

**IMPROVING PUBLIC PARTICIPATION AND CONSULTATION IN
ENVIRONMENTAL IMPACT ASSESSMENT (EIA): A CASE STUDY OF
NAIROBI COUNTY**

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DECLARATION

This research project is my original work and has not been presented for examination to any other university.

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DEDICATION

I would like to dedicate this to almighty God and my family especially my husband Ndegwa Kimani.

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Abstract

Public participation should be an integral part of environmental management. Regulation is more effective when regulators and proponents are constantly exposed to the public's opinions and perspectives. Most higher income countries or the global north have somehow found a workable way to incorporate public opinions in decision making concerning projects that affect the environment, while in Kenya the legislation on public participation is still quite new and there is still a long way to go. This study sought to assess whether public participation in the Environmental Impact Assessment (EIA) process of the different projects in different sectors of the economy in Nairobi County is sufficient and how this participation influences environmental decisions as relating to a specific project, and how this can be improved. This study also examined the barriers to public participation and consultation and sought for ways to minimise these barriers.

This study used multiple methodological techniques, including document review for documents/ case files obtained from NEMA and questionnaires for data collection. It also employed calculations based methods using chi square. The chi square was used to defend the null hypotheses on barriers to public participation and to find out if there were significant variations of public participation in the different economic sectors in Nairobi County. It was evident from the findings that there are various limitations such as poor dissemination of information, the use of language that locals do not understand, unwillingness to participate and political influence. Increased participation in the public meetings or feedback from the public about the project does not necessarily translate to those opinion considered in the final decision making. For the public to feel motivated to participate regarding these projects then there need to be improvements in how to engage them. This study recommends the use of other media outlets in addition to the print media. Radio and television are widely used than the print media in Kenya. The social media is also a good platform that is quickly gaining popularity among the youth, this could also be explored. The use of other languages in addition to English should be explored. There is also the need to explore further the element of public participation and consultation in the Legal notice 101 and spell out penalties of those who would not adhere to public participation and consultation.

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Acronyms

EIA - Environmental Impact Assessment.

EIAAR - Environmental Impact Assessment and Audit Regulations of 2003

EIAGAP - Environmental Impact Assessment Guidelines and Administrative Procedures

EAC - East African Community

EMCA – Environmental Management and Co-ordination Act

KWS - Kenya Wildlife Service

KFS - Kenya Forestry Service

KENHA - Kenya National Highways Authority

NEAP – National Environmental Action Plan

NEMA - National Environmental Management Authority.

NGO - Non Governmental Organization

SPSS - Statistical Package for Social Sciences

UNECE - United Nations Economic Commission for Europe.

WRMA - Water Resource Management Authority

1 CHAPTER ONE Introduction

1.1 Background

Many countries globally are struggling to promote public participation in environmental matters- a key non-legally binding principle of the 1992 Earth Summit. (Feb 03, 2016). In 1998 Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (or “Aarhus Convention”) was used to set up its enforcement requirements. According to the “Aarhus Convention” at the level of the nation state, each citizen is entitled to access to appropriate environmental information in the possession of public officials. Furthermore, each citizen should be accorded the opportunity to be involved in the making of decisions that affect the environment. States are to facilitate and encourage public awareness. This also requires effective access to judicial and administrative proceedings (Feb 04, 2016). In conforming to this agreement most African countries and regional organizations are responding to the impetus to include these environmental governance principles into national jurisprudence and regional initiatives. In May 1999, the Environmental Law Institute made two presentations introducing the “Aarhus Convention” and its principles to East African audiences composed of NGO, quasi-governmental, and governmental attorneys and experts. During the first presentation held in Arusha (Tanzania), participants strongly evinced a desire to advance environmental governance principles and procedural rights in Africa. The second held in Nairobi emphasized the need for specific, concrete national and sub national projects to implement the principles so that real progress is made. It was generally agreed that comparable regional or sub-regional conventions would encourage countries in Africa to enact national jurisprudence. (Environmental law institute 2014)

Upon the establishment of Environmental Management and Coordination Act of 1999 (Feb 04, 2016) National Environmental Management Authority (NEMA) was vested with the responsibility of coordinating, monitoring and enforcing public participation as well as administrative procedures. The Environmental Impact Assessment (EIA) process in Kenya acknowledges the need for engagement with the stakeholders’ opinions and concerns, particularly the affected citizens, if the development projects are to be successfully implemented.

Within the EIA process public participation is a component during the scoping, review and decision making processes. Public participation is embodied in the Kenyan law Legal Notice 101 section 17 subsection 1 which states: “While conducting an environmental Impact Assessment study under these regulations, the proponent of the assessment will need to consult

the particular authorities involved as well as to seek the opinions of the people who may potentially be affected by said project.”

The 2010 Kenyan Constitution integrates public participation in article 69 (1) (d) which states:

“The state shall encourage public participation in management, protection and conservation of the environment”

Also in article 118 (1) (b) states that Parliament will facilitate public participation and involvement in the legislative functions as well as other activities undertaken by parliament and its committees.

Other government agencies have followed suit with KWS (Kenya Wildlife Service), for example, constituting the Wildlife Conservation and Management Act 2013 where in Section 116: “empowers the Cabinet Secretary to come up with rules and regulations” to implement various provisions of the act including public participation.

The EIA process begins with the proponent submitting their potential project to NEMA. The proposal is then screened by an appointed agency in consultation with the Provincial and District (now county government) Environmental Committees to determine EIA requirement (or not). Thereafter scoping determines the critical aspects of the required EIA and the Terms of Reference (TOR). An Environmental Impact Report is submitted to NEMA which reviews it together with the county government environmental committees and the public. Finally a decision is made whether to issue an EIA license or reject the proposal. The decision is based on environmental, socio-economic, cultural impact as well as public concerns. (Source; EMCA 1999)

The Environmental Impact Assessment (EIA) process in Kenya recognizes the necessity of taking into account the opinions and concerns of various stakeholders, most importantly those directly affected, if the proposed development projects are to be successfully implemented. The concept here is that since the community bears the negative effects of environmental degradation, it is the right of the public to be involved in any decision on environmental affairs (Kameri-Mbote, 2000). It therefore follows that for the government to ensure that there is environmental justice and sustainable development there is a need to have active public participation. Such consultation and participation of affected stakeholders helps to identify, early in the EIA process, negative environmental impacts in order to address such issues during the actual study and in the EIA report.

1.2 *Statement of the Research Problem*

Environmental democracy expresses that environmental issues cannot be ignored and must be tackled by everyone, or at the very least, the majority of those directly impacted by the outcomes of these minority issues. Minorities, most prominently governments and leading private sector participants, should not entirely dictate the course through which these issues are to be tackled. (Mumma, 2002). It suggests and recommends that everyone should be involved and should have a say regardless of the background of the individual or group in environmental issues and governance, just as they voice their opinions in other areas including health, education and governance (Hansel, 1998). . Access to environmental information and justice for all those who choose to participate in such decision-making is of most importance to environmental democracy. In all this, the study aims to find out if the challenges that are highlighted in this study are valid and if there are more challenges that have not been documented.

The Ministry of Environment, Water and Natural Resources in Kenya has voiced its concerns on the lack of adequate public participation and consultation in environmental impact assessment. The process, for instance, is affected by poor sharing of information, as well as having partnerships that are weak and unsustainable with stakeholders (Kameri-Mbote 2000). There is therefore a need to rethink the relationship between the government and the public to create greater participation in the environmental process. It is also important to understand the challenges and barriers that affect this.

Kenya's Vision 2030 outlines the fragmentation present in the country's current environmental management institutional framework. A lot of overlapping in terms of the mandate of the environmental policy exists between various institutions. The Vision for Kenya as stated in Vision 2030 is to provide Kenyans, "a clean, secure and sustainable environment". The inspirations for this are globally held sustainable development is inspired by the principle of sustainable development principles as well as the utilitarian principles that advocate for equity among all members of society in accessing the benefits of a clean environment. In a bid to achieve this, the government aims to focus on four strategic loci, among them environmental planning and governance. The aim is to broaden institutional capacity in environmental planning, augmenting the impact of environmental governance so as to bring about an improvement in overall environmental management. Environmental management therefore becomes simultaneously a means as well as an end. The goal is to bring forth and sustain advanced and unified environmental management. This aligns to NEMA's Strategic Plan 2008-

2012 (June 2009), and will lend aid to the following strategic objectives: The improvement of environmental education, the augmentation of public participation and awareness, the coordination of lead agencies and other stakeholders in environmental management, the strengthening of the management authority's capacity in undertaking its mandate, the conduction of research surveys and the dissemination of research findings. (Ministry of Environment, Natural Resources and Regional Development Authorities; 3rd March 2016)

This study focused on the environmental management objective on enhancing environmental education, public participation and awareness and specifically on public consultation and involvement during the EIA process in Nairobi County. This study also sought to understand the changes needed to engage the public more vigorously in the environmental decision making processes.

Public participation does not seem to influence decision making as expected. Previous research on this topic has merely acknowledged importance of public participation but has never questioned why public participation is not more vigorous or more productive in final decision making. Lack of coordination between NEMA and other newly created independent environmental bodies has also been a barrier in effective decision making. Although EIA legal framework in Kenya is enabling, the public is still not aware of how they can be involved in public participation and therefore do not adequately participate. There is very little improvement in the exercise of public participation in Kenya almost more than 10 years after the inception of the EMCA in 1999. (Okello et al, 2012)

Some of the policy gaps will be seen in some of the case studies. In several examples Water Management Authority (WRMA) – an institution created in 2002 - has conflicted with NEMA especially when licenses were granted in wetlands. WRMA was created as an independent institution in charge of water resources but the act did not clearly spell out how these independent bodies will co-ordinated their roles as environmental regulators. Another policy misjudgement is giving NEMA a principle role as revenue collector – a duty that seems to conflict with its role as regulator. An alternative form of communication to newspapers should be explored given the vast opportunities of transmitting information through digital mobile networks.

1.3 *Research questions*

The research aims to answer the following questions:

- i. To what **level are the public concerns integrated** in the EIA reports?
- ii. How does public consultation and participation **differ in the different economic sectors** in Nairobi County?
- iii. What are the **barriers** to public consultation and participation?

1.4 *Objectives of the study*

1.4.1 **General Objective**

The general objective of this study was to assess whether public participation in the EIA process of the different projects in different sectors of the Kenyan economy is sufficient and how this influences environmental decision making.

1.4.2 **Specific Objectives**

- i. To examine the level of public participation in EIA process.
- ii. To evaluate the variations of public participation levels in various economic sectors.
- iii. To examine the barriers to public consultation and participation.

1.5 *Hypotheses*

- i. H_0 : Greater public participation in the EIA process does not lead to better representation in EIA reports.

H_1 : Greater public participation in the EIA process leads to better representation in EIA reports.

- ii. H_0 Public participation in the EIA process does not vary between the different economic sectors.

H_1 Public participation in the EIA process varies significantly from sector to sector.

- iii. H_0 There is no significant barrier to public participation in the EIA process.

H_i There are significant barriers to public participation in the EIA process.

