK – Government of Kenya

IEA – Institute of Economic Affairs

ISWM – Integrated Solid Waste Management

KENSUP – Kenya Slum Upgrading Programme

KNBS - Kenyan National Bureau of Statistics

LASDP – Local Authority Service Delivery Plan

LGA – Local Government Act

MoH – Ministry of Housing

MPO – Management of Park and Open Spaces

MSWM – Municipal Solid Waste Management

NEMA – National Environmental Management Authority

NGO – Non-Governmental Organisation

PPP – Public Private Participation

SWM – Solid Waste Management

UN - United Nation

UNEP – United Nations Environment Programmes

WiW – Waste is Wealth Network

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1. Introduction

1.1 Research Problem

Traditionally urban service provision has been managed by the public sector and lately to a larger extent by the private sector. In most developing countries poverty, financial difficulties, inefficiency and corruption together with the growing urbanisation have all been part of the failure to meet the basic needs of the urban population. The failures have been especially visible in the low income communities. The systems used are often bureaucratic with top-down solutions and undiversified, not distinguishing between the different needs and heterogeneity of different areas within a city (Otiso 2003:224). The inability of the public and private sector to provide basic service deliveries in low income areas often results in the involvement of other actors; the voluntary sector including Non-Governmental Organisations (NGOs) and Community Based Organisations (CBOs) (Otiso 2003:222).

The voluntary sector is believed to lack many of the weaknesses the public and private sector have, it's not as bureaucratic as the public sector or as market oriented as the private sector. Third, the voluntary sector is often closer to the urban poor and has a deeper understanding of the characteristics of the low income areas (Fowler 1995:65; Otiso 2003:222). These factors have led to a strong belief in the voluntary sector as the best suited basic service provider in low income areas.

Despite the all positive aspects and the recognition of the voluntary sector as an important complement to public and private actors it cannot single-handedly meet the needs of the urban poor because of a lack in capacity (Fowler 1995:67). Lack of adequate resources, capability and competence are constraints the voluntary sector have to struggle with and to be effective in their work they need the inputs from the other actors, especially the state. The minimum level of partnership required is an environment that enables the voluntary sector to be established and function this often to being recognised by the state (Batley 2007:4). International agencies like the World Bank and the United Nations (UN) are strongly advocating the need of partnership between governments and non-state providers arguing that they can play complementary roles in the access and quality of basic urban services in the low income areas (UN-HABITAT 2011:10; Cities Alliance 1999:7).

What often needs to be improved is the level of collaboration and cooperation between the different actors. Today many governments in developing countries have recognised the voluntary sector as an equally important partner in basic service delivery and formally adopted

policies that recommend partnership and cooperation with them. However few initiatives have been taken to turn recommendations into reality (Batley 2007:4). Policy statements indicating the need for partnership and collaboration is clearly not enough, what is needed is effective engagement between the government and the voluntary sector at the operational level. Earlier studies have showed that this can only work when adequate information is provided and shared, there is capacity to enforce standards and there is no incentive to suppress the voluntary service providers (Batley et al., 2004; Chowdhury et al., 2004; Delay et al., 2004; Kadzamira et al., 2004; Larbi et al., 2004; Moran and Batley, 2004; Nair, 2004)

Solid Waste Management (SWM) is an essential part of basic urban services. In most cities in developing countries SWM constitutes a serious problem, less than 50 percent of the waste generated is collected posing a risk to the environment and human health (Medina 2000:2). SWM have been given less attention by local governments, policy makers and academics than other basic urban services such as water and sanitation that have been regarded as, and probably are depending on how you look at it, more important for the urban population. Nevertheless improper handling of waste contributes to a high level of mortality and diseases; it's a source of air, water and land pollution and biggest are the problems in the low income areas of the cities (ibid). The conventional approaches used often functions in the high to middle income areas where people are able to pay for the service and proper infrastructure and a higher level of stability exists. In the low income areas, in developing countries often synonym with informal settlements or slums¹, another reality exists with unplanned settlements, low level of infrastructure and socio-economic conditions that are very different from the rest of the city, hence a different approach is needed (ibid).

In the developing countries and especially in the low income areas the voluntary sector plays a major part in the waste management system. As described above this often depends on the municipalities' inability to provide effective and sustainable solutions and the people have stepped forward themselves to provide their own waste management system. However, the system does not ensure adequate SWM, the voluntary sector still have to struggle with the same factors: little resources, lack of adequate infrastructure and low capability from the settlers to pay for the service. Good local government and sound municipal management with an environment that ensures collaboration and partnerships is a requirement for sustainable and effective SWM (Batley 2007:6).

¹ Informal settlements refer to unplanned areas with insecure tenure inhabited by poor people without adequate basic infrastructure. Slums refer to poor areas with lack of basic infrastructure but are surveyed and planned

In Nairobi, the Capital city of Kenya, the basic urban service provision including SWM is allocated to the local government, the city Council of Nairobi (CCN). However the CCN has today moved from being a sole provider to becoming a facilitator over other actors, still having the main responsibility over the sector. The CCN have shifted to a public-private partnership approach and the middle to high income areas of Nairobi are today well served by private companies. This public-private partnership is planned to be taken even further with the ongoing implementation of the Integrated Solid Waste Management Plan (ISWM), focusing on completely franchising SWM to the private sector. In the low income areas of Nairobi there is a minimal direct provision of SWM by the CCN and non by private companies, instead the collection and management of waste is done voluntarily by community members organising themselves into Community Based Organisations (CCN 2013:4).

1.2 Research aim

Based in the information above the focus of this study has been derived. The study is case study which examines the relationship between the local government in Nairobi (e.g. the CCN) and CBOs undertaking waste management activities.

The focus is two folded and aims to investigate if the community organisations are a sustainable solution for proper SWM in the informal settlements. The sustainable solution focus will be investigated by looking at income generating aspects, the way waste is handled, the situation on the ground and what motivates the organisations handling waste.

Second, the cooperation between the CCN and the voluntary sector will be examined, how they collaborate and the level of participation. The second focus is closely linked to the first.

The study have been conducted under the assumption that community based initiatives need the support from the local authorities to be a sustainable solution and to be efficient.

The data was collected through field work in Nairobi and one of its informal settlements named Kibera during December 2012 to February 2013. The data was collected through interviews and non-participant observations and analysed qualitatively.

1.3 Disposition of the Paper

Followed by this introduction is a background chapter describing waste management in Nairobi together with guiding laws and policies. A description of the Case study area, Kibera is also included. Chapter three outlays the analytical framework describing the concepts of sustainable development, participatory development and a brief section on partnership theory. In chapter four the methodology for this study can be found. Chapter five contains the analysis and is divided into two sections. First the sustainability aspect is analysed and second the level of

participation and cooperation between the CCN and CBOs. The last chapter, number six, concludes the analysis. References and appendices can be found in the very end of this paper.

2 Background

The overall goal with SWM is to collect, treat and dispose solid wastes generated by households in an environmentally, sustainable and satisfactory manner using the most economic means available (World Bank 2013). In the following sections Kenyan laws and policies supposed to guide the management of waste are presented followed by short presentation of the waste management situation in Nairobi today. The section will end with an introduction of the case study area, Kibera.

2.1 Guiding Laws and Policies

The management of solid waste is dealt with under several laws, by law, regulations, Parliament Acts and policies, only the one that are relevant to this study will be outlined in this paper.

The administration of Nairobi city is the responsibility of the CCN under the Ministry of Local Government. Legally the CCN is responsible for the provision of most urban services including solid waste management through the Local Government Act (LGA) chapter 265 of the Laws of Kenya. The main objective for local authorities in Kenya and hence the CCN is to respond to local community demands (IEA 2009:7). In 2007 the CCN came up with solid waste By-Laws to improve the regulation and management of solid waste within their jurisdiction area. The By-Laws mandates the CCN to arrange for the collection, treatment of all domestic wastes within their area of jurisdiction and they have to take all necessary and reasonably measures to ensure and maintain clean and sanitary conditions within their area of jurisdiction at all times (By-Laws 2007 section 8). However the CCN is allowed to enter agreements with third parties such as private companies to fulfil their duties. Another important section in the By-Laws is section nine stating that the CCN shall make provision for small scale resource recovery activities to be undertaken by organised groups at by the CCN designated sites for disposal.

Environmental Management and Coordination Act (EMCA) from 1999 provides for the establishment of an appropriate and institutional framework for environmental management. The Act aims at prohibit dangerous handling and disposals of waste. One important section states that any person transporting or handling waste needs have a licence issued and waste can only be transported to an approved, by the GoK, disposal site (EMCA 1999 section 87). The National Environment management Authority (NEMA) have the mandate to order any person or business to stop any generation, handling, transport, storage or disposal where it presents substantial danger to public health, the environment or national resources (EMCA 1999 section

90). In practice this mean that NEMA can hold the CCN responsible for improper waste disposal or collection and event take them to court if necessary. In 2006 the Minister of Environment and Mineral Resources together with NEMA came up with regulations to complement the EMCA on the procedures and criteria's for handling categories of waste. For instance section one, two and three prohibit people from disposing any wastes in public places, this is important since it in reality is prohibit people from littering or throw waste near or into a water resource for example.

Vision 2030 is a national long-term development strategy that aims to transform Kenya into an industrialised middle-income country by the year 2030. The vision for the environment is "A nation living in a clean, secure and sustainable environment" (GoK 2002:§5.3). To realise the vision waste management is mentioned as one out of four important areas that needs improvement through development and enforcement of regulations and policies, creating awareness and Public Private Partnership (PPP). Through Vision 2030 a decentralisation framework have been formulated guiding citizen and PPP policies.

The Local Authority Service Delivery Plan (LASDP) is encouraging local authorities to spend resources on service delivery to citizens and also to promote citizens role in decision making processes in local authorities. The LASDP have since it was implemented in 2003 failed to effectively engage the public and mobilise well organised communities. One explanatory factor has been the low level of awareness from the citizens and the officers at the local authorities (GoK 2012).

Public participation is recognised in the Constitution of Kenya in article ten as a national value and a principle for good governance. Further on the constitution gives power to self-governance on local level and recognises the right of the communities to manage their own affairs and to further their own economic development, including the provision of basic services. The GoK have developed a framework for public participation where the commitment of the GoK and local authorities to share information and engage communities in an open dialogue is highlighted, however the framework have just recently been implemented, in October 2012 (GoK 2012). The public participation framework aims at bringing together the government, civil society and the private sector to build a common understanding of the local situation, priorities and programmes. The GoK confess that so for the public participation processes have been poorly conceptualized, misdirected and perceived confusing by many stakeholders (GoK 2012). Public participation has been defined in various ways by different people and for a variety of reasons, the new framework recognises the many forms public participation can take but highlights the need of two key approaches. First public participation is the "right thing to

do" and successful public participation is attached to good mechanisms and processes for achieving a common goal. Secondly there is no "one sixe fit all" public participation model (GoK 2012).

2.2. Waste Management in Nairobi

As described in the section above service delivery in the form of waste management is in Nairobi the responsibility of the CCN. In this section the waste management system will be explained in detail.

In Nairobi the daily total waste generation is at its most about 3120 tons and about 60 percentage of this is domestic waste and at best the waste collection level is at 50 percent (UNEP 2010:13-17). The CCN collect on average 430 tons/day and the rest is mainly collected by private companies (ibid). Historically the CCN was the only provider of solid waste collection, until 1986 when private waste collectors was introduced to the City with two private companies. Since then the number has increased to 60 in the year 1998 to 115 in 2009 (UNEP 2010:28). The CBOs in SWM increased from 15 in the year 1998 to over 135 in 2009 (ibid). This is the official figures over registered CBOs dealing with SWM and its assumed that there are many informal actors and non-registered CBOs undertaking activities connected to waste (ibid).

Today there is an active process of collaborative action between stakeholders aiming to achieve more effective coordination. The CCN together with UNEP have developed an Integrated Solid Waste Management plan which is a planning framework for solid waste management. The ISWM framework focus on three dimensions: Practical and technical elements of the waste management system, the aspects of the local context that should be taken into consideration when planning a waste management system and the stakeholders involved in the waste management (Scheinberg et al 2001:12). The ISWM plan was to be implemented in 2009/2010 but have still not been initiated however there are plans on starting the first pilot project next year in 2014.

Multilateral and bilateral external support agencies are engaged in supporting the municipal SWM, the agencies most involved in Nairobi are UN agencies like UN-habitat and UNEP (United Nations Environmental Programmes) and the Japanese International Cooperation Agency (JICA). JICA have been providing assistance to the CCN for improvement of waste management systems in Nairobi for over ten years. Back in 1998 JICA conducted a comprehensive ISWM master plan that was to be implemented by the year 2008, this did not happen. In 2012 JICA together with the CCN initiated the Project for Capacity Development of Solid Waste Management of Nairobi City. The overall goal is to expand the waste collection

and transportation in Nairobi and to strengthen the capacity of the CCN on SWM (JICA 2012). One output of the project is to strengthen the involvement of CBOs in waste collection and transportation by developing guidelines and holding workshops with CBOs.

2.2.1 Actor in SWM in Nairobi

The first category of actors consists of governmental actors; Waste Management Unit of NEMA and the Department of Environment in the CCN. Alongside with these actors, there are the private companies operating under regulation of CCN and NEMA in public-private partnership.

The role of NEMA in the overall SWM process is legislative and regulative. NEMA is a state agency located under the Kenyan Ministry of Environment. The Waste Management Unit grants licenses for formal garbage transport vehicles and is responsible for tracking documents needed in garbage collection/transportation/disposal.

Since the Department of Environment it was established 1996, the department has had a mandate to carry out waste management in Nairobi (CCN 2012:1). The role of the department is to enforce and implement the many laws and by-laws related to waste. The department of Environment is divided into 3 divisions; Environmental Planning Management division (EPM), Solid Waste Management division, and Management of Parks and Open Spaces division (MPO). The role of MPO division is restricted to taking care of parks and planting trees etc. Thus the MPO division, in the context of this study, is irrelevant. The responsibility of the EPM division is to take care of environmental legislation in cooperation with NEMA. The SWM Division responsibility is the everyday collection, transport and disposal of waste in Nairobi (ISWM plan 2010:8)

Apart from the formal governmental actors and the private sector, there are the various networks, youth groups, cooperatives, CBOs and NGOS involved in the overall solid waste management process. These organisations either support the work carried out by other actors or they are involved directly in the collection and separation of waste themselves. The support is manifested in several of ways depending on the type of organisation and their vision and mission. A third category of actors in SWM is the informal sector, sometimes referred to as scavengers, who engage in collecting and/or using and selling valuable, reusable or recyclable materials and products.

2.3 Case study area – Kibera

In the official census from 2009 the population of Nairobi was estimated to 3.2 million by the Kenyan National Bureau of Statistics (KNBS), the annual growth rate for the city is around 4 percent and one can assume that the population have increased since 2009 (KNBS 2009). Out

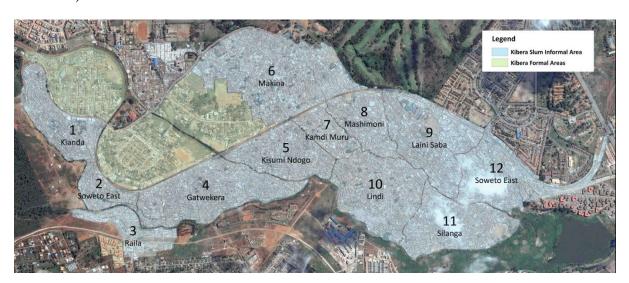
of Nairobi's total population over 60 percent live in one of the many informal settlements (UN-Habitat 2006:4). The informal settlements are a consequence of both unclear government policies and decades of official indifference (Mutisya & Yarime 2011:201). The informal settlements was for a long time classified as illegal and hence excluded from any city planning or budget processing and as a result facing multiple challenges with lack of most basic needs and social amenities. Recently the informal settlements have been recognised by the GoK through strategic plan papers and policies highlighting the need to improvement through security of tenure and access to social services (Mutisya & Yarime 2011:198). However the complexity of the informal settlements have made it difficult for the GoK to develop effective and workable policies and plans for upgrading and they still lack a range of essential services provided by the GoK and CCN to the high and middle income areas in Nairobi.

Kibera is located 4 kilometres from the city centre on an area of around 2.38 square kilometres. The settlement is often referred to as the largest informal settlement in Kenya and one of the largest on the African continent. The actual number of people living in Kibera is a debated figure. Before the KNBS 2009 population census an often quoted figure was 1-2 million, however the KNBS figure of around 170 000 people is instead believed to be an underestimation (KNBS 2009). To give an exact figure of the population is difficult since there is no control of the people moving in and out and maybe the most accurate figure to go with is UN-Habitats range between 400 000 to 700 000 settlers (UN-Habitat 2013).

The settlement ages back to the First World War when it became a resettlement area for Nubians returning from the war given to them from the colonial government, the same government later allowed for other tribes across the country to settle in Kibera. Today the settlers of Kibera is a mix of migrates from the underdeveloped rural areas in search for job opportunities due to its central location near the industrial area and city centre and people born and raised in the settlement. Poverty is a huge problem and the one common denominator almost every inhabitant share. The average monthly income per household is around than 10 000 KES (120 USD) and most of the residents are rent-paying tenants leaving little room for savings or investment (MoH 2006). Job insecurity is a problem with around 50 percent of the employed people being self-employed or having to work on a day to day basis which are activities that do not guarantee any regular income (Mulcahy & Chu 2008:11). The low income creates challenges for upgrading projects as paying fees for water, electricity or garbage collection becomes an extra burden for the household. Upgrading of the informal settlement is not only a financial challenge but also a physical challenge. Using UN-habitat population figures give a population density between 160 000 to 300 000 inhabitants per square kilometre creating highly

congested living conditions. The settlement is limited from expanding any further by the Nairobi Dam and Ngong River to the south and east and the north and west is already occupied land. Houses are built in an unplanned and unstructured fashion and the terrain is hilly which complicates the upgrading process of housing and infrastructure. Adding on this Kibera has just a few drivable roads and mainly footpaths and access to the settlement by construction vehicles and garbage trucks is a major problem.