1.6 *Justification of the Study*

As shown in the Environmental Impact Assessment guidelines and administrative procedure 2002 of EMCA number 8 of 1999, public consultation and participation is one of the most significant requirements in Environmental Impact Assessment in Kenya. It is indicated as one of the main principles in the guidelines. Consequently not much research has been done in Kenya to assess public participation and consultation and how it varies between different economic sectors including the causes of these variations. Most of the research done has not focused on the barriers of the current public participation and consultation processes as stated in the Legal notice 101 and EMCA 1999. This study could assist future researchers and policy makers to identify the best tools for public participation. Close attention should be paid between the level of participation and participatory impact (NRC 2008). Some examples of the benefits of public participation (or environmental democracy) have been witnessed in Porto Alegre, Brazil and local villages in India (Argawal & Gibson 2001). Meaningful public participation requires much more than holding meetings, hearings, or collecting public comment (Wasserman 2012). As will be witnessed in the case studies public hearings were held mostly as a legal token and many did not incorporate public views in the decisions made. This study was undertaken in Nairobi County because of the sheer number of projects being carried in most sectors of the economy. All parties stand to benefit from public participation including: civil society, environmental practitioners, developers and policy makers (SAIEA 2005).

1.7 *Scope and Limitations of the Study*

This study focused on public participation and consultation in the EIA process in Nairobi County (Nairobi city and its satellite towns and urban areas including Ongata Rongai, Kiserian, Ngong' and Kiambu towns). The major limitation of this study was that it did not capture projects that impact on rural livelihoods - agriculture, livestock and fisheries - in a way that an over-all Kenyan study would have. The study had high emphasis on real estate and similar projects. The data collected for this study was also limited to the period up to June 2015 for the case study reports.

1.8 *Definition of Operational Terms*

Chi Square – assesses the association between observed values and predicted theoretical values

Commercial Buildings – These are any buildings other than residential that are used as offices or business premises.

Earth Summit - The informal name for the United Nations Conference on Environment and Development (UNCED) which took place in Rio de Janeiro in June 1992.

EIA Experts - Professionals licensed to carry out EIA analysis on behalf of NEMA

EMCA 1999 - Environmental Management and Co-ordination Act is an act of parliament that lays the legal and institutional framework for the management of the environment.

Mixed-Use Building – This is any building that has rooms for both commercial use and residential use.

Proponent – This is the person or entity that intends to carry out a project.

Public Participation - This is the involvement of individuals and groups that are affected by a proposed intervention (project, program, plan, policy etc.)

Public Consultation - Or simply **consultation**, is a regulatory process by which the **public's** input on issues concerning them is sought. The major goals of public consultation entail the improvement in efficiency, transparency and public involvement in major projects or laws and policies.

Scoping – This is penultimate process before the EIA license is issued - in which the important environmental impacts of the proposed project are examined

Zoning – This is the legal land-use designation for a particular area (Residential, commercial, industrial etc.)

Zoning Change – This is the conversion of legal land-use from one use to another: (For Example from Single Unit Residential to High Density Multiple-Units)

2 CHAPTER TWO Literature Review

2.1 Introduction

This chapter focuses on what has been written and research done on public participation and consultation in the EIA process globally and in Kenya. This chapter also highlights the levels of public participation and consultation in the EIA process.

2.2 Environmental Impact Assessment

2.2.1 Global Perspective

Environmental impact assessment is an important section of environmental licence process. It connects to national and private programs that are likely to have compelling consequence on natural and societal environment. The intent of EIA is to examine as well as suggest all desirable accoutrements of development proposals on the environment. It also helps to define an environmental administration arrangement along with moderation limits so as to minimize conflicting consequences to the environment. So the main and actual intent of EIA is to determine the environmental emanation of a development prior as well as acknowledge feasible brunt preceding to a choice being taken on whether or not a proposal should be accorded a licence to go ahead. Also, it targets on the remission measures to take in order to avert harmful environmental impacts; which positions EIA within a broader context of sustainability (Jay al 2007). In this regard, putting up well established and strong EIA systems is still a challenge for emerging and developing economies.

First popularized on earth in the 1970s, EIA has experienced important adjustments and improvements. While some nations of the nation in the global north have more developed EIA systems, in others, EIA has only been enforced not so long ago(Ramos et al. 2008). In general, EIA process starts with project identification. These projects significantly impact environments, both those constructed by nature as well as by socialization. Annex I of the Aarhus Convention outlines activities that are mandated to undergo EIA. There of course could be, activities missing from this list, but which significantly impact the environment. A case-by-case screening process is applied to such activities.

In Denmark, for example, the Denmark Planning Act emphasizes the importance of public participation (Kornov, 1997). The Danish Act allows the public to participate at 2 levels: at the project proposal stage and later at the post-design stage (before implementation).

2.3 Public Participation in Decision Making

The “Aarhus Convention” outlines two domains for public involvement in decision making:

- Participation in decisions on specific activities and
- Participation while preparing policies and programmes and other instruments that are legally binding.

Paul (1987) defines community consultation and participation as the active process of stake holders or client groups having a say in both the directing and executing of a project intended to enhance their lives and livelihoods in terms of earned income, personal improvement, self-reliance or other values they hold dear. This definition enunciates the fact that one interpretation is linked to other interpretations in a dynamic framework. Community consultation and participation can be said to occur only in the event of people working together to advise, decide or deliver on issues. This is best achieved as joint and not individual efforts.

Identifying Levels of Public Participation

How the projects look like and the nature of the stakeholders will influence how actively and satisfactorily the participatory practices are achievable. It is also important to differentiate between various levels of intensity of participation in the community, even when participation at various intensity levels may occur simultaneously within the course of the project. Paul (1987) cited four levels (in ascending order) of participation as; information sharing, consultation, decision-making and action initiation. According to Paul, all the four levels may co-exist in the same project. The initial two categories offer means of exercising influence. He refers to these as low participation. The subsequent two provide means through which control is exercised. Paul regards these two as “higher” forms of participation. Pretty & Vodouche (1997) outlined seven categories useful in the description of participation. The categories are outlined in a descending order, from least to most participatory as evinced below:

1. **Passive participation** – community is informed on what will happen and involved and also informed on the processes in the project.
2. **Information sharing** – Questionnaires and research questions are administered to the locals. These questions were already formulated. I.e. the locals were not involved in the choosing of the questions asked.
3. **Consultation** - project stakeholders (mostly the communities) meet with external agents who explain the issues and solutions in accordance to the responses given

by the public, but are not obliged to take the public opinion under consideration in decision making.

4. **Provision of material incentives** – the local around the project area provide resources, for example labour or land, and in return, they are provided with other incentivizing goods or materials. Once the incentives ends, the locals have no claim in any continuing activities of the project.
5. **Functional participation** – citizens around the project area form groups to take part in project implementation. These groups are in most cases are in most cases established by external facilitators. These groups at some point could become self-reliant and most of the time come to be after major decisions have been arrived at, and not the early phases of the project.
6. **Interactive participation** – here, the community participate together. This in turn will lead to the articulation of project plans.
7. **Self-mobilization** - communities participate by taking initiative and not involving any individual institutions and develop networks with other individual institutions for information, other material resources and technical advice, but still have control over how all these are used (Pretty and Vodouche, 1997).

Shaeffer et al (1994) also puts participatory levels into two categories: passive participation and active involvement. Passive participation encompasses the use of services; while active participation may be exhibited by the delivery of a service.

2.4 Public Consultation

Public consultation is a regulatory process where the input of the public on issues that are affecting them is sought. In most instances, the main aim of consultation is to improve public involvement, efficiency as well as transparency. It comprises of two processes;

1. Notification: In this process, the public is consulted on the issue that affects them.
2. Consultation. This is a two way flow of information participation and exchange of opinion between various interest groups before the legislation or policy is drafted and could also include projects (Garton & Carter, 2002).

This process has been employed by most commonwealth nation states like New Zealand, Canada and the UK. Each nation state has different process of public consultation, which could be nation based or region based. Ineffective consultations are cosmetic in that they are either obligation or show based and do not really involve genuine participatory decision making. The advantages of collective participation and consultation in environmental decision making are

achieved only if setups are favourable for productive engagement and provided that governmental stakeholders and other advocates are dedicated to the participatory process. If requirements for productive participation are not engaged, the process may be counter-productive, bringing about an expensive and tedious situation with insufficient improvement in the kind of the decision outcomes (Dietz and Stern 2008). Advocates may be having concerns that the inclusion of public involvement in EIA will translate to much higher costs, increased effort, and deferrals in the consultation and planning processes. (Rauchmeyer & Risse 2005) argue that these shortcomings may be subjugated by stressing on better consultation and participation to improve governance and build public trust.

Communication breakdown and information not being accessible may also hinder the efficacy of public consultation and participation in EIA (Diduck & Sinclair 2009). The public may not be properly notified, reports could be in too technical as to make it difficult for the public to understand them, the period allowed for consultation and participation may be too short, limited monetary resources may be available, or the public could be in the dark the entire process. In emerging economies, lack of formal education, the exclusion of marginalized groups in decision making, and participation conditions forced on the communities by inconsiderate international donors who fail to acknowledge the role of traditional decision making processes may also impede meaningful participation in EIA (Spaling 2012). To conquer some of the above mentioned hurdles in EIA, certain prerequisites should be set for meaningful participation to be met.

The advantages of participation that rise often bet on applicable legislation and policy. Explanations of ‘the public’, sufficient period and the mechanism of notice provision, stipulations for public engagement, and the availability of programs that fund participants often dictate the efficacy of participation (Diduck & Sinclair 2009).

How to Integrate Public Concerns

In line with Heiland (2007), consultation and participation must occur promptly in the process when the decisions that have been made at that particular time are impermanent. This consultation and participation must also allow the public enough time to become well-known with, and develop opinions about, the important issues. Consultation and participation should not only happen at the start, but be an on-going phenomenon or matter through the whole process and constant feedback into every sequential planning phase (Kende-Robb and Van Wicklen 2005). Continual participation provides an avenue for the consideration of public needs

and viewpoints at very successive stage, in order to lower the possibility of conflicts thereafter. Doelle and Sinclair (2015) argue that ensuring community involvement in identifying not only alternatives but also preferred options is necessary in the transition to sustainability.

After fulfilment of the participatory planning process, the advocates need to establish pertinent follow-up and circulation of the results (Heiland 2007). This involves ensuring the availability of EIA reports to those involved, using a variation of dissemination approach so that all stakeholders have access and accuracy in how their recommendation influenced the decision at the end. Increased participation is imminently boosted by indications that the initial public participation impacted the decision reached.

2.5 Legal context of public participation in Kenya

The NEAP 1994 (National Environmental Action Plan) was one of the first policy documents to seek harmony between national development and environmental protection (both private and civil society took part in the initial draft). The EMCA (Environmental Management and Coordination Act) of 1999 is the most important law in relation to public participation. It requires that a notice of the EIA study report is to be published for a week (2 weeks prior to 2001) in the Kenya Gazette and the local dailies circulating in the area of the proposed project. The public is given a maximum of 30 days to inspect the report and to submit oral or written comments on the same. The Kenyan Constitution 2010 specifically encourages public participation in environmental management (Article 69(1). The 4th schedule of the constitution consequently devolves the environmental mandate of the national government to the counties. This has the potential to improve public participation since environmental management is no longer a preserve of the national government. (Bosek, J. 2014)

Since the inception of EMCA 1999, several important studies that analyze public participation in EIA have been conducted (Kameri-Mbote, 2000; Angwenyi, 2004; Onyango and Schmidt, 2007; Okello et al., 2008). Under the EMCA, the Environmental Impact Assessment and Audit Regulations of 2003 (EIAAR, 2003) and the Environmental Impact Assessment Guidelines and Administrative Procedures of 2002 (EIAGAP, 2002) came to being as regulatory and guiding mechanisms to the EIA process. These three documents provide the details of public participation and assessment during EIA in Kenya.

In the EIAAR, for example, the proponent is required to organize and host public gatherings for consultation and invite participation from the public where a qualified coordinator minutes all comments. Currently an official from NEMA has been coordinating the public meetings. In another example, section 2.9 of Kenya's EIAGAP (2002) states that the "...methodology for consultation and public participation may include: meetings and workshops with affected communities, interpersonal contacts, dialogue with user groups..." Kameri-Mbote (2000), however, says that there is "certain reluctance" by many in authority especially government to involve the public and to allow them to access information easily.

Even though the preconditions for public participation are well documented in the legal framework, the uncertain question still regards their fulfilment of their obligation in ensuring effective public participation. It is important to note that the EMCA (1999) defines neither public participation nor the public beyond the common understanding of the terms. Section 1 (5) (a) of the EMCA states that – "In the adjudication of such matters, the principles of public participation shall guide the high court". Showing recognition of the problem, the Kenyan Ministry of Environment and Natural Resources reveals that it exhibits many weaknesses, chief among them being insufficient sharing of information and the formation and maintenance of feeble alliances with key stakeholders, mainly the public (GoK, 2006). Comprehending the legal weaknesses in the structure and interpretation of the EMCA is a vital step in improving public participation as stated in the "Aarhus Convention". The law does not, for example, articulate sanctions for non-compliance with public participation,

2.6 Public Involvement in Environmental Decision making in Kenya

Over the last 20 years, Kenya has witnessed increased popularity in public participation and consultations as regards to environmental decision making. However, the totality of its wherewithal is yet to be accomplished (Onyango et al. 2005; Okello et al. 2009). Jurisprudence like the Water Act of 2002 and the Forest Act of 2005 have underlined the demand to empower the communities around the project area to manage their own resources (GoK 2005; K'Akamu 2008). Furthermore, the provisions that the EIA framework makes for public participation have been seen as reasonably compelling (Okello et al. 2009). There is acknowledgement, nonetheless, that such provisions can be just uncomplicated grandiloquence, along very little local participation taking place on the ground (Onyango & Namango 2005; K'Akamu 2008; Okello et al. 2009). Okello et al. (2009) report participation in EIA exercise mostly stays at the

consultation level and arriving at the top ranks of nationals' empowerment becomes very difficult.

Many hurdles to proper participation of the Kenyan public in EIA have been noticed in other studies. Insufficient access to knowledge (Montes 2008; Okello et al. 2009), poor implementation of participation codification (Okello et al. 2009), lopsided ruling class (Montes 2008; Spaling et al. 2012), and restricted assets (Montes 2008) are just some of the hurdles. Incomprehension may also create an impediment to the local citizens acquiring information. This is mostly because notice and reports, if made readily available, are often printed in the local dailies or on rare occasions, posted on the World Wide Web (Okello et al. 2009). People living upcountry often have limited access to internet or the local dailies. In a community based EIA case study, Montes (2008) accounts local stakeholders disappointment due to innumerable limited or deferred dissipation of the EIA reports to the communities in the project area. The same case study also sites a power disparity in the EIA process - with mainly the gentry citizens in the community being involved. The opinion of the women who were sometimes present had very little weight over what was finally decided. Furthermore, the opinions of the youth have often not been considered in the entire EIA exercise.

In the National Environmental Management Authority's 2013-2018 blueprint, the sense of local participation and the exuberance of home grown awareness in environmental handling are acknowledged. But, the incorporation of such awareness must improve for the impact to be felt. Improvement of local participation may be done by disseminating information. This means that that information can be easily accessed (e.g. local radio) and in the native dialects (Okello et al. 2009). The provision of participant incentives may also be used to improve public participation, for example by conducting the meetings in easily accessible places by most of them, ensuring that all members of the communities including the vulnerable people are involved, and using techniques and approaches that area participatory in nature. Okello et al. (2009) recommends the necessity for further research on the practical efficacy of EIA public participation, currently the way it is, is still not adequate in Kenya, which this study aimed to follow up on.

One research paper done on this subject before the constitution includes "*Public Involvement in Environmental Decision making in Kenya*", Research Report for World Bank in 2000, by Dr. Kameri-Mbote. The other paper is "*The doing and undoing of public participation during environmental impact assessments in Kenya*" by Okello et al. in 2009. EMCA 1999 was still pretty new during the Kameri-Mbote study and there was very little in the old constitution to

support public participation in the EIA process. However, this study did provide a solid basis on public participation in the EIA process of other subsequent studies including this one.

2.7 Theoretical Perspectives

2.7.1 Stakeholder Theory

Stakeholder theory stated as a corporate management tool in the mid 1930's in the US. This was after the beginning of the great depression in 1929. The main tenet of the theory consists in applying the principles of democracy in economics.

Stakeholder theory is anchored in democratic theory, which claims that everyone impacted by corporate decisions should have an equal say in the making of said decisions. Stake holding asserts that different stakeholder interests need to be factored in into governance decisions, and that these decisions should be protected by the rule of law. One of the key tenets of stakeholder theory lies in the differentiating of who the stakeholders are. An Important distinction, seen when analyzing the perceptions specific stakeholders have of the powers they hold, exists between internal and external stakeholders. Internal stakeholders control the process, external stakeholders rely on and are influenced by the process and the decisions reached.

The inclination to increase public participation has also made known obstacles regarding the public. The public is made up of various individuals and groups in possession of different skills, goals and capabilities, and so the same participatory methods cannot be applied to all across the board. Stake holders' theory is also used in analysing case studies.

“A stakeholder is an individual or group impacted by, and able to significantly influence (directly or indirectly) – the topical area of interest.” nccsap.net.

This definition views the stakeholder as either an individual or a group.

The concept of stakeholder participation originates in the rise of alternative means of dispute resolution in the 1970's and '80's (Freeman 1984). Stakeholder participation is not just circumscribed to mediated dispute resolution, negotiation and arbitration.

“Stake holding involves the invention of new forms of expression, and increasing the difficulty of exit strategies, especially for people who are already influential within the process. Inclusion does not conclude at just preventing exclusion. Rather, it also involves the generation of loyalty frameworks between different partners with different stakes in order to generate and sustain mutual trust” (Barnett, A. 1997)

2.7.2 The Theory of Citizen Participation

Citizen participation is a process in which private individuals can influence public decisions - and has long been a component of the democratic decision-making process. Citizens' participation is said to have its origins in the ancient Greek and colonial new England. Public involvement ensures that citizens have a direct expression in public decisions. The terms "citizen" and "public," and "involvement" and "participation" are usually used correspondent. While both are broadly used to pinpoint a process through which people have a voice in national policy decisions, both have adversely contrasting meanings and transmit little understanding into the course they aim to portray. Mize indicates that the term "citizen participation" and its affiliation to public decision-making has matured without a general unanimity regarding neither its meaning nor its consequences (Mize, 1972).

A number of firms choose to exclude or minimize public participation in planning efforts claiming citizen participation is too expensive and time consuming. Nonetheless, there are palpable advantages that can be borrowed from a productive citizen involvement program. Cogan and Sharpe (1986, p. 284) establish 5 advantages of citizen participation to the planning process: information and ideas on public issues; public support for planning decisions; avoidance of protracted conflicts and costly delays; reservoir of good will which can carry over to future decisions; and spirit of cooperation and trust between the agency and the public.

2.8 Conceptual Framework

Public participation is affected by poor sharing of information, unequal power relationships and insufficient enforcement of participatory requirement. It is important to restructure the relationship between the government, the public and project proponents so as to create greater community participation in the environmental process. It is vital to understand the challenges and barriers that affect this process to ensure success. Projects with sufficient public input and collaboration tend to have better longer term environmental impact, lead to overall community satisfaction and reinforce the trust between proponents and local communities. Public participation and consultation is assessed in various economic sectors (housing, industry, transport, mining, and agriculture) of Nairobi County.

Public participation is a continuous and important sharing of information, meanings, and views. The public has many roles such as:

- Make available data and information important for evaluation of impacts on the physical and social environment.
- Limit conflicts through the early identification of issues of contention.
- Participate in identifying local citizens and groups with special expertise.
- Identify local and regional issues.
- Provide historical perspective to current environmental conditions.
- Help to generate field data.
- Provide criteria for evaluating the significance of identified impacts.
- Suggest forms and help organizing mechanisms for public participation.
- Help to define the scope of work and schedule for the overall assessment process.
- Provide a link between the assessment team members and key organizations.
- Identify and assess potential mitigation measures.
- Increase public confidence in the EIA exercise.

2.8.1 EIA Approach to Public participation.

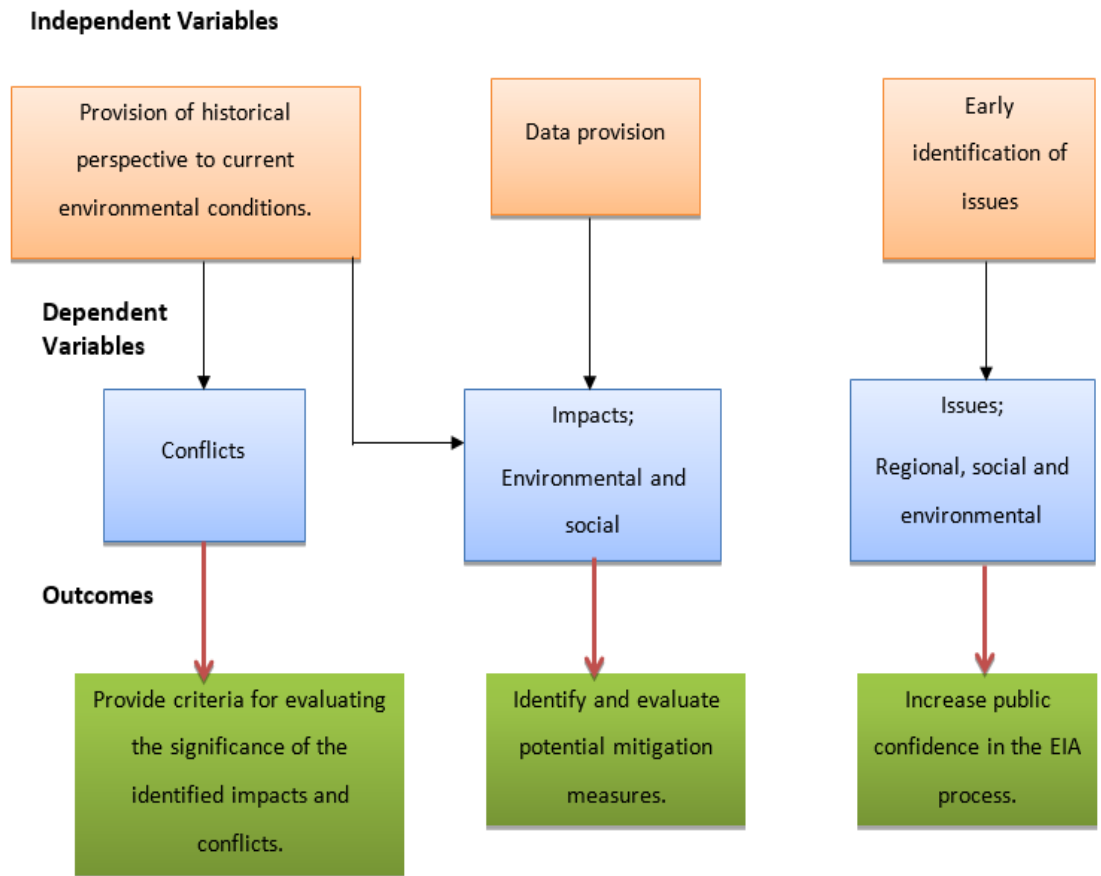


Figure 2.1: Public participation conceptual framework. Source: NEMA participation pamphlet 2014(2)

2.8.2 Conceptual Framework Diagram

This conceptual framework diagram displays the research question, the causes of inadequate participation, the outcomes, and the impact of the outcomes (the box in purple) if no mitigation measures are taken.