Kibera is located on two divisional administrative areas, Lang'ata and Dagorett division and constitutes of fourteen villages with two of them being formal areas (see figure 1). The villages in the informal areas have their own leaders in the form of village elders. The land on which Kibera stands is owned by the GoK, and they took definitive action in improving the living standards through the Kenya Slum Upgrading Programme (KENSUP) starting the year 2002. The programme aims at improving housing and access to basic services, secure tenure and opportunities to generate income (MoH 2002). However progress have been slow and the pilot project in in Soweto East, one of Kibera's villages, is still not completed and questions concerning the affordability and appropriateness of the project initiatives have been raised (Mulcahy & Chu 2008:10). Over the past decades Kibera have also been targeted by various NGOs, both local and international, with varying degrees of impact and success in their slum upgrading projects. The NGOs built health centres, water kiosks, toilets, schools and have done community mobilisation including community based waste management groups. However these facilities are inadequate given the size of the population, for example most of the people, around 60 percent, must share toilets with approximately fifty others (Mutisya & Yarime 2011:207).



Figur 1: Map of villages in Kibera (Source: mapkibera.com)

The challenges in Kibera are many, access to social as well is physical infrastructure such as proper health care, schools, educational centres, security, good housing conditions, energy, clean water, sanitation and SWM are some of the fundamental challenges. The lack of proper waste management and sanitation facilities have made Kibera heavily polluted by human refuse, garbage, soot, human and animal feces and other wastes.

Uncollected waste is the most visible environmental problem in Kibera. With no formal garbage collection system and the scarcity of space garbage can be seen everywhere. The garbage collection system that exists is of the informal kind, done by the communities themselves. No official and environmentally approved dumpsites exist or recycling plants. Instead unofficial garbage dumpsites have emerged and waste is thrown basically everywhere within the settlement. During the rainy seasons most of the waste is washed away into water channels like the Nairobi River or drainages and polluting the ground water and rivers. The average waste generated per person in Nairobi is 0.59 kg/day however, in the informal settlements it's more likely to be around 0.30 kg/day (UNEP 2010:13). Taking this figures and multiplying with the lowest estimate of Kibera's population gives a daily generation of 120 000 kg/waste/day². Due to the poor accessibility and low ability to pay for the service garbage collection have been neglected in Kibera. The neglecting by the CCN is argued to contribute to negative attitudes and behaviours towards waste management causing people to not care about where they litter increasing the problem (Mutisya & Yarime 2011:208). In the low income areas of Nairobi, including Kibera, 74 percentage of the population do not receive any solid waste collection service, formal nor informal (UNEP 2010:20). The lack of any waste management systems in Kibera have led to the emergence of CBOs, especially in the form of youth groups, dealing with waste activities like collection and recycling.

3 Analytical Framework

The overall theme of this study is connected with issues of community participation and their relationship with local governments. I have used an analytical framework and theory of sustainable development and participatory development as a context within I have developed and analysed my research focus.

3.1 The Sustainable Development Concept

The sustainable development concept explores the relationship between economic development, environmental quality and social justice (Rogers et al 2008:42). The

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 $^{^{2}400000 \}times 0.30 = 120000$

philosophical foundations for sustainable development originate from the mid- and late 1960s when questions concerning environmental issues came up on the political agenda after realising natural resources are not infinite. Credits for the concept *sustainable development* is generally given to the 1987 report of World Commission on Environment and Development, *Our Common Future: From One Earth to One World*, often referred to as the Brundtland report. New conceptions of development was called for in the report stating that the development and material use for today's generations should not deprive future generations of resources required to satisfy their needs (World Commission on Environment and Development 1987:42). The Commission conceptualised sustainable development as: "paths of human progress which meet the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs" (ibid).

The Commission's report drew attention the inseparable relationship existing between poverty, development and environmental unsustainability. During the time the Brundtland report was released a need for a new development paradigm was widely recognised within the development discourse (Estes 1993:2). The United Nations had declared both the second and third of its development decades a failure in ending the poverty in the world's poorest countries. Sustainable development was recognised as a unifying concept that could provide a new vision for national and international development and Sustainable Development became the new flagship of international development movements (Estes 1993:3).

Today there are many different interpretations and definitions of the concept but most of them identify three important dimensions of sustainable development: the social, economic, political (Roger et al. 2008:42). Because of the focus of this study only social sustainability will be discussed.

3.1.1 Social sustainability

There are no clear definitions or frameworks for the different dimensions of sustainability and many scholars argue that the social aspect of sustainability is underdeveloped in both conceptual and practical development (Hubbard 2009, Seager 2008, Dyllick & Hockerts 2002). The main focus has been placed on the environment as the dominant factor when discussing social sustainability. Critic's likes Littig & Grießler (2005:69) ask for the idea of multi-dimensionality to be adapted allowing social (and economical) dimensions of sustainability to be examined beyond a purely environmental focus. In social sciences where the focus when conducting sustainability research is not only about environmental processes but also understanding social processes the concept of sustainability can be quite challenging according

to Littig & Grießler (2005:70). However there has been some development even though it's still unclear what the social aspect of sustainability covers (ibid).

Estes (1993:9) describes social sustainability as the satisfaction of minimum welfare standards, meaning that basic social and material needs should be fulfilled. Broader definitions of social sustainability in the development context claims that any changes in a society must be consistent with core values, expectations and mores of the people affected (Brown 1991:15). According to Seager (2008:54), no single unity of a community or the population can reach sustainability on their own and there needs to be an understanding of different views, motivations and aspirations for successful collaboration. This implies the need for participation ensuring people is not excluded from processes directly impacting the quality of their lives. Littig and Grießler (2005:72) defines social sustainability as follows "Social Sustainability is a quality of societies. It signifies the nature-society relationships, mediated by work, as well as relationship within the society". Littig & Grießler (2005:71) have defined three core indicators for the social aspects of sustainability: basic human needs, social justice and social coherence. When discussing what basic human needs are it clearly depends on the definition. Littig & Grießler (2005:71) argues that basic needs should include factors going beyond food and shelter, like education, social relationships and self-fulfilment since people then are more capable to take responsibility for shaping their own lives. Social justice in the narrow concept looks at income distribution while a broader definition implies "equal opportunities regarding quality of life and participation in society" (Littig & Grießler (2005:75). The third indicator relates to integration into social networks where for example participation in collective groups and networks, community stability, safety and security and tolerant attitudes can be measured. Littig and Grießler (2008:71) recognise the difficulty in incorporating the indicators into policymaking and for them to have an impact. They suggest that to overcome these difficulties the indicators should be incorporated into national and international sustainability strategies combined with qualitative and quantitative targets and policy instruments.

3.2 Participatory Development

In the development context participation as a concept emerged in the 1970's after strong critics against the top-down approaches often used in development projects and programmes neglecting the perspectives and needs of recipients of project interventions (Lamb et. Al 2005:172). Today the concept of participation has gained big prominence in the development discourse and has become a staple for development practices in the world. Most donor agencies

have participation as mandatory in development project, though the degree of participation can vary from different projects.

However it has become evident that participation is a complex and difficult concept to deal with in practice. Participatory approaches aren't living up the promise of empowerment or transformative development and for this the concept have been heavily criticised (Cooke & Kothari, 2001:82). Henkel and Stirrat (2001:168) argues participatory approaches only provides alternative method for governmental and aid agencies to incorporate poor communities into large projects without being answerable to those they are supposed to serve. In other words participatory development as it is being practiced in most cases is only an impression of inclusiveness and empowerment of the poor when instead traditional top-down development agendas are being pursued. Botes and van Rensburg (2000:41) states that as a concept "participation is the most overused, but least understood concept in developing countries without a serious attempt to critically analyse the different forms participation can take". Parfitt (2004:538) on the other hand, though recognising it's a problematic concept, believes it has the potential to deliver real benefits to the development context.

Within the development context there are many different definitions of participation, Nelson and Wright (1995:182) describes participation as "cooperation and incorporation in predetermined development activities, decision-making activities, implementation and maintenance, and evaluation of success and failures". Another definition by the UN defines participation as "Sharing by people in the benefits of development, active contribution by people to development and involvement of people in decision-making at all levels of society" (UN 1979:225). Participation is argued to build long-term capacity and improve the ability of local people to manage and negotiate interventions and projects taking place in their nearby environment (Mwangi 2000:79). By implementing a participatory process the local authorities, governmental agencies, private- and voluntary actors are brought into a closer relationship and may have a greater impact on accountability of basic service suppliers. However there might be some drawbacks to participatory approaches. Participation can be a source of tension and a destabilising force due to unbalanced socio-economic relationships which can undermine the very aim the participatory process seeks to nurture (ibid). Participatory practices that are conceived without sufficient thought of how responsibilities should be distributed can shift the burden from the national or local government onto the poor while reliving the local or national governments from their responsibility (Batley 2006:247). This is, as have been described, often the case with basic service delivery in poor areas.

A common critic against participatory development is the non-recognition of diversity within communities, ignoring power differentials and the different needs within a community. Chambers (1997:183) argues that most policy documents only advocates for "community participation" and go no further. Government and aid agencies assume those whom they meet are representative for the whole community. Instead the ones who meet and interact are most likely to be most the most powerful, from dominant groups. In this case participation is implemented in a "vacuum" assuming that all actors have the same meanings and goals. Members from a community or an organisation may have different perceived interest and the delegation of power, even if democratically chosen, affects the representation of interest (Desai & Potter 2008:119). A risk with mainstreaming participation is that it can become an instrument for promoting pragmatic policy interests. In such cases community participation can instead of being used for transformation of the society and empowering communities be used to shift the cost of services delivery to the beneficiaries. Studies on participatory projects in developing countries have reviled cases where the poor are forced into making far more contributions and bear a percentile higher cost then the rich (Mosse 2001, Ribot 1995, Bowen 1986).

3.2.1 Participation as a means or an end?

Okley (1991:6) describes how participatory development can be divided into two different forms, either as a means or as an end and that there is a big difference between the two perspectives. They have different implications for how the targeted community is viewed and the power relations in the participatory process. Since any project or intervention has to produce some outputs, participation can be a means to achieve such outputs. On the other hand participation can function as an end as empowerment is seen as a necessary outcome.

Participation as a means leave the power relations between government or aid agency agencies and the community rather untouched, hence a top-down approach still exists. Oakley (1991:8) point out that participation as means is "essentially a short-term exercise; the local population is mobilised, there is direct involvement in the task at hand but the participation evaporates once the task is complete". The role of the community, who have been mobilised to participate, is to help to archive the project goals. Many governments or development agencies are more prone toward participation as a means according to Oakley (1991:8) while empowerment is only rhetorically recognised.

Participation as an end on the other hand suggests a change in unequal power relations. Communities are empowered through a process of participatory development that unfolds over time (Parfitt 2004:538). The purpose is to strengthen capacities and achieve ownership and management over the concerned issue affecting the community, such as water or solid waste

management. The participating community are able to define their own needs and interests and to intervene more directly in development initiatives (Oakley 1991:8). Participation through this perspective is a permanent feature of the project or intervention which is strengthens as the project develops. The key is to have an active and dynamic form of participation which enables the community to play an increasingly important role in development activities (ibid). In the best of worlds, according to Oakley (1991:8), participatory development should balance between participations as an end, empowering the communities, and as a means, efficiently achieve development objectives.

3.2.2 The role of the state in Community participation

The states response to and involvement in community participation have been of great variation in different developing countries over time, depending on the preferences of politicians and local leaders. Desai & Potter (2008:117) argues that historically the states response to public participation have been poorly formulated or disorganised and a lack of will to distribute power and resources. Further on Desai and Potter argue that few substantial initiatives have been taken by scholars to examine the relationship between the state and community initiatives. The lack of examination originates partly from a strong disbelieve that the state can contribute effectively to the promotion of community initiatives. On the other hand communities are often in need of government support for investments, inputs and trained personnel since they are usually too poor to fund all of the costs related to their activities.

For the state to have a successful relationship with community organisations and be good facilitator suitable personnel has to be in place, e.g. community organisers and mobilisers. New working approaches where community participation is incorporated into planning and day to day activities needs to be in place which requires a structural change towards a more public service oriented administration (Desai & Potter 2008:118). The community must be involved more directly, often communities are left out in the planning and design stage but expected to participate in implementation and maintenance. The state/local government on the other hand must be held accountable.

3.2.3 Participation in Practice: Typologies of participation

Typologies of participation can be useful when differentiating degrees and forms of participation, how communities are being involved and whether it's a genuine or more superficial participation of the communities. I have chosen to present two charts of typologies of participation, table 1 describes the level and characteristics of participation and table 2 the different interests at stake in various forms of participation.

Typology

Characteristics of each type

1. Manipulative participation

Participation is simply a pretence, with 'people's' representatives on official boards, but who are un-elected and have no power

2. Passive participation

People participate by being told what has been decided or has already happened. It involves unilateral announcements by an administration or project management without any listening to people's responses. The information being shared belongs only to external professionals.

3. participation by consultation

People participate by being consulted or by answering questions. External agent's define problems and information-gathering processes, and so control analysis. Such a consultative process does not concede any share in decision-making, and professionals are under no obligation to take on board people's views.

4. participation for material incentives

People participate by contributing resources; for example, labour, in return for food, cash or other material incentives. Farmers may provide the fields and labour, but are involved in neither experimentation nor the process of learning. It is very common to see this 'called' participation, yet people have no stake in prolonging technologies or practices when the incentives end.

5. Functional participation

Participation seen by external agencies as a means to achieve project goals, especially reduced costs. People may participate by forming groups to meet predetermined objectives related to the project. Such involvement may be interactive and involve shared decision-making, but tends to arise only after major decisions have already been made by external agents. At worst, local people may still only be co-opted to serve external goals

6. interactive participation

People participate in joint analysis, development of action plans and formation or strengthening of local institutions. Participation is seen as a right, not just the means to achieve project goals. The process involves interdisciplinary methodologies that see multiple perspectives and make use of systemic and structured learning processes. As groups take control over local decisions and determine how available resources are used, so they have a in maintaining structures or practices

7. self-mobilisation

People participate by taking initiatives independently of external institutions to change systems. They develop contacts with external institutions for resources and technical advice they need, but retain control over how resources are used. Self-mobilization can spread if government and NGOs provide an enabling framework of support. Such self-initiated mobilization may or may not challenge existing distributions of wealth and power

Source: Adapted from Pretty (1995:1252)

Pretty's typology goes from "bad" forms of participation – manipulative and passive participation with only symbolic representatives without any real power or participation without inclusion in any decision-making processes – to better forms. Under functional participation main decisions are often taken by external actors, in a development project the implementing agency, and participation of e.g. communities is associated with efficiency arguments: when people participate project objectives are meet more effectively and costs are reduces. According to Cornwall (2008:271) this is the most common practice of participation in the development context. White's typology (table 2) helps to make clear motivations behind adopting participatory practices and identify how and why participation is being used.

Table 2: Typology of interests

Form	What participation means to the implementing agency	What participation means for those receiving it	What participation is for
Nominal	Legitimation – to show they are doing something	Inclusion – to retain some access to potential benefits	Display
Instrumental	Efficiency – to limit funders' input, draw on community contributions and make projects more cost-effective	Cost – of time spent on project-related labour and other activities	As a means to achieving cost-effectiveness and local facilities
Representative	Sustainability – to avoid creating dependency	Leverage – to influence the shape the project takes and its management	To give people a voice in determining their own development
Transformative	Empowerment – to enable people to make their own decisions, work out what to do and take action	Empowerment – to be able to decide and act for themselves	Both as a means and an end, a continuing dynamic

Source: Adapted from White (1996:7-9)

3.3 Partnership and cooperation

Partnership is closely linked to participation and can be defined as cooperative working arrangements, formal or informal, aimed at achieving a specific objective (Katajima 1997:42). There are however objections against such a definition. First it assumed a shared vision among the partners which requires a similar picture of the future and secondly a willingness to work together in a spirit of collaboration and cooperation. According to Mitchell (2005:123) one cannot assume such factors as humans often are competitive, defensive and

protective all attributes that hindering collaboration and cooperation. However Mitchell recognises that a shared vision is fundamental for a truly effective partnership only that it's complicated and one cannot only relay on the shared vision there are other characteristics that needs to be in place.

There are many benefits of improving cooperation between CBOs and the local governments. Working together problems can be defined more effectively and solutions become more sustainable since a sense of ownership is created over both problems and solutions (Mitchell 2005:124). To improve cooperation effective institutional designs have to be installed and factors contributing to successful relationships understood (Krischna 2003:364).

Implementation of appropriate institutional designs includes structuring appropriate partnerships (Krischna 2003:365) What sort of activity is the CBO supposed to take, support local government activities by information sharing and consultation or play an extended role in local government responsibilities such as providing waste management services. Second is the allocation of responsibilities, if CBOs have an extended role in governmental service deliveries they can be treated as subcontractors of the local government. In this case the capacity of the CBO is of importance, that they are able to handle the task handed to them or taken upon own initiative. Third there has to be a high level of accountability and information sharing between all actors involved. Krischna (2003:368) describes how the accountability can be managed in three directions; upward, downward and horizontal. Upwards accountability means that both the local governments and CBOs can become beholden to the central government and if involved donor agencies. Horizontal accountability is between the CBOs and local government and must function all the time, Krischna (2003:368) argue that regular communication is the key to success together with well-defined partnership arrangements. The CBOs have good local knowledge and access to the setting that the local government lacks. This knowledge can be used in decision-making processes to pinpoint where help is most needed and help improve governance at local level (Rubin 2000:35). In regards to downwards accountability, citizens or community members must be informed about the actions taken and have and have the opportunity to have an input. Citizens who are well informed and additionally know where to go for compensation and who to get in contact with are more capable of holding their local authorities accountable (Parry 1997:219).

Understanding factors that leads to successful relationships is a second method for improving cooperation. Shaw (2003:12) identified eight main characteristics: *Trust, flexibility, understanding, balance of power, shared mission, compatibility, communication, and commitment.* To have all eight characteristics fully fulfilled would almost be a utopia but for a

successful relationship at least four out of eight should be in place (Shaw 2003:118). To these eight characteristics Mitchell (2005:123) has *added benefits to all partners* and presence of *integrity, patience and perseverance* by all partners.

4 Methodology

To capture the opinions by and perspectives of the local state government officials and CBO members in Kibera operating in SWM several methods have been used. This section will describe research design, methods used and ethical considerations.

4.1 Research Design

This thesis is based on a field study conducted in Nairobi between December 2012 and February 2013. A field study is a general method where material for research is collected in a natural setting and research subject decides what the field consists of (Jakobsson 2011:34). In this case the field is the city of Nairobi and more specific the informal settlement named Kibera and the field setting is within SWM operations.