Causes of inadequate participation:

Time: When the notice for public participation is given over a short period of time. When there is little time for participation and consultations during the meetings.

Communication medium: When communication medium used e.g. newspapers are not widely used/ bought by the general public.

Lack of political good will: When the project is politically inclined and doesn't directly benefit the public, the public might not turn up for the meetings.

Language Barrier: When the language used in the project literature is too technical for public or the language used is not common in that community.

The outcomes of the problem will include:

Lack of good will (from public) due to substandard projects being implemented and omission of the public from the decision-making process.

Causes of Inadequate Participation

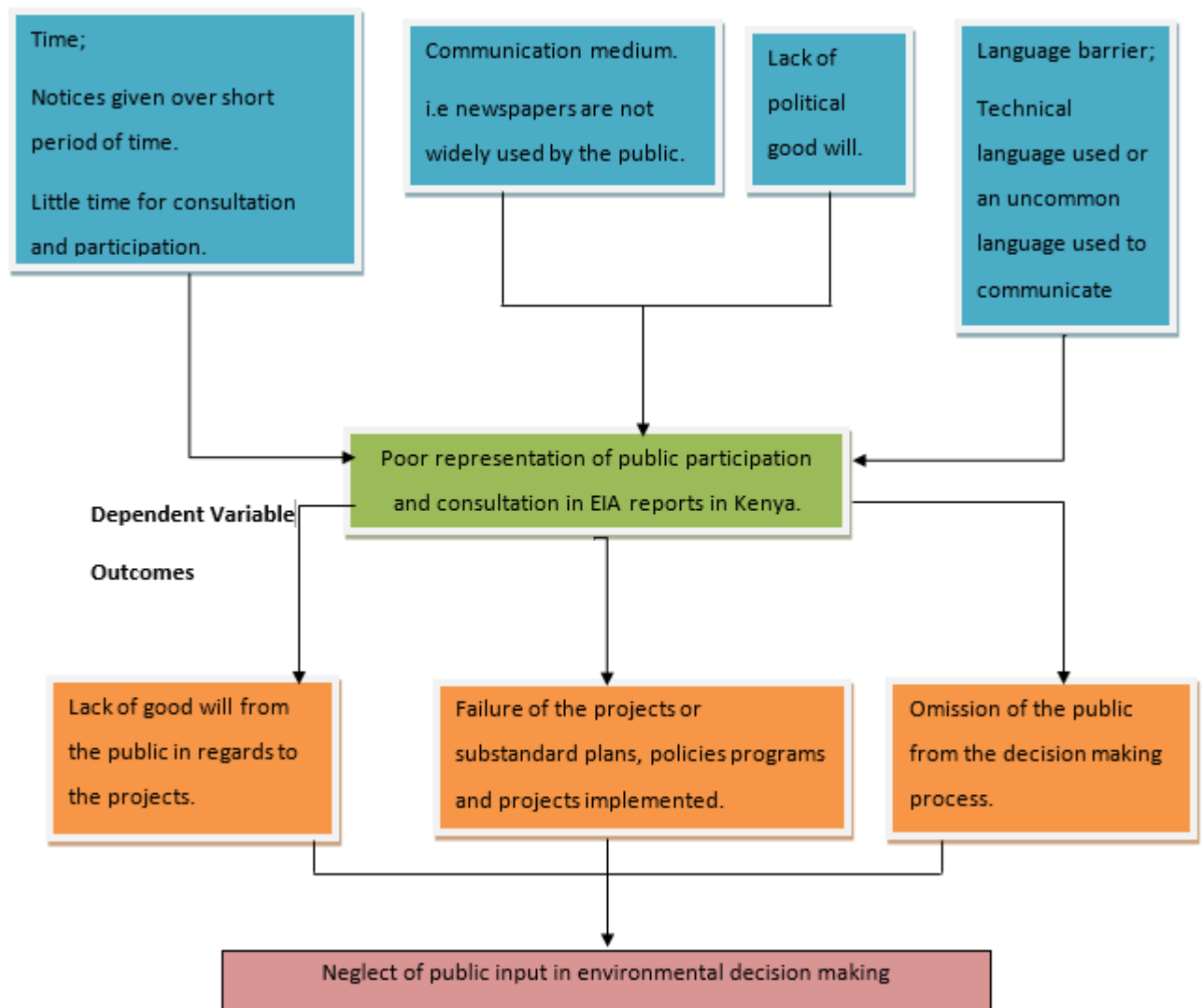


Figure 2.2: Research's conceptual framework. Source Field data 2015.

3 CHAPTER THREE Research Methodology

3.1 Introduction

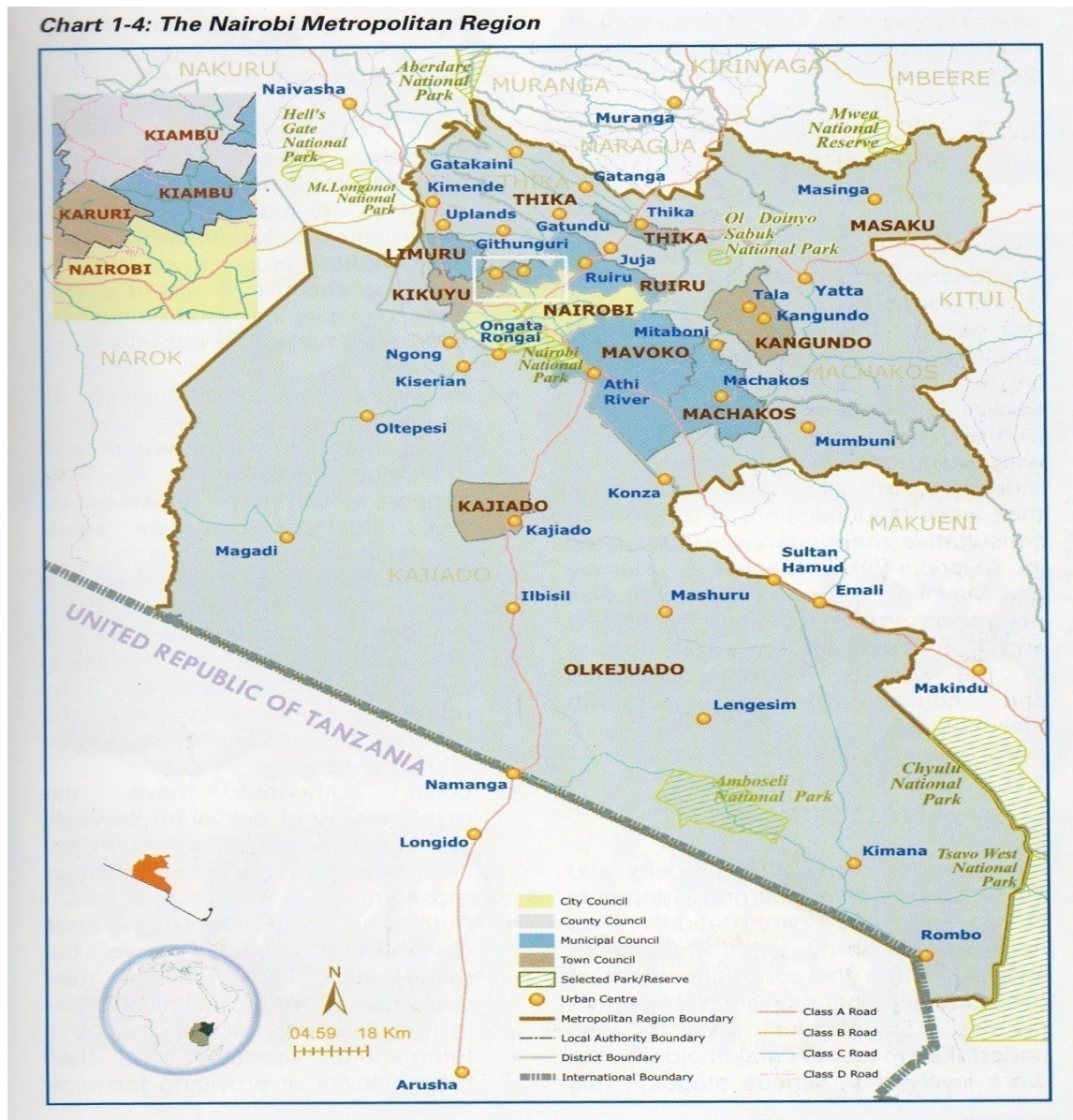
Both primary and secondary data formed the main data source of this study. Field surveys formed the major part of the primary data and this was supplemented by observation, while document reviews was used to study the EIA reports from NEMA. But first we will look at the study area.

3.2 Study Area

Nairobi County houses the country's largest city. Since its foundation in 1899 as a transit stop for travellers to the East African inland, Nairobi has become, second only to Dar es Salaam, the largest city in the African Great Lakes region. The growth rate of Nairobi is currently 4.1% an astronomical figure fuelled mostly by rural urban migration. The current population of Nairobi is slightly above 4.1 million who live in an area of 696km² and the city accounts for up to 60% of Kenya's GDP. Until 2008, Nairobi's urban growth was dictated by a metropolitan growth strategy written in 1973. In 2005, a report titled "Nairobi Metro 2030: A World Class African Metropolis." was released by the Ministry of Nairobi Metropolitan Development as the city's roadmap towards achieving Kenya's larger national development agenda titled "Kenya Vision 2030". The report was not meant to be a static document, but rather one open to modifications and revisions.

3.2.1 Infrastructure and Building Construction

Virtually all of Kenya's tallest buildings are located in Nairobi. By some estimates Nairobi contributes up to 90% of value addition in real estate in Kenya. Nairobi is Kenya's centre for innovation, industrialization, education and culture. It generates almost half of Kenya's GDP, and provides employment to 25% of all Kenyans, and 43% of all Kenyan urban workers. The consequent demand for infrastructure and construction, accelerated by major speculation in the middle income housing market and suburban office buildings has made Nairobi a natural choice for this study. The last 10years have also seen the completion of the Thika super highway and the construction of the southern by pass. Nairobi has the most EIA reports submitted at NEMA (National Environmental Management Authority). Many of the project reports include housing projects and commercial buildings projects. Mining projects are not common in Nairobi. Out of the 1105 registered EIA Experts, 713 of them reside and have done projects in Nairobi. This makes Nairobi a rich hub of EIA experts.



Map 3.1: Nairobi Metropolitan Region. Source: GoK; Ministry of Nairobi Metropolitan Development; Resettlement Policy Framework for Nairobi Metropolitan Services Improvement Project (NaMSIP), Dec 2011.

3.3 Data collection tools

Semi-structured questionnaires formed the basic tool of data collection. A mixture of both closed and open ended questions was administered to both lead and associate EIA experts. The structured questions had blanks to be filled in, multiple choice questions, or contained open-ended questions where the respondent is encouraged to provide lengthy replies and, to some extent, pick their own loci of focus.

This formed the basic tool of primary data collection. 65 questionnaires were administered to EIA experts.

Field Notebooks: were used to record observations made during the period of field study.

For secondary data, we got information through document reviews, reviewing case files of projects obtained from NEMA with their permission, focussing on public participation.