The focus of my research is mainly on experiences by the different actors, therefore I found it suitable to use a qualitative research approach. Qualitative research methods allows the researcher to study perceptions, behaviours and experiences of the research problems in words and enhances the depth of research in order to investigate further into complex research problems (Bryman 2012:388). In my research descriptive information such as anecdotes and stories was important to gain understanding about the CBOs and CCNs work and their relationship to each other. While qualitative research methods limits generalisation the aim with this study is not to show a representative picture of waste managing CBOs and their relationship to local authorities, rather to give an example (Creswell 2007:36).

The research is framed within a single case study design in order to study the research problem in depth. Yin (2003:2) describes how a case study design helps to bring understanding of complex issues or problems and to examine contemporary real life situations in depth. The issue here is the role of community participation in basic service deliveries linked to concepts such as sustainability and the cooperation with the local authorities. In this case have used an instrumental case study design where the issue is selected and then a bounded case chosen to illustrate the issue (Creswell 2007:74). In this field study CBOs connected to the Waste is Wealth network became the bounded case. To gain a more comprehensive picture of how CBOs operate in this area of work and the involvement of the local government a variety of perspectives were required. The WiW network consists of 17 community based waste management organisations operating in Kibera who cooperate and share information with each

other. Even though they are closely linked to each other they provided different perspectives and experiences. Since this study focus on the relationship with the local government interviews had to be conducted with officers at the CCN to gain a wider range of perspectives and the CCNs view community based waste management was essential for the analysis.

To analyse my findings I have used a mixture of the inductive and deductive perspectives. The aim is not to test any specific theory nor is theory an outcome of my empirical findings (Bryman 2008:26). The analytical framework has been used, both as a background and for guiding the analysis of my findings.

4.1 Sampling methods

Several sampling methods have been employed with purposive sampling being the main one. By using a case study approach criteria's that my informants had to fulfil had was already established and the purposive sampling method enabled me choosing relevant informants in a strategic way (Creswell 2007:125, Mack et al 2005:5). At the local government level as I was inflexible with who my informant should be, the environmental department at the CCN is rather small and I had to pin point the few officers working with waste management issues in Nairobi. For choosing informant in Kibera I was, in the beginning, more flexible, since there are many CBOs working with SWM, being flexible I was able to approach those who were willing and able to take the time to be interviewed.

In the field I relied on several different sampling approaches: criterion sampling mainly used to target key stakeholders within SWM in the CCN and leaders of CBOs in Kibera. My initial contact with key stakeholders was then used to find other informants through a snowball method. This is how I got in contact with the Waste is Wealth network and decided to only use informants within this network. A third sampling approach that occurred was convenience sampling. This is the least robust sampling technique according to Marshall (1996:523) but something that almost always occurs in qualitative research. During field visits in Kibera I allowed myself to engage in informal interviews with waste pickers, non-related to the CBOs but still giving me valuable knowledge and a deeper insight about the situation in Kibera.

To locate respondents I used personal contacts as gatekeepers in the initial stage to access the CCN and CBO's. My experience has showed me that being introduced through a contact increases the chance for a positive response or a response at all. In the beginning CBOs operating in SWM in Kibera was approached randomly as opposite to officers at the CCN were specific offers was targeted due to their involvement in SWM. Additionally I approached an officer at the CCN working with community mobilisation, the reason was to get a deeper

understanding of how the CCN works with people in the informal settlement on a regular basis and in general.

4.2 Data Collection Methods

The method of data collection has been constituted of semi-structured interviews. This method was chosen to allow for flexibility, to ask question outside of the interview guide and for the respondent to elaborate more freely on the subject (Bryman 2012:471). This is important as I'm asking for people's own perceptions and for their own experiences. To capture how the informants from the CBOs perceived their own situation and how sustainable their work was I wanted my informants to speak freely and tell me their story of their daily life connected to their work in the CBOs. My objective was for the interview process to emphasis on how the respondent understands and frame the issue of SWM in Kibera linked to the relationship between the CBOs and the CCN. During the interviews an interview guide was used but I allow myself to ask additional questions and to follow up on answers from my informants (see appendix A and B).

Non-participant observations were also conducted with the purpose of describing the CBOs everyday work in garbage collection and for me to get a deeper understanding of the situation with waste in Kibera. These observations were always combined with informal interviews on the subject with CBO members guiding me around Kibera. As a researcher I allowed myself to be flexible and engage in informal interview about my research topic whenever chance was given. Not all of these informal interviews was of value for my research topic and has therefore not been used. During interviews with CBOs I was often invited to follow them out in the field when they were collecting waste from households or doing other activities involving waste management. An opportunity I grasped. This gave me a chance to ask more questions and discuss the issue of SWM in an informal way.

In total a numbers 18 interviews were held (list of interviews can be found appendix C). Through the WiW network I had regular contact with a few leaders of the CBOs as well as the leader of the network allowing me to conduct more them one interviews with them. Going through my interviews afterwards more questions was raised or I felt that I needed clarification on a specific matter and through my good contact with these leaders I was able to get them answered until saturation was researched.

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4.3 reliability and validity

During my field work I relied only on myself and was in no need of a translator or assistant as English is one of the official languages in Kenya. However while entering Kibera I was dependent of a guide for my own security. In most cases the CBO members were my guides and I didn't feel this jeopardized reliability or validity.

Reliability and Validity can be described as whether you are conducting research on what you state you are researching and to the degree which a research can be replicated, respectively (Bryman 2008:46). In conducting interview guides and during the analysis stage thorough literature reviews of participatory development and sustainability theory was conducted to ensure I was using an appropriate framework for analyzing my data, measurement- and internal validity. External validity deals with generalisation and whether the result can be generalised beyond the research context (Bryman 2008:47). A critic against using case study methods is that it offers no grounds for generalisation of the findings (Yin 2003:33). I do not claim that the findings are representative for all community based waste management organisations, however the results can be generalised to Kibera and most probably to Nairobi.

To address external reliability all questions in the interview guide was designed as straight forward and as understandable as possible. In this way I didn't have any major problems with misunderstandings of my questions. When conducting interviews I made sure we were in a familiar and comfortable location for the informants.

4.4 Ethical considerations

The research topic is sensitive in the way that it's investigating a relationship. This means that there are two, or more, actors involved for it to be a relationship. During the process I have protected the identity of my informants, not to interfere or harm the relationship I'm investigating. I always started my interviews with discussing the issue of confidentiality and anonymousness with my informants. However the identity of officers working at the CCN is not that easy to keep anonymous when referring to the CCN. I explained for them that even though no names are used in the final thesis there is no absolute anonymity for them. All officers interviewed at the CCN chose to continue the interview after this had been explained. The leader of the WiW network claimed he had no problems with being mentioned, he is therefore referred to as "leader of WiW" but no name is used.

5 Findings and Analysis

This section presents the findings and analyses the data collected in the field. The purpose of this study was to examine the relationship between the community based waste management organisations linked the concepts of participation and cooperation and secondly the sustainability of the organisations. The section will start with a situation analysis of SWM in Kibera to give a more comprehensive understanding of the waste management situation in Kibera. The second section deals with challenges faced by the CBOs effecting sustainability and the third section examines the relationship.

5.1 Situation analysis of solid waste management in Kibera

In Kibera the municipal solid waste management is non-existing and neither is the waste collected by private companies instead most actors involved are from the voluntary sector. Its difficult if to give an exact number of all actors since there is no complete registry or database over CBOs and NGOs in Nairobi. In this field study I encountered over 20 CBOs engaged in waste management activities in Kibera alone. Moreover it's difficult to define who the actors are. In Kibera few NGOs and many CBOs "formally" do waste management activities, this can be everything from waste collection to sorting and recycling of material. The informal sector consists of waste-pickers, traders, itinerant buyers and informal dump site providers.

The NGOs operating in Kibera are mainly working with SWM indirectly by supporting other actors such as CBOs and informal waste pickers in their work. The support given can be providing tools for waste collection, capacity building, community sensation and mobilisation, advisory and advocacy services and recycling activities or introduction of new technologies e.g. compositing. Another important function the NGOs have is building awareness in the communities, aimed at behavioural change when it comes to sanitation and waste management. During my time in the field I didn't find any NGO who were directly involved in waste management activities.

The direct waste management is instead managed by the CBOs and informal waste pickers. The waste managing CBOs are almost always made up by youth groups who do various activities and SWM being one of them. During an informal discussion with CBO members they indicated that it was a general agreement in the community for waste collection to be an activity for the youth. If this was only for the village where this particular member were operating or for the whole of Kibera was not clear. Observation from the field though indicated that there could be a general agreement for the whole of Kibera as it's the youth who are active in direct waste management and the ones who "own" the market.

Garbage collection is the predominant activity by the CBOs together with recycling activities. For the residents in Kibera it's optional to be a part of the garbage collection system, the CBOs interviewed in this study could have from 50 to a couple of 100 clients. The two main reasons

for residents not to have their garbage collected, according to the CBOs, was either inability to pay the weekly fee of 20³ KES or the unwillingness to pay for garbage collection The people living in Kibera are very constrained regarding money and paying for garbage collection when almost nobody else does might not seem worth it. "Why should I pay when most [people] just dump their garbage by the railway?" one CBO member reasoned on people's unwillingness to pay, and continued "as long as it's not visible to them [the inhabitants of Kibera] they feel the environment is clean". To tackle the problem the CBOs allow households to share one plastic bag and only paying 10 KES each. This does however not solve the problem when many still found the fee to high or don't see the point of garbage collection.