3.4 Primary data

3.4.1 Simple random sampling

Simple random sampling was used in sampling the collecting data from the EIA experts from the records obtained from NEMA on the licensed EIA experts as at October 2014.

3.5 Secondary data

3.5.1 Stratified Random Sampling

We divided the reports from the NEMA into economic divisions i.e. Housing, Transport infrastructure, tourism (hotel, resorts), commercial buildings, Industrial and energy.

A random sample from each stratum was then taken in a number proportional to the stratum size when compared to the population.

3.6 Research Methodology

This chapter describes the approach used in data collection and analysis. It explains the sources and methods of collecting data, the target population and the sampling designs.

3.6.1 Target population

The study targeted lead and associate EIA experts in Nairobi County who have been active for the past 5 years. There are approximately 350 registered EIA experts residing in Nairobi according to NEMA records by the year 2014 (some registered environmental consultants practice in Nairobi but are not based here)

3.6.2 Sampling design

The sample size is determined scientifically by Slovin's formula

$$n = N / (1 + Ne^2)$$

Where

n = desired sample size for the study area

N = total no. experts in the study area

e = desired margin error

Source: (Israel, 1992)

A margin error of 0.05 is selected since it is logistically difficult to deal with a larger sample size (Mugenda & Mugenda, 2003)

$$\text{Thus } n = 350 / (1 + 350 * 0.05^2)$$

n=186

Due to financial and logistical constraints 25% of the sample size was used in this research study. The study therefore utilized a sample size of 65 registered EIA lead and associate experts.

3.6.3 Qualitative Research

Qualitative research was done by employing document review approach of inquiry. This enables the researcher to explore deeply into the how the public participation was captured in the EIA reports that NEMA received. In this case, out of the targeted 30 files that had public participation and consultation problems, only 18 were reviewed and 13 are highlighted. The Smith Scheme of Public participation -Smith (1984) was used to analyse EIA reports obtained from NEMA. The table below shows a model for evaluation of public participation.

CONTENT	PROCESS	OUTCOME
<ul style="list-style-type: none"> • Historical background • Institutional framework • Political structure and awareness and process • Legislative provisions and regulations • Administrative set up • Agency features • Administrative status • Functions • Teams of reference • Financial resources 	<ul style="list-style-type: none"> • Goals and objectives of participation • Mandate of participation by concerned agency • Objectives of participants • Number and nature of public involved • Who the participants are • How organized they are • Methodology adopted • Techniques of participation • Access to information • Availability of resources 	<ul style="list-style-type: none"> • Results of participation exercise • Effectiveness of participation • Focus on issues • Representative of participant • Appropriateness of process • Degree of awareness achieved • Impact and influence of participation • Time and cost

Table 3.1: Model of evaluation of public participation. Source: Adapted from Smith

Factors	How to measure:		
	High	Medium	Low

1	Notification/ mobilization	Gave a 2 week notice both in the Kenya gazette and the local dailies(used more than one daily), used other methods of notification e.g. informing the area chief to inform the residents.	Only gave the 2 week notice, in the Kenya gazette and the local dailies. Used one daily.	Only one weeks' notice was seen in the local dailies.
2	Identification of objectives/ Goals of meeting	If all the contentious issues affecting the public were Set in the agenda of the meeting and mentioned in the meeting.	Not all	Very few
3	Identification of relevant stakeholders and community	If all the relevant stakeholders were identified and present in the meeting.	Not all	Very few
4	Techniques/ process of conducting meeting	If the meeting was conducted peacefully and all issues discussed		
5	Inputs and efforts of stakeholders	If all the stake holders who had contributions were given time to air their opinions	If some were denied the chance to contribute.	If very few stake holders were given time to contribute.
6	Evaluation of the success of public hearing	If there was some sort of agreement from both sides	If an average number of the stakeholders	If very few people were satisfied.

		and if the issues which would not be addressed at that meeting would be addressed at a later time as agreed by the stakeholders and the proponent.	were satisfied.	
7	Time and cost	Cost was on the proponent. Time- Whether no one was inconvenienced because of too much or too little time.	Whether the time allocated was averagely adequate.	Whether most of the participants were inconvenienced because of time

Table 3.2: Factors Used to analyse data. Source: Adapted from Smith 1984.

Ranking of factors

High=3, Medium=2, Low=1, None=0

4 CHAPTER FOUR Results and Discussions

4.1 Introduction

In order to address the research objective, the following study was conducted to provide an understanding of how public participation is done in the EIA process and if it is adequately integrated in the EIA reports. The purpose of this chapter is to present interview responses from participants and findings from reviewing some of the case files obtained from NEMA. The questions in the structured interviews looked at the level of participation, barriers to public consultation and participation and extent of integration of public concerns into the report.

Vicariate descriptive analysis was used to describe these general areas against the respondents' background factors. The Smith scheme of public participation was used, and the seven factors were used to measure and to gauge the level of public participation and consultation of each case file.

Listed below are the factors that were used to gauge the success of public participation and consultation in each case.

- Notification/ mobilization
- Identification of objectives/ Goals of meeting
- Identification of relevant stakeholders and community.
- Techniques/ process of conducting meeting
- Inputs and efforts of stakeholders
- Evaluation of the success of public hearing
- Time and cost

Ranking of the factors was 3 for High, 2 for medium, 1 for low and 0 for none.

4.1.1 Description of the Respondents in interviews

50.8% of the respondents were Associate EIA experts, meaning that more of the assessments were done by Associates rather than the lead EIAs experts. 40% of the respondents did not indicate whether they were lead or associates. Most of these respondents who did not indicate mentioned that they were individual experts who work for themselves and were not comfortable classifying themselves as lead or associates. Looking at the description below the type of

respondents, most of the respondents (78.5%) lived in the Nairobi area as indicated in the table and figure below.

Type of respondent		
	<i>Frequency</i>	<i>Valid %</i>
Lead EIA experts	6	9.2
Associate EIA experts	33	50.8
Not indicated	26	40.0
Total	65	100.0

Table 4.3: Background description of the respondents. Source: Field data 2015

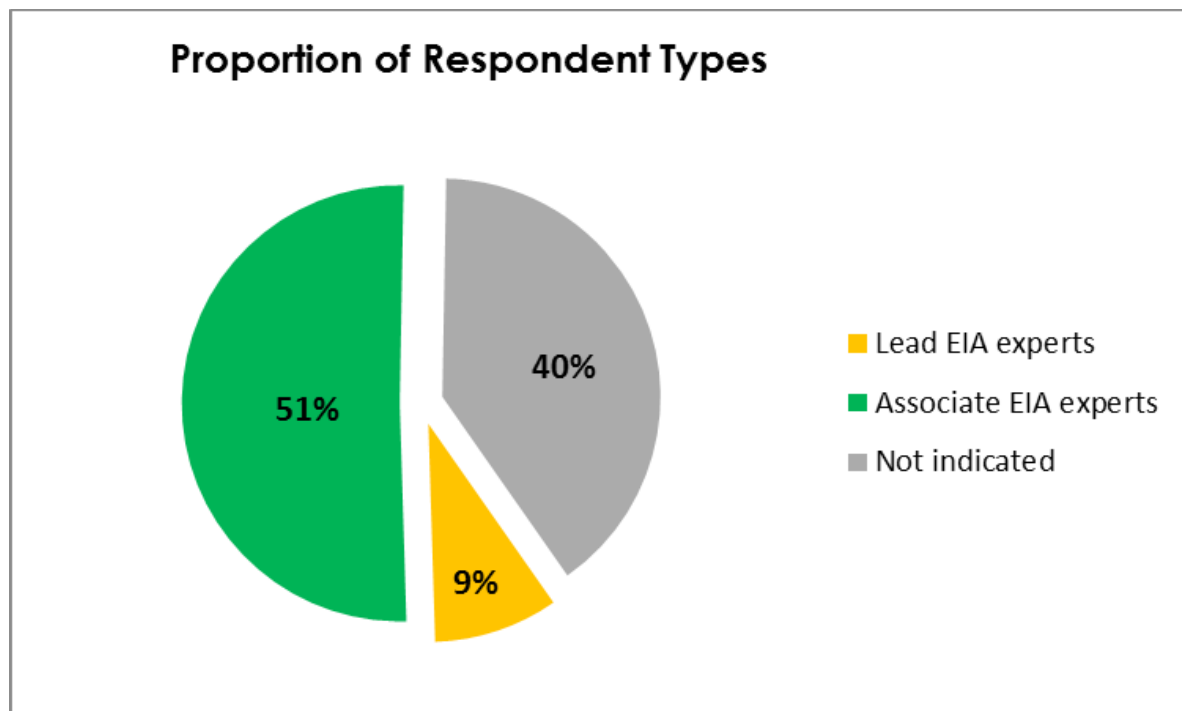


Figure 4.3: Proportion of the respondent types. Source: Field data 2015

Distribution of Residence of Respondents

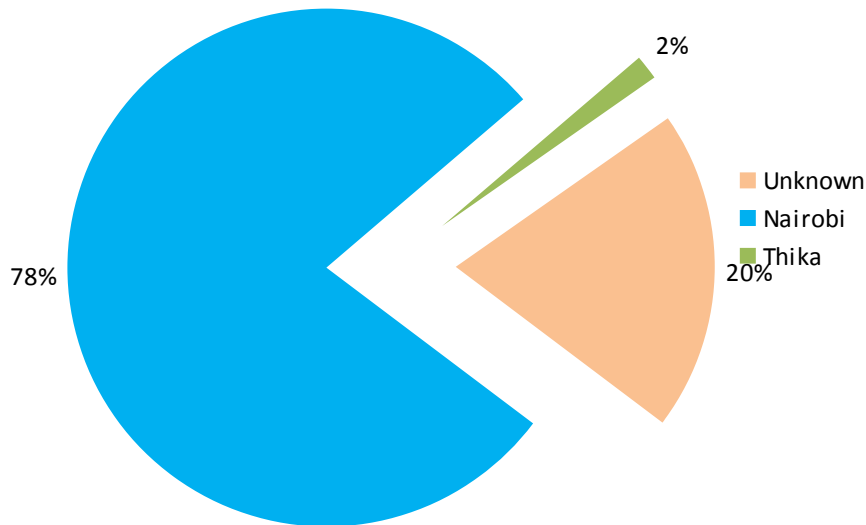


Figure 4.4: Distribution of residence of respondents. Source: Field data 2015.

Since most of the associates respondents were acting on behalf of the lead experts, we will put them together and call them EIA experts, for the sake of analysis.

4.2 Level of Participation in EIA Process

4.2.1 Introduction

One of the objectives of the study was to establish the level of public participation in the EIA process. Most of the respondents (93.7%) were of the opinion that public participation and consultation is necessary. Data from the case files were also used to study this objective. The data below was obtained from the questionnaires administered.

4.2.2 Level of Public Consultation and Participation in EIA process

4.2.2.1 Necessity of Public Participation

This is looked at because public participation and consultation will be integrated well in the EIA reports depending on how the respondents view the necessity and importance of public participation.

Generally, most of the respondents thought that public participation is necessary in the EIA process. However, of all the respondents, a third (6.3%) of the respondents thought that public participation was not necessary.

				Is public participation necessary in EIA process?		Total
				No	Yes	
Type of respondent	EIA experts	n	4	59		63
		%	6.3%	93.7%		100.0%

Table 4.4: Comparisons between characteristics of respondents and necessity of public participation. Source: Field Data 2015.