One of the major problems in Kibera related to waste is the open dumpsites, both legal (referred to as collection points) and illegal. As mentioned the CCN are supposed to collect garbage once a week at the collection points, this however doesn't work in reality. The situation on the ground is that the CCN can take up to five months before they collect waste from one collection point and then it can be too much garbage for one truck to carry, ending up in a situation where the garbage pile just keep on growing. During almost all of the interviews with CBOs from Kibera and informal discussions with residents the open dump sites was mentioned as the main challenge related to waste. This is not a surprising answer since it's a highly visual problem.

"Kibera is bad/.../the kind of garbage I saw dumped by the streams, clogging the rivers. I couldn't take photos I was shocked. I've seen waste around the country, I've been to slums but I've never seen that kind of waste sitting by the people. People doing their business and around them is a mountain of waste. So you ask yourself even in terms of health standards how safe are we?" "(Director of Clean Up Kenya Campaign)

The CBOs does waste collection weekly or monthly, preferably on Sunday mornings when most residents are free from work and haven't left for church yet. During the collection every paying resident are given a plastic bag to use for the following weeks garbage. The weekly collection is carried out by foot due to the lack of adequate infrastructure and the congestion of houses, wheel barrels are used by some of the CBOs. The circumstances make it difficult to collect waste on a larger scale, the coverage of households is scarce and the waste collecting areas are small. On average the CBOs cover around 50 to 70 households in one day depending on how many are participating. After the waste has been collected the CBOs sort out metal, plastic and other valuable materials. The waste that cannot be reused is taken to a collection point where the CCN are supposed to take over and collect the waste for final transportation to

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³ 1 KES=0.011 USD

the dump site. The CCN heavily subsidise the cost for garbage collection for the CBOs from the collection points, the CBOs have to pay around 1000-2000 KES to the CCN. During the field study it was also revealed that some CBOs do not pay the fee at all and dump either at formal or informal dump sites.

The reason for the non-existents of municipal waste management in Kibera according to the CCN in is mainly due to poor accessibility and the low willingness or ability to pay for the service together lack of resources with the CCN. As the system today is moving towards a more privatised system the CCN doesn't have the funds to pay for SWM for over 60 % of the population in Nairobi.

5.1.1 The city-councils involvement on SWM in Kibera

Even though the city council are not involved directly in waste management operations in Kibera every now and then, they are involved in donor-led projects where waste management is either a part or the main target of the project. The current JICA project which aims at enhancing capacity in the waste management sector is an example of this. The JICA project wants to involve the CBOs on a more extensive level and had recently held workshops CBOs in slum areas, unfortunately for this study they had, in the pilot phase, targeted other slum areas then Kibera and therefore this wasn't investigated.

I discussed the past project initiatives with several CBOs and many had a mixed feeling about them. They are glad that investments are being done in their neighbourhood and that the GoK recognizes their situation, but there was also a high level of scepticism.

"Look at those toilets there, no one is using them they don't function they just built and left... I have been to meetings where big plans are being presented and we the people get engaged... and then in the end, after years of planning nothing happens".

This quote by the leader of WiW explains to some extent the mixed feeling people have towards interventions in their village. If this has become a pattern, that a lot of projects never go beyond the planning and design phase people might lose their trust and become reluctant to participate such interventions.

The CCN recognise that the informal settlements and slums cannot be managed in the same way as the high and middle income areas. With the ISWM plan soon to be implemented the CCN wishes to cross-subsidize where the private sector charges more in the middle and high income areas to give services to a lower prize in the low income areas. This solution does not take into account the situation on the ground for the CBOs, who will manage the waste collection in the slum areas. As will be discussed in section 5.3 the CCN depends on the CBOs

for collecting waste in the informal settlements, because the private companies are not interested in those areas and the CCN doesn't have the capacity. Still, these groups are not being formally involved.

5.2 Challenges to sustainability

Relating back to the theory of sustainable development the focus in this section has been to look at social aspects that might affect the sustainability of the organisations.

5.2.1 Low community priority for solid waste management

Linking back to the previous section, all the CBOs shared the same picture of unwillingness from the community to pay for the service they provide. Kibera as described in section 2.4 is a huge settlement with many inhabitants and only small percentage of them are prepared to pay for garbage collection. Low income areas often face considerable problems and solid waste management might not be one of them, hence it's not a priority for the community in large to improve it. If solid waste management doesn't have high priority this will have consequences for the willingness to pay for the service. How SWM is prioritized by the people of Kibera and their willingness to pay for it has not been examined in the study, the only primary source are the experiences told by the CBOs. However the GoK are currently implementing a World Bank funded nationwide slum upgrading project with one of the objective being to improve infrastructure (World Bank 2011:5). The project uses a participatory approach where members of the targeted communities prioritise what type of infrastructure investment they need for their communities and solid waste management are almost always rated below water, sanitation, roads etc. The communities have other needs they want satisfied before garbage collection.

5.2.2 Low payment for collecting garbage

The willingness to pay is a rather important point of community based waste management as it affects the success, motivation of CBOs and the reliability of the service. There is a complexity to the issue, the service given by the CBOs must be reliable to sustain willingness to pay and on the other hand for CBOs to provide the service, and recruit new members for garbage collection, they must have a sustainable income.

All of the CBOs interviewed in this study gave the same statement, waste collection and the activities connected to it are not sustainable income generating activities. Because Kibera is a low income area the waste collections fees and sales of recyclable materials do not yield much revenue. The fees cannot be too high because then people wouldn't be able to pay, as mentioned before in Kibera the collection fee is usually 20 KES.

The CBOs describes that after the money have been collected a certain percentage of around 30 %, depending on the agreement within the CBOs, goes to group savings and the rest is distributed to the participating individuals. One working day normally bring in 1000-1400 KES⁴ which after the percentage to group savings has been discounted is divided between the participating individuals. The number of participant varies from week to week. During my field visits I could found only one person collecting the garbage on that day and at another time they were five. Still the money received for the work is not something one can base your livelihood on. This is creates a motivation problem for the recruitment of people. Many CBOs share the same story of how people get involved in waste management activities but leave already after a few weeks or a months because the income generated is not enough

"A challenge we have is that most of the youth feel like it's not giving them the lifestyle they want or changing their life in a way they hoped because the income is very little and their vision is bigger" (Leader of WiW Network, 2012-02-11)

The garbage collection is not the only income generating activity connected to waste management. Most of the CBOs have small offices, or youth centres as they call it, where they bring the garbage and sort it into plastic, metal and organic waste. Plastic and metal is later sold for a price around 5 KES/Kg and 15-20 KES/kg, respectively. Who buys the waste differs, some sell to independent metal or plastic dealers while some of the CBOs approached in this study have agreements with recycling companies or NGOs/groups dealing with reuse of waste (such as turning waste into handy-crafts). The waste is wealth network have, with support from NGOs, trained the many of the CBOs how to turn organic waste into manure which is either used to grow vegetables or being sold, either way profit is made from the manure when the vegetables are being sold.

Currently the CBOs operating in SWM in Kibera do not receive any fund from the CCN for solid waste management. Consequently most of the CBOs are donor-dependent. This relationship has been largely positive and is essential for the existence of most of the CBOs. The groups approached in this study didn't receive any direct fund for garbage collection, instead they have been given help to build community centres or as described above training in recycling activities. The training and funds given to the CBOs are positive in a wider perspective when members become more skilled and have a place to carry out their activities outside of garbage collection. However these activities done by NGOs or other donor agencies do not directly contribute to members' salaries from waste collection.

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 $^{^4}$ Multiplying the number of households with the collection fee: $50 \ ^*20 = 1000$ and $70 \ ^*20 = 1400$

Another reason for the low salary is the size of the coverage areas. With no adequate infrastructure in place most work has to be done by foot and with wheelbarrow. In this situation one person can only cover so many households in one day and collecting waste is a tiresome and heavy work. Increasing the client number, which would increase the income generated, create a challenge with transportation and requires more people involved. Involving more people wouldn't necessary increase the salaries since more people have to share the income generated.

5.2.3 Low status and bad working conditions

The nature of the work may sometimes cause a low status of being a waste collector. Colleting and sorting garbage can often be considered as unclean and unpleasant. The CBO members didn't indicate any larger problems on this matter with people living in Kibera. A possible reason for this acceptance might be Kibera being a low income community. The people living there are very poor, struggling everyday themselves for survival and generating and income which might provide a bigger acceptance for other people's source of income. For people living outside Kibera in richer areas on the other hand this could be an issue. Many of the CBO members are waste pickers, or have been waste pickers. The status of waste pickers is low and they are met with suspiciousness when they move around in middle- to high income areas one CBO member explained. The suspicion towards the waste collectors might be because they are associated with waste pickers.

The working conditions for the garbage collector are low, as explained before no proper equipment is used and everything have to be done by hand. The activity of sorting garbage is done without any protective clothing, such as gloves or a protective mask which might cause health implications when dealing with hazardous waste. For example the CBOs sometimes found medical waste, such as syringes and medication.