4.2.2.2 Importance of Public Participation.

When asked, 36.8% of the respondents were of the opinion that public consultation helps the authorities in decision making. Of all the respondents, another 36.8% of the respondents thought that public consultation gives the public an opportunity to air their opinions on projects, while 18.5% indicated that it affects the public directly as shown in table 6 below.

				Grouped opinion whether public consultation and participation is essential.				Total
				It affects the public directly	The public can air their opinions on the project	It's part of the law; EMCA 1999	Helps the authority in decision making	
Type of respondent	EIA experts	n	7	14	3	14		38
		%	18.5%	36.8%	7.9%	36.8%		100.0%

Table 4.5: Comparison between characteristics of respondents and importance of public consultation and participation. Source: Field data 2015.

Non-issuance of licenses.

This is highlighted in this objective because this shows one the results of not engaging the public in the EIA process or if the participation wasn't adequate.

Of all the respondents, 72% of the EIA experts had never had projects in which licenses were not issued due to public concerns while 27% of the EIA experts had ever had projects in which licenses were not issued due to public concerns. All of those who had had licenses revoked due to public concerns were those experts who have been practicing for a long time and have done many projects.

		EIA done that licenses were not issued		Total	
		No	Yes		
Type of respondent	Lead EIA experts	n	24	9	33
		%	72.7%	27.3%	100.0%

Table 4.6: Comparison between background factors and non-issuance of licenses. Source: Field data 2015.

4.2.2.3 Explanation on Non-Issuance of licenses

Change of land use was cited as the main reason why licenses were not issued. 44.5% of the respondents cited this reason. Not enough participation and objection from the public was cited to be the least reasons why licenses were not issued, both were represented by 11.1% of the respondents. 33.3% of the respondents said that pollution of the environment was also a reason that licenses were not issued.

			Grouped explanation as to why the project was not licensed				
			Pollution of the environment	Change of land use	Not enough public participation and consultation	Objection from the public	Total
Type of	Lead	N	3	4	1	1	9

respondent	EIA experts	%	33.3%	44.5%	11.1%	11.1%	100.0%
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Table 4.7: Comparison between background factors and explanation on non-issuance of licenses. Source: Field data 2015.

Among the case files, in all the cases at least there was a score for each factor. The level of participation is derived from the public meetings and the documentations inform of emails and letters from the public voicing their opinions about the project. There was more participation from the public on projects that directly affect them and that are in close proximity to them. For example; building of an office block in a residential area, or multi-storeyed building in an area where the zoning is only meant for single dwelling units. But for huge projects like the standard gauge railway, only the key stakeholders' views were documented. E.g. Kenya forest service, Kenya wildlife service. There were no views documented from the locals that the railway line was passing through their land. Although there are some domestic projects (i.e. projects done by private developers that affect the immediate population) that also had a lower score.

Below is a summary of the cases that were reviewed. Here, the researcher used both the case studies approach and document review. This study chose to concentrate on a few cases that were controversial as far as public participation and consultation is concerned - 18 case files were studied, and 13 have been highlighted. The researcher divided the cases into economic divisions that the researcher wished to review. These economic divisions or sectors include; 'Housing, Transport infrastructure, tourism (hotel, resorts), commercial buildings, Industrial and energy.

4.2.3 Housing

Nairobi has experienced one of the highest growth rates of any city in Africa. The high growth rate of Nairobi (currently 4.1%) puts tremendous pressure on housing requirements and related service infrastructure. From the many projects and cases that are conducted in Nairobi, only a few were selected. The targeted case files were files that were controversial on the part of public participation. 30 case files were targeted but only 18 files were obtained. Total score

Here are some of the case files that were reviewed;

4.2.3.1 Case file NEMA/EIA/SR/30

Redeemed Christian Church Apartments - Laving ton, Nairobi 2011.

Single housing units designed and built in 1940s to 1970s are being converted to apartment blocks at a rapid rate in the Kileleshwa– Lavington suburbs. Local communities are rarely

consulted during the planning and feasibility phase and usually receive information through legal public notices published in newspapers. This raises the ever present problem of unilateral zoning changes without adequate public participation.

In this case the Redeemed Gospel Church wanted to build 6 apartment blocks on 0.8Ha of land. The local resident association raised an objection to NEMA claiming that the new development would strain the existing service infrastructure (water, sewer and drainage) and increase traffic in the narrow single lane roads of Chalbi and Njambi.

NEMA proceeded to cancel the license in October 2012 and asked for public consultation between the parties. Another public hearing was set-up on 29th April 2013 specifically to address the high density of the proposed project. Despite these objections a license was issued on 28th May 2013.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
2	3	2	2	2	2	2

Table 4.8: Case 1 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.3.2 Case File NEMA/EIA/5/2/705

Presbyterian Foundation - Apartments

In February 2011, the Presbyterian Church wanted to construct 100 apartment units on 10.5acre West-land plot (LR. 1860/11/160). The plot was allocated to the church in 1991 under the community land act – in which government could alienate community land for public use on condition that it would be used for non-commercial church activities (The legality of this allocation has recently been questioned by various groups)

The public notice (for change of use and proposal to construct) was posted on March 2011 and immediately raised several objections from various quarters. Foremost was the local West lands Resident Association which was concerned about the possible destruction of the Wetland, altering of the river’s course, and massive tree cutting. These concerns were echoed by the Green Belt movement and KARA (Kenya Residents Association). WRMA (Wetlands and Rivers Management Authority) soon stepped into the fray and recommended that the area be designated as a wetland sighting a 2008 court order stopping all tree-felling in the wetland.

The title given to PCEA was subsequently revoked and the church advised to seek an alternative site. The church insisted on taking mitigation measures such as pegging – a suggestion that was soundly rejected by WRMA since the area is a catchment zone and no pegging boundary may be created.

In 2014, as a final step, the PCEA sought redress from the National Environmental Tribunal in where they found a favorable ruling. The legal back and forth did not stop there as WRMA, the area MP and the local environmental organizations sought to stop construction of the boundary wall through the Ministry of Environment. Finally the office of public prosecution questioned the legality of the initial 1991 land alienation from community land to private land. The license was not issued.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
2	3	2	2	3	2	2

Table 4.9: Case 2 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.3.3 Case File NEMA/EIA/5/2/588

Residential Estate Development – Muthaiga North

A housing development company, Karura Investments Ltd, proposed to build 183 housing units in about 8Hactares (20 acres) of land in Muthaiga North (a suburb of Nairobi). Notice to construct was duly posted on 25th of June 2010.

A local residential group, Muthaiga Residents Association, opposed the project stating that it would overload the public sewer line serving the area. They also noted that the small suburban road network could not handle the added traffic. Lastly they shone a spotlight on the environmental consequences of the development – which would damage the adjacent Karura River and the Karura ecosystem it serves.

NEMA advised the developer to seek professional advice from WRMA (the water management authority) on ways to protect against damage to the river and surrounding wetland, and also to respect existing zoning requirements on building density.

The final hearing to sort out these issues was held on 30th October 2010 (Of note is that the developer had changed environmental consultants prior to the hearing). WRMA did indeed

confirm that the area was a wetland and would liaise with NEMA to have the area gazette and therefore protected. The new environmental consultant, Earth Care Services (representing the client), asked NEMA to review the EIA given the new project plan. License was issued on 16th May 2013.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
2	2	2	2	2	2	2

Table 4.10: Case 3 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.3.4 Case File NEMA/EIA/5/2/1220

Multiple Dwelling Units – Deshun Properties

Deshun Properties, the developer, sought to construct multiple dwelling units (flats) in a single dwelling zone. The local resident’s association, Kunde Road Association, opposed the project citing zoning incompatibility. The taller high density flats would overwhelm existing services (sewage and water) and create traffic congestion. The residents’ association subsequently filed a petition in court seeking legal redress on this matter. The petition was dismissed by the court on grounds that it was based on assumptions and didn’t meet legal thresh-hold for a law-court.

On June 2015 NEMA received a project study report from the developer and recommended that they (the developer) address the infrastructural concerns (roads and sewerage) while also holding participatory meetings with concerned residents to sort out the aesthetic/design issues. Finally they had to get approval to cut indigenous trees and get permits for noise, vibration and dust pollution during demolition of existing structures.

The project is still waiting approval since the last public meeting held on August 2015.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost

2	2	3	2	3	2	2
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Table 4.11: Case 4 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.4 Transport

4.2.4.1 Case File NEMA/EIA/5/2/625

Nairobi Southern By-Pass Project

In 2010 Kenya National Highway Authority (KENHA) intended to build the 30km Southern By-pass highway. The road (A class-A highway) was part of a larger design to re-direct transit traffic on the Mombasa-Kisumu highway away from the city centre.

Part of the highway was to pass through the Nairobi National Park – a park managed by the Kenya Wildlife Service (KWS). KWS, Kenya Forest Service (KFS) and various environmental organizations raised concern about the impact of the road on the park’s ecosystem. The road – they claimed – would disrupt animal migratory corridors and involved massive cutting of indigenous trees and shrubs.

ON October 2010, KWS wrote to NEMA asking the environmental agency to intervene and pressure KENHA to seek alternative routes away from the park (an underground tunnel was even offered as an alternative). A license was never-the-less given on February 2011 and KENHA given the required way-leaves. Controversy surrounding the project did not end there, however, as the residents of Makadara and Langata complained to NEMA about excessive dust levels caused by the on-going earth works.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
1	1	2	2	2	2	2

Table 4.12: Case 5 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.4.2 Case File NEMA/EIA/5/2/900

Standard Gauge Railway – Kenya Railways Corporation

The Standard Gauge Railway project is the largest infrastructural project in East and Central Africa. The first phase sought to replace the colonial era line from Mombasa to Nairobi with a modern, wider line of international standards – boosting efficiency greatly.

KWS (Kenya Wildlife Service) and KFS (Kenya Forestry Service) were concerned that the impact analysis of the project on wildlife, forestry (especially Kibwezi forest) and other flora/fauna was too general. Furthermore, the exact route of the completed railway line was not clear.

National Museums of Kenya was also worried that important cultural sites might be destroyed and insisted that the Kenya Railways Corporation carry out an impact assessment of cultural sites. Later on a letter from the Ministry of Interior to NEMA queried the negative impact on local communities in Kibwezi especially that the railway would create a physical barrier between villages and market places, schools, water points and other socio-economic assets.

License for the SGR was issued on 12th February 2014.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
1	1	2	1	2	1	2

Table 4.13: Case 6 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.5 Tourism and Hotels

4.2.5.1 Case File NEMA/PR/5/2/9927

Proposed Hotel and Conference Centre - Gigiri

In November 2012 a notice was given intending to construct a hotel, retail outlets, parking bays, other commercial and office spaces.

ON January the following year *Gigiri Residents' Association* opposed the development due to the extreme commercial nature of the project. The developer basically amalgamated several residential plots and changed user on the basis of their combined size. The area is residential and designated (zoned) as a low density single dwelling unit area.

The residents' main concern was the added congestion due to increased pedestrian and vehicular traffic, and the inadequacy of the already stressed service infrastructure (roads, drainage, sewer and water) was also a source of worry. *City Council of Nairobi* also wrote to NEMA advising that the proposal not be accepted on environmental grounds due to the amalgamation of several plots. Nevertheless NEMA issued a license on May 16, 2013.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
2	2	3	2	2	2	2

Table 4.14: Case 7 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.5.2 Case File NEMA/EIA/PSR/698

Rehabilitation of Nairobi City Park

The *Agha Khan Trust for Culture* (AKTC) partnered with the Nairobi County Government to rehabilitate this iconic urban park. The park is 60hactares (150acres) in area.