5.2.4 Lack of motivation

The motivation for entering community based solid waste services varied in this study, but there was one clear trend. The leaders of the CBOs were often motivated by community benefits such as a cleaner environment, improving the health for people in their neighbourhood and had a genuine interest in SWM issues. During interviews they often got very passionate about the subject, wanted to discuss possible solutions and were always trying to find new ways to improve the waste management. I got the impression they were genuinely concerned about waste situation in Kibera.

Many of CBO members in a non-leading position had different motivation reasons, number one being income. Linking back to the previous section describing how member quit when they realize the received income is not a sustainable income source is a good example of income being the first motivation factor. However during interviews I still got the impression that most of them was concerned or had noticed the bad waste situation in Kibera. As one CBO member explained:

"Collecting garbage gives me some money at least... yes I have seen all the waste laying around in Kibera but sometimes I don't see how the work I do improve the situation, there is too much garbage, its everywhere"

Similar answers was given by other members, that yes they do recognise garbage being a big problem affecting people negatively in Kibera but at the same time they do not see or feel that their work is doing any difference. On the other hand I interviewed CBO member who was very interested in waste management issues and was strongly motivation to improve the situation, as stated before this was only general observations.

5.3 The relationship between the CCN and CBOs in waste management

This section of the analysis aims to investigate the level of participation and cooperation in waste management operations and if any form of partnership exists.

5.3.1 Level of participation

The CCN recognise the CBO as key stakeholders in SWM operations, the term was expressed several times in relation to CBOs during interviews with CCN officers. As describes earlier in section 2 the CCN is responsible for the provision of SWM to its citizens. The city council describes how they have problems with fund for providing proper waste management services and therefore the CBOs have become a necessary partner to deliver the service to the citizens in low income areas "The issue of CBOs came up as a necessity to solve the problems of waste management in the low income areas".

That the CCN sees them as a "necessity" questions if they view CBOs as equal partners or only as a must because they cannot deal with the situation themselves. As Batley (2006:247) described this might often be the case; governments shifting the burden from themselves onto the poor relieving themselves from their own responsibilities when they can't handle the situation. When examining the level of participation by the CBOs in solid waste management operations it seems to go no further then collecting and recycling garbage. It became clear that the CBOs are not involved in any decision-making processes nor can exercise any power regarding waste management. Within the low income areas like Kibera CBOs are the dominant

actor within the SWM arena and still the city council generally steers everything which weaken the CBOs role because of the minimal influence.

Linking back to the theory on participation the situation can be described as participation as means or instrumental. The CBOs are invited to officially participate in SWM operations because they help to fulfil and complete a task the CCN themselves cannot handle without any influence or power, hence the power relations are unchanged. An Instrumental form of participation is ongoing because the CBOs help to reduce the pressure on the CCN and to reduce cost since they currently are not giving any financial support to the CBOs.

Analysing the participatory situation from Prettys (1995:1252) typology table there are many types overlapping. One can argue that there is a level of self-mobilisation since the CBOs have organised themselves independently of the city council. On the other hand they have failed in developing contacts with external institutions so they can be independent and stand on their own. I would argue that the most accurate form is functional participation. This links back with viewing participation as a means to achieve a goal and not for increasing empowerment. The goal for the CCN is to deal with the waste management situation within the low income areas and the CBOs are helping them in achieving this goal without the CCN having to put much effort into it.

Public participation has not been guided by any policies until recently when a public participation framework was developed. The framework was implemented only month before this study was conducted and it was too early to evaluate or see any effects. The CCN themselves admitted that they hadn't figured out how to transfer the framework into practice. The lack of institutional guidance for participation might be one of the reasons for the low level of participation, the CCN do not know how to deal with community based organisations.

Desai & Potter (2008:118) argued that for a successful relationship to be in place the personnel have to be trained in how to deal with community organisations. At the CCN they have one officer working with community mobilisation. During the interview with her it became clear that the she haven't been involved in any work with community based waste management organisations. She divides her time between the CCN and the Ministry of Housing for a housing programme where most of her work was done. The CCN describes the relationship between them and the CBOs as reasonable:

"I wouldn't call it bad because they also do acknowledge that they are our key stakeholders...

I mean the relationship should not be good or bad it should be mutual, it is mutual because both sides benefits".

When asked how the CBOs benefit from the relationship I was told that garbage collection is the biggest income generating activity in the informal settlements. Based on my findings in section 5.2.2 it's difficult to believe this statement and also a danger to it. If there is a general belief within the CCN that collecting garbage in informal settlements brings in a lot of income it might have a negative effect on the possibility for CBOs to receiving financial support.

The CBOs defined the relationship as neutral, which correspond to the CCN opinion of being neither good or bad or as one CBO leader described it and from which the title of this thesis have been derived: "*it just is...*"

5.3.2 Level of Partnership agreement

Despite the fact that the CCN call the CBOs one of their key stakeholders the CBOs has not been included formally, meaning that there is no formal and legally binding partnership agreement in place like the one the CCN have with private companies. Within the CCN laws and policy guidelines on waste management there is no room for official contracts with organisations operating under the conditions that CBOs does. To be contracted by the CCN for SWM activities there are several requirements that are difficult for the CBOs to live up to. First proven ownership of a vehicle or a truck is required and second there are yearly fees for different permits and licenses of around 30 000 KES. Non CBOs approached in this study could afford to neither buy a truck nor pay the yearly fees. Moreover there is no need of buying garbage trucks as they cannot be operated in Kibera since it highly congested without adequate infrastructure. This is however is today the only way today for any organisation or company to establish a legal agreement with the CCN in SWM.

Formal contracts are important since it creates more accountability; both sides then have rights and responsibilities and have to deliver results. An issue for the CCN to enter legal agreements with CBOs is the unsustainability of the organisations. CBO members have no formal obligation the organisation and can leave whenever they want and as described before this has been a problem for the CBOs. Under these circumstances legal contracts may not be possible or the best solution. My impression from the field is that there is a low level of accountability in all directions: upwards, downwards and horizontal. It is difficult to hold CCN answerable for not collecting waste at the collecting point without any formal agreements. On the other hand the CCN are obligated by law to provide the service their citizens which would increase their accountability. Krischna (2003:368) described how communication and well-defined partnership agreements would increase the horizontal accountability. As will be described in the next section there is a low level of communication between the actors.

As Shaw (2003:118) described, for a successful relationship there has to be a shared mission. In this case there is to some extent a shared mission. Both the CCN and the CBOs are concerned about the waste situation in Kibera and wants to improve it. What seems to lack is a shared vision for how to improve the situation. The CCN and CBOs work side by side without sharing their experiences or knowledge to each other which could increase the collaboration towards a cleaner Kibera.

5.3.3 Level of Communication and cooperation

Even though the CCN refer to the CBOs as key stakeholder no regular meetings or formal communication arrangement are taking place. Most of the CBO members interviewed had never met any officers from the CCN. However as a network WiW representatives have participated in a few workshops concerning waste management where governmental officials, both local and national, also participated. The workshops was organized by NGOs focusing more on recycling techniques and left little room to discuss waste management issues, as expressed by the participants. I asked how the CBOs then communicate with the CCN under the assumption that some sort of communication must be in place since they have the agreement about the collection points and the fee connected to it. The answer was that when and where the garbage would be collected was often communicated by the private companies, contracted by the CCN to collect. The fee the CBOs have to pay for the truck to remove the garbage is paid at a small administrative office in Kibera where no official involved in SWM are stationed. This means that the CBOs can do all of their activities without ever having to be in contact with the CCN.

The lack of influence due to the unregular and informal communication channels was expressed with frustration. "I've never been invited to a board room with them [the CCN] or had a formal meeting...it's an issue because my voice is not getting heard. Maybe it's because they only think about the negative part of the slums but we have positive parts" (CBO leader). During this field study it was obvious that the WIW network have large visions for Kibera and many innovative ideas on how to improve the waste management, including reusing and recycling activates. The problem is that they need support and funding for their ideas.

"If they [the CCN] give people from the slums who handle waste some room to speak and invite them, they could understand fully what waste is and really how to manage it in the slums, we have the knowledge... It is difficult for an outsider to understand the complex situation in the slums" (WiW leader)

It became clear that if the CBOs wanted to talk to the CCN about an issue they had to contact them themselves and that these "meetings" was under informal conditions. According to the CBOs the CCN never contacted them or came out to Kibera. When discussing issues of communication with the CCN they responded that being a public office anyone can walk in and out whenever they want and speak to any of the officers. This is all good in theory but none of the CBOs members interviewed have ever been downtown in the city councils head office where the environmental department is located. They knew that it's an open office but was questioning why they would go there and if it would do any difference to their situation, to appear unannounced on their doorstep asking for change and support?. There are two issues about the CCN approach to this question. First the people living in Kibera are poor and to travel into town takes both time and resources, it's a potential loss in income since they have to take valuable time from other income generating activities. Second, there is an issue with the power relationships, coming from a low income area that has a history of not being recognised and overlooked by the government for them to walk into the city council office, making demands for change or asking for support might not be something they feel comfortable with. For the CBOs to make this effort they have to believe that their appearance will make a difference and that the officers will listen to what they have to say. The travel might not be worth all the efforts. Both sides describe that once a month clean-ups are organized in different areas of Kibera. The clean-ups are normally organized by the CBO operating in that area in collaboration with an NGO. Representatives from the CCN are invited and they normally contribute with tools and equipment and point out an area where the waste can be put for later collection by the CCN. The CBOs claimed that officials from the CCN almost never participate in the clean-up

According to the CCN the clean-ups provides good regular contact with the CBOs. The problem is that the clean-ups circulate to different areas each month and several cleans-ups are ongoing at the same time. Because of this it can take several months before a CBO have any contact with the CCN. Moreover it is unlikely that meeting under these circumstances would allow any room to thoroughly cover, discuss, plan or bring up anything about the CBOs weekly work in garbage management.

activities. The CCN on the other hand claimed that they always participate. There are many informal settlements in Nairobi, almost all of which have clean-up activities. This might be the

reason for the contradicting statements, the CCN might in fact participate but due to the large

number of informal settlements their appearance in Kibera is not regular.