Notice to proceed with the project was given on July 30, 2014 and the project was beset by hurdles from the beginning. First the park was a National Heritage site and therefore under the jurisdiction of the *National Museums of Kenya*. Second the boundaries between the park, the *World War I Memorial* and the *Murumbi Memorial*. The principal partner AKTC also wanted to use their lease on the (public) land to obtain loans from private financial institutions – a legal quagmire.

A letter from the *Kenya Forests Authority* to NEMA written in December 2013 stated that the proposal was an urban project, an intrusion green space, and basically was out of character with an urban park. Some of the structures proposed included a parking bay. The park's hawkers' associated also lodged a complaint with NEMA opposing the project and stating that they were not consulted.

The Solicitor General's office also opposed the project on the grounds that the composition of Nairobi City Park Service Company (the developer) didn't include various crucial stakeholders like park users and hawkers. . The license has not been issued yet.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
2	2	1	2	2	2	2

Table 4.15: Case 8 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.6 Commercial Buildings - Offices/Malls

4.2.6.1 Case File NEMA/EIA/5/2/789

Office Park and Hotel – Lower Kabete Rd

The developer wanted to construct an office park and hotel in this residential area. The residential area is a low density zone and so the commercial nature of building complex naturally drew many objections from concerned residents.

Local residents worried about the inadequacy of the existing service amenities and the extra strain this building will impose on the already struggling infrastructure. No notification of change of use was done in this case.

On January 2012 a high court order was received by NEMA stopping the development. A later hearing found that there were no objections to the project and a license granted on July 30, 2012.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
2	2	2	2	2	2	2

Table 4.16: Case 9 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.6.2 *Case File NEMA/EIA/5/2/661*

Office Block – Village Market

Harrow Investment, a private developer, wanted to erect an office block behind the Village Market in Gigiri, Nairobi in November 2010.

NEMA wrote to the developer asking for the riparian reserve (which was part of the site) pegged 30m from its edge by the Water Resources Management Authority. This was done and a sewerage plant designed to be outside the wetland/riparian area.

Runda Residents’ Association wrote to NEMA on January 2011 raising concerns about traffic congestion, deterioration of the road during construction and incompatible user change from residential to office building.

License was issued on June 2011 after the developer re-submitted improved plans for the sewerage plant as requested by the environmental authorities.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
2	2	2	2	2	2	2

Table 4.17: Case 10 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.6.3 *Case File NEMA/EIA/1165*

Commercial and Recreational Development - Kitisuru

In this case the developer wanted to create a commercial park with re-creational facilities – a mall in common parlance.

An email by a local resident objected to the project on grounds of inconsistency with existing zoning laws. The area is residential and the project would be very disruptive to local residents due to its commercial nature. Some of the proposed structures were up to 7-storeys high while all existing structures in the neighbourhood were less than 4-storeys in conformity to existing zoning laws. The Ministry of Lands and Ministry of Urban Housing wrote to NEMA asking the environmental agency not to license this project.

Several public hearings were held and cancelled. The final hearing was held on June 2015. No license has been issues to date.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
2	2	2	2	3	2	2

Table 4.18: Case 11 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.6.4 Case File NEMA/EIA/1127

Low Density – Mixed Use (Runda)

Mixed-use buildings usually comprise of residential and commercial units in the same block. This development was no different and proposed to construct a 200 bed residential hotel (sometimes known as fully serviced apartments) and an office-block.

Runda Residents Association opposed the project because it was out of character with the neighbourhood and would cause dust and noise pollution during construction. The appeal was lodged at the National Environmental Tribunal on April 2015. The Runda residents stated (in this forum) that no meaningful public discussion on the project had taken place prior to this.

License was however issued.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
1	1	2	2	0	1	2

Table 4.19: Case 12 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015.

4.2.7 Industrial and Energy

4.2.7.1 Sanitary Land-Fill in Ruai

Sanitary Land-Fill – Ruai

City Council of Nairobi gave a Notice in 2011 for intention to create a land-fill in Ruai – a peri-urban section of Nairobi metropolis. A land-fill is simply a large excavated hole in the ground where residential waste is dumped.

The project was immediately opposed by the Kenya Civil Aviation Authority (the managing authority of Kenya's airports) and the JKIA (Jomo Kenyatta Airport). Airport authorities feared that decomposing organic matter would attract birds that would pose a risk to aircraft. Ruai is directly under the landing and take-off flight path of the JKIA airport.

Ruai residents through their association objected to the project on health and pollution grounds in a letter written to NEMA. The environmental body (NEMA) asked City Council to seek alternative solutions to the open land-fill.

The parties finally settled on the Fukuoka method – a semi-aerobic land-fill system in which waste is covered by earth in layers meaning the top layer is always covered. Air-supply necessary for aerobic decomposition is channelled through underground networks of ventilation pipes. The benefits of this method are that toxic gases are not released directly to the atmosphere. Furthermore this solves the bird problem because the system is closed.

Notification/ mobilization	Identification of objectives/ Goals of meeting	Identification of relevant stakeholders and community	Techniques/ process of conducting meeting	Inputs and efforts of stakeholders	Evaluation of the success of public hearing	Time and cost
2	3	3	2	3	2	2

Table 4.20: Case 13 Scores using variables adapted from the Smith scheme 1984. Source: Field data 2015

4.2.8 Hypothesis testing

These were the null and alternative hypothesis;

- i. ***H_o*: Greater public participation does not lead to better representation in EIA reports.**

H_i : Greater public participation in environmental review process leads to better representation in EIA reports.

Referring to the case files, indeed there is better representation of public participation in the EIA reports when there was more public participation than when there was not. Stakeholders sending emails and writing letters to the proponent in regards to the projects were well documented in the case files and minutes of the meetings in the EIA reports.

Here is an analysis of the case files using the variables adopted from the Smith Scheme of Public participation -Smith (1984). This model allows us to analyse level of participation and consultation using a set of variables. Each variable has the highest score of 3 and the lowest score of 0. Some variables have been combined for the sake of analysis. These variables analyse public participation and consultations based on public meetings.

	Notification/ mobilization, Identification of objectives, relevant stakeholders and community in the meeting.	Process of conducting meeting and Inputs stakeholders.	Evaluation of the success of public hearing, Time and cost.	Total
Case 1	7	4	4	15
Case 2	7	5	4	16
Case 3	6	4	4	14
Case 4	7	5	4	16
Case 5	4	4	4	12
Case 6	4	3	3	10
Case 7	7	4	4	15
Case 8	5	4	4	13
Case 9	6	4	4	14
Case 10	6	4	4	14
Case 11	6	5	4	15

Case 12	4	2	3	9
Case 13	8	5	4	17
Total	77	53	50	180
Mean	5.923	4.077	3.846	13.846

Table 4.21: Scores, total scores and mean scores of the case files. Source: Field data 2015.

In the first column three variables were combined, in the second and third columns two variables were combined for each.

For the variables in the first column, the highest score is 9, for the second and third columns, the variables have the highest scores of 6 for each of them. Therefore the highest total score is 21.

In the first column, Notification/ mobilization, Identification of objectives, relevant stakeholders and community in the meeting, these are 3 variables merged into one. The mean score in the set variables in column 1 is 5.923 out of 9. This is slightly above average. In column 2 and 3 respectively, the average scores were 4.077 and 3.846 out of a score of 6. These scores are also above average.

Chi square test is also applied for further analysis.

	Observed Frequencies	Expected Frequencies	(O-E)	(O-E) ²	(O-E) ² /E
Case 1	15	13.846	1.154	1.332	0.096
Case 2	16	13.846	2.154	4.640	0.335
Case 3	14	13.846	0.154	0.024	0.002
Case 4	16	13.846	2.154	4.640	0.335
Case 5	12	13.846	-1.846	3.408	0.246
Case 6	10	13.846	-3.846	14.792	1.011
Case 7	15	13.846	1.154	1.332	0.096
Case 8	13	13.846	0.846	0.716	0.052
Case 9	14	13.846	0.154	0.024	0.002
Case 10	14	13.846	0.154	0.024	0.002
Case 11	15	13.846	1.154	1.332	0.096
Case 12	9	13.846	-4.846	23.484	1.696
Case 13	17	13.846	3.154	9.948	0.718
Total	180				4.687

Table 4.22: Chi square table of the case files scores. Source: Field data 2015

Note; Expected frequencies = $180/13 = 13.846$

D.f = 12

$X^2 = 4.687$

Significant level = 0.05

The approximated P value from the table is 0.98

Using an online Chi square calculator, a P value was obtained to be (right tail) 0.981453.

Rounded off to = 0.98

=98%

Probability (P) value is more than the calculated value; we fail to reject the null hypothesis that states that; ***Greater public participation does not lead to better representation in EIA reports.***

The public could be represented well in the meetings and their views aired but this doesn't mean that that would reflect in the EIA reports and later on decision making in regards to the project.

4.3 Variations in Public Participation in Various Sectors

4.3.1 Introduction

The purpose of this objective was to find out if there are variations in public participation and consultation depending on the type of project. This project sought to find out if there were projects that attracted more public participation and consultations than others and if these variations were based on which economic sector the project was in. The data was derived both from the questionnaires and the case files.

4.3.2 Variations of Public Participation levels in various Economic Sectors

Most EIA experts (50%) have worked in the commercial and residential building projects. This is because Nairobi's projects are mostly comprised of commercial and residential buildings. This is surprisingly followed by agricultural projects (18.7%), then the energy sector as shown in table below.

			Grouped economic sectors					Total
			Agriculture	Energy	Education	Transport and communication	Commercial and residential buildings	
Type of respond	EIA experts	N	6	4	3	3	16	32

ent		%	18.7%	12.5%	9.4%	9.4%	50%	100.0%
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Table 4.23: Comparison of PPC in the different sectors of the economy. Source: Field data 2015.

4.3.3 Differences experienced in the Economic Sectors in which they Work

38.5% of the respondents indicated that there were different levels of participation in different economic sectors. This was due to the different interests of the public in those areas. Some respondents (34.6% indicated that different economic sectors have different issues or negative impacts, so depending on what impact will affect the public most, that is what will cause more public participation or public outcry. The respondents indicated that cost is never a hindrance to public participation. All the respondents agreed that there are indeed differences in participation in the different economic sectors as shown below.

		Grouped differences experienced in the different economic sectors						
Type of respondent	EIA experts	n	Difference in baseline information	Cost differences	Different sectors have different issues and impacts	Difference in level of participation	No major differences	Total
			7	0	9	10	0	26
		%	26.9%	0%	34.6%	38.5%	0%	100.0%

Table 4.24: Comparison between the background of respondents and differences experienced in the economic sectors in which they work. Source: Field data 2015

4.3.4 Analysis

There were some variations in public participation in the different economic sectors. There is more public opposition in commercial building projects in residential areas - for example, Proposed Hotel and Conference Centre in Gigiri, Office Park and Hotel in Lower Kabete Road,

Office Block in Village Market. This was because the public or neighbourhood in those places were organised in residential associations and therefore they were stronger that way. Out of the three larger projects funded by the county and the national governments, two had a relatively high score of public participation. The Nairobi southern by-pass had a more or less high public activism because of its route since it was due to pass close by Nairobi national park. This although doesn't relate to a high score as there was no documentation inviting stakeholders to a public meeting and no minutes were available as evidence that a meeting occurred. Many NGOs dealing with conservation voiced their opinions on this including Madaraka and Langata residents associations who were concern about air and noise pollution. The Ruai land fill had the highest score on public participation because of the nature of the project and how it was going to affect the residents of Ruai even though it was being constructed for the residents of Nairobi.