6 Conclusions

This study has aimed to examine cooperation and participation in waste management between the local government and community based organisations in Nairobi, Kenya. Secondly the sustainability of these organisations have been investigated. The study have given insight to how people in the informal settlement Kibera and local government understand their role in community development.

As shown in the analysis, the main challenges for the CBOs are low payment for their activities which can be linked to low community priority on waste management, lack of or mixed motivation within the organisations and bad working conditions. All of these factor creates unsustainability, both within the organisation and for them to provide a reliable service to the people of Kibera.

Adapting Littig and Grießlers (2005:71) indicators for social sustainability to this case shows a low level of social sustainability attained by the CBO members. The income generated by waste management activities is too low to cover basic human needs such as securing food and shelter for the members of the organisations. Littig and Grießler (2005:71) inquired to look beyond only food and shelter when discussing basic human needs and towards social relationships and self-fulfilment. The relationship CBOs have to each other and within the groups was not examined in this study however I would argue that being a member of a community organisation contributed positively to the feeling of belonging and having a place in the society. To the leaders of the CBOs and WiW a level of self-fulfilment is in place since they have a strong genuine interest in waste management issues and are allowed to pursue and work with something the feel strongly about. As shown in the analysis the CBO member's lack of motivation was closely linked to the low income generated.

I would argue that the lack of financial stability is one of the main threats to the sustainability of community based waste management organisations. Without an adequate income recruiting new and keeping members becomes difficult and the members are the backbone of the organisation and the reason it can exist. Financial security can improve the other challenges the CBOs experience; improve working conditions with proper tools and clothing, increase the status of being a garbage collector and create more incentives for working with waste management. As shown in the analysis lack of payment is closely linked to the unwillingness to pay for the service which is connected to the low priority waste management has in the community. For more households to accept the potential service of garbage collection behaviour change and awareness of the benefit is in need and this can be achieved through

educating the people. Education can be done by the CBOs themselves however this requires they have capacity and skills to do so. Another suggestion would be for the government, local or national, to provide education programmes and campaigns on waste management.

The study was conducted under the assumption that community based initiatives need the support from the local authorities to be a sustainable solution and to be efficient. The findings in the analysis strengthen this assumption. The case have clearly shown that a more participatory approach needs to be adopted by CCN in overcoming waste management issues and in their relationship with the CBOs. The CCN call them their key stakeholders and are becoming increasingly dependent on the CBOs but still excludes them decision-making processes and to have any substantial influence or power over the activity they are undertaking. A majority of Nairobi's population live in informal settlements and they are only served by the CBOs in waste collection and cooperation is needed to maintain and operate the service system in these areas efficiently. This would is a strong argument for admitting the CBOs into the board rooms and sign formal agreements with them.

In Kenya policies and laws are in place to ensure public participation encouraging the civil society to actively participate in service delivery. The problem is that they have not been followed in practice. The CCN acts like they don't know how to deal with or approach the many CBOs. To achieve a more collaborative relationship with a possible solution could be for the CCN to design their own framework guiding their work with the CBOs on waste management. But before this can be done they have to recognise the value of a collaborative relationship, which they currently are not.

Finally, communication have to be improved. As the analysis show there is no regular contact or meetings. For the CCN and CBOs to be able to share a common mission in a sustainable way they need the other actor's input. The CCN are today not recognising the value of having regular, formal contact while the CBOs strongly wishes for their voice to be heard. Communication is the key for improving the relationship between the community based waste management organisations in Kibera and the City Council.

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Appendix A - Interview Guide for local government authorities

Date	
Place	
Name of participant	
Department	

Overview of the topic: Participation and Partnership in urban solid waste management

Objective: The objective is to examine cooperation between actors involved in solid waste management. To assess the challenges and obstacles and to get the actors involved own perceptions over partnership connected to the concept of participation and cooperation.

Confidentiality: I won't use any names is my report, you may be assured of complete confidentiality. I'm using a tape recorder because I don't want to miss any of your valuable comments.

Interview questions:

General questions on solid waste management in Nairobi

- 1. Introduction, your profession and what you do
- 2. Tell me about your CCN and the procedures you do in reference to solid waste management. What are the CCN's responsibilities in solid waste management?
- 3. How many vehicles, employees do the CCN have employed in SWM sand in which area of Nairobi do they operate?
- 4. What is the key challenge that have been experienced with SWM in Nairobi and what do you think are the cause of these problems?
- 5. Have you set any standards for SWM/waste collection in Nairobi, if so do you reach this goal, if not why?

6. Do you practice Integrated Solid Waste Management, has it been implemented by now?

Questions related to partnership and cooperation

- 7. Can you please describe the form of partnership and relationship CCN has with the private sector and CBO's
- 8. What is you view on the private sector and the CBO's as a valuable waste management service. What is the purpose for privatization and decentralization?
- 9. Do your department offer any kind of support to the community based waste management organizations? (Programmes/Projects)
- 10. How would you describe the relationship between CCN and the private sector and CCN and the civil society/CBOs? Are there any issues or problems whit for example waste collection, handling waste?
- 11. Is there any type of cooperation that enables for waste collectors (CBOs and private sector) to suggest new measures to solid waste management in Nairobi? If yes, how? If no, why?
- 12. How is the communication strength between you and the private sector and CBOs? How do you normally communicate (regular meetings, informal meetings)

Way Forward

- 13. What do you think should be the way forward? If you have the chance what would you say the government and the community should do that will bring better waste management services in Nairobi?
- 14. What are your suggestions for improvement of the partnerships and cooperation between CCN, the CBO and the private actors?

Appendix B – Interview Guide for Community Based Organisations

Date	
Place	
Name of participant	

Overview of the topic: Participation and Partnership in urban solid waste management

Objective: The objective is to examine cooperation between actors involved in solid waste management. To assess the challenges and obstacles and to get the actors involved own perceptions over partnership connected to the concept of participation and cooperation.

Confidentiality: I won't use any names is my report, you may be assured of complete confidentiality. I'm using a tape recorder because I don't want to miss any of your valuable comments.

Interview questions:

- Introduction, your profession and what you do
- Tell me about your work and what you do in your organization,
- How did your organization come about? The reason behind?
- Why did you join the organization?
- Tell me about your activities in relation to solid waste management
- What are the key challenges of solid waste management in Nairobi today
- What are the key challenges you and your organization are experiencing in relation to solid waste management?
- Who do you think/mean is responsible for SWM (CCN, private sector organizations), who should be responsible according to your opinion?

Institutional questions on partnership and cooperation and communication

- How do you experience the cooperation and partnership between you and the city council? (do you get any support, if yes what kind of support)
- Have your organization been involved in any type of policy formulation, operation or maintenance of SWM systems. If you feel you have the ability to influence is it your organization or the CCN who initiate the contact or do you have to approach them?
- Would you like to be able to influence more (how)?

- How is the communication strength between you and the CCN? How do you normally communicate (regular meetings, informal meetings)
- Does your organization have any type of cooperation with the private sector (formal or informal?)

Way forward

- What do you think should be the way forward? If you have the chance what would you say the government and the community should do that will bring better waste management services in Nairobi?
- What are your suggestions for improvement of the partnerships and cooperation between CCN, the CBO and the private actors? Why?

Appendix C – List of interviews

14.12.2012	Informal discussion with the leader of WiW
16.01.2013	Interview with the leader of WiW
16.01.2013	Informal discussion with CBO members and non-
	participant observations of their work at the site
5.02.2013	Interview with officer at the CCN, Environmental
	Department
5.02.2013	Interview with officer at the CCN, Environmental
	Department
5.02.2013	Interview with officer at the CCN, Environmental
	Department
7.02.2013	Interview with community mobilisation officer at the CCN
11.02.2013	Interview with CBO member
11.02.2013	Interview with CBO leader
11.02.2013	Interview with CBO member
13.02.2013	Interview No.2 with officer at the CCN, Environmental
	Department
14.02.2013	Interview with Director if the Clean-up Kenya Campaign
14.02.2013	Second Interview with the leader of WiW
15.02.2013	Interview with 2 CBO leaders
15.02.2013	Interview with 3 CBO members
17.02.2013	Informal interviews with CBO members and non-
	participant observations of their work

19.02.2013	Informal interviews with CBO members and non-
	participant observations of their work
20.02.2013	Interview No. 2 with CBO leader
20.02.2013	Interview with CBO member

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