The scores in the table below were obtained by getting the sum of the scores of the cases in each sector the getting their averages.

Economic sector	Score
Housing	15
Commercial buildings and malls	13
Transport	11
Energy	17

Table 4.25: Averaged scores of case files divided into economic sectors. Source: Field data 2015.

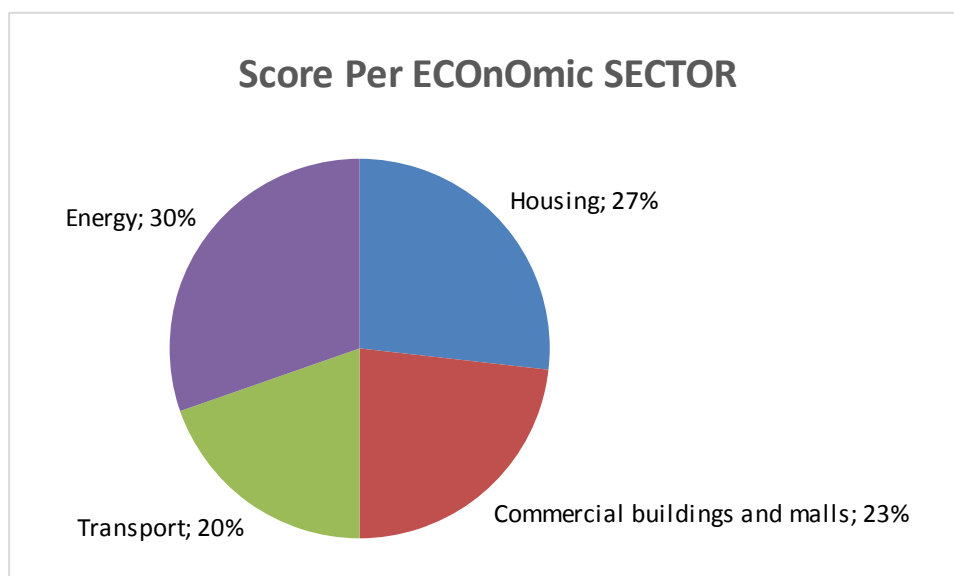


Figure 4.5: Scores per economic sector. Source: Field data 2015

From the graph above, there is more public participation from the energy sector than the others. This was followed by housing and commercial buildings. Transport had the least average score of public participation.

4.3.5 Hypothesis testing

These were the null and alternative hypotheses.

H₀ Public participation in the EIA process does not vary between the different economic sectors.

H₁ Public participation in the EIA process varies significantly from sector to sector.

Data from the case files were used because it was elaborate and Chi square could be used well with the frequencies. The frequencies were not averaged so that chi square again could be used.

	Observed Frequencies	Expected Frequencies	(O-E)	(O-E) ²	(O-E) ² /E
Housing	15	14	1	1	0.0714
Commercial Buildings	13	14	-1	1	0.0714
Transport	11	14	-3	9	0.6429
Energy	17	14	3	9	0.6429
Total	56				1.4286

Table 4.26: Chi square table of the case files score divided into economic sectors. Source: Field data 2015.

Note: expected frequencies = $56/4 = 14$

Chi square (X^2) statistic = 1.4286

Df = 3

Significant level = 0.05

The approximated P value from the table is 0.60

Using an on-line Chi square calculator, a P value was obtained to be (right tail) 0.698845.

Rounded off to = 0.70.

=70%

Probability (P) value is more than the calculated value; we fail to reject the null hypothesis that states that; ***Public participation in the EIA process does not vary between the different economic sectors.***

This means that public participation in the EIA process does not vary significantly from sector to sector.

4.4 ***Barriers to Public Participation and Consultation***

4.4.1 **Introduction**

This objective was easily highlighted from the respondents. Information on this objective was derived entirely from the questionnaires.

4.4.2 **Barriers to Public Participation**

Communication barriers was the most cited barrier across board with 51.4% of the experts citing it. Unwillingness to participate followed with 34.3% of the respondents citing it while the least cited barrier was political influence as shown in table 7 below.

		Grouped barriers experienced in public engagement						Total
			Bribe ry	Communicati on barriers	Political influence	Low turnout in meetings	Unwillin gness	
Type of respond ent	EIA experts	N	2	18	1	2	12	35
		%	5.7%	51.4%	2.9%	5.7%	34.3%	100.0 %

Table 4.27: Comparison of background factors and barriers to public participation. Source: Field data 2015

4.4.3 **Reducing Barriers to Public Participation**

		Grouped coping strategies employed when faced with						Total
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		the barriers					
			Use a translator	change tactic/mode	Create awareness	Engage willing respondents	
Type of respondent	EIA experts	N	13	5	11	5	34
		%	38.2%	14.7%	32.4%	14.7%	100.0%

Table 4.28: Comparison of background factors and coping strategies to barriers to public participation. Source: Field data 2015.

The most mentioned solution across board was the use of a translator 38.2% of the respondents cited it. The least cited coping strategy was change of tactic or mode as shown in table 8 above.

4.4.4 Hypothesis testing

These were the null and alternative hypothesis;

H_o : There is no significant barrier to public participation in the EIA process.

H_i : There are significant barriers to public participation in the EIA process.

The barriers were further grouped into 3 for chi square test to be used, to test the hypothesis.

Grouped responses	Frequencies
Communication barrier	18
Unwillingness	12
Political influence, bribery, Low turnout	5
Total	35

Table 4.29: Grouped responses of barriers to public participation. Source: Field data 2015

	Observed Frequencies	Expected Frequencies	(O-E)	(O-E) ²	(O-E) ² /E
Communication barrier	18	11.67	6.33	40.0689	3.4335
Unwillingness	12	11.67	0.33	0.1089	0.0093
Political influence, bribery, Low turnout	5	11.67	-6.67	44.4889	3.8122
Total	35				7.225

Table 4.30: Chi square table of grouped responses to barriers of public participation and consultation. Source: Field data 2015.

Note: expected frequencies = $35/3 = 11.67$

Chi square (X^2) statistic = 7.225

Df = 2

Significant level = 0.05

The approximated P value from the table is 0.025

Using an on-line Chi square calculator, a P value was obtained to be (right tail) 0.02698430.

Rounded off to = 0.027.

=2.7%

Probability (P) value is less than the calculated value; the null hypothesis is rejected that states that; *there is no significant barrier to public participation and consultation in the EIA process.*

This means that there are significant barriers to public participation and consultation in the EIA process.

4.5 Other background factors of the respondents from the interviews

4.5.1 Practice of conducting EIA in the last five years

52.3% of the respondents had at least been conducting EIAs for the last five years. Only 3.1% of the respondents indicated not having conducted any assessments over the last 5 years. While 44.6% did not indicate whether or not they have conducted environmental impact assessments over the last 5 years as indicated in table 2 below:

			Conducted EIA for the last 5 years			Total
			No	Yes	Not indicated	
Type of respondent	EIA experts	N	2	34	29	65
		%	3.1%	52.3%	44.6%	100.0%

Table 4.31: Experts who have actively conducted EIAs in the last five years. Source: Field data 2015.

4.5.2 Comparison between Number of EIA projects conducted and Background factors

46.9% of the respondents have done between 0-20 projects in the last five years. Few of the respondents have done more than 5 projects over the last 5 years. We are looking at the last 5 years because, the new constitution was promulgated in 2010 and it encouraged a lot of public participation and consultation across all areas. This can be seen in the table below.

		Number of EIA projects conducted in the last 5 years				Total
		0-20 EIA projects	21-50 EIA projects	More than 50 EIA projects		
Type of respondent	EIA experts	n	30	24	10	64
		%	46.9%	37.5%	15.6%	100.0%

Table 4.32: Comparison between Number of EIA projects conducted and Background factors.

Source: Field data 2015.

5 CHAPTER 5 Conclusions and Recommendations

5.1 *Conclusions – and findings from case-files*

In relation to objective 1 (level of public participation and consultation) many of the projects involved activism as opposed to any meaningful participation. Notices were given in major newspapers (as per legal requirement) but local residents were not actively notified. In the Runda mixed-use project, for example, the local residents' association complained that no meaningful public hearing had taken place. In several of the case studies local residents complained to the environmental authority about zoning law conflict (between their own homes and the proposed development). NEMA however, still issued a license despite these concerns. It is important to explore whether the regulator, being a major revenue collector has a conflict of interest in such a scenario. Is there, probably, a strong incentive to charge for and issue licences without due diligence?

Objective 2 aimed at finding variations in public participation in various economic sectors. Of the sectors studied, energy showed more public participation than other sectors. This can be explained by the fact that energy projects are fairly large and affect more people.

Barriers to public participation make up Objective 3. One of the major hurdles to meaningful participation is the use of national print media to communicate a local issue – notices placed in major newspapers often go un-noticed until the developer demolishes existing structures and fences the site. It is interesting to note that the “Nation” and “Standard” newspapers were once quite localised newspapers of a fairly small post-colonial town (Nairobi) and these notification methods may have sufficed then. Residents are also at a disadvantage in these public hearings because they do not have professional representation. In the residential development project in Muthaiga, for example, the developer had an environmental consultant representing him while the local residents did not – therefore putting them at a professional disadvantage during technical hearings.

The level of public participation does influence decision making but it appears this relationship is much weaker than one would imagine. Environmental agencies have become both regulators and major revenue collectors and sometimes this may bring about a moral hazard in denial of license.

Although many experts acknowledged the benefit of interviews, they would rather use questionnaires because information can be retrieved easily – and one would suspect its favour is that it limits the articulation of dissenting voices during public hearings. A combination of the two should therefore be required so as to obtain the best out of the information seeking process.

Language barriers (mainly the low use of Swahili as a technical language) and use of technical format of were cited as major barriers to public participation and consultation in regards to **objective 3**.

5.2 Recommendations

Legal notice 101 merely mentions public participation and consultation. It remains silent on the penalty for not failing to do so. NEMA should also actively use social media such as “Facebook” and “WhatsApp”. Statistics show that more than 4 million Kenyans use social media regularly. Larger projects should have more time to run their notices both in the Kenyan gazette, the newspapers, and other media outlets to allow the public enough time to interact with the projects report. NEMA and the proponents should also be required to use Swahili especially in the public participation forums to increase the level of understanding and participation.

Policy restructuring of the roles and duties of the various environmental bodies will reduce excessive bureaucracy and make it easier for the public views to be included, avoid overlapping of duties and enhance collaboration. There is a need to review the revenue collecting role that these regulators play as this may directly conflict with their principle role as regulators.

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7 APPENDIX

7.1 Questionnaire to Lead and Associate EIA Experts

Public Participation and Consultation in the EIA process in the County of Nairobi. The purpose of this research is to find out the level to which the public is engaged in the EIA process and whether their opinion are captured in the EIA project and study reports.

Thank you for being part of this research, your honest response will be highly appreciated. Please feel free to turn overleaf if the spaces provided are not enough.

Respondent Name		Lead EIA		Associate	
Telephone No.		Email address			
Year registered		Registration No.			
Gender	Male		Female		Residence

1. Have you conducted any EIA in the last 5 years? Yes..... No.....

a. How many EIA projects have you conducted in the last 5 years?

0-20	
21-50	
50 or more.	

b. Do you think it's important to consult the public on EIA projects? Yes.....No.....

If yes, what is your opinion?

If No, what is your opinion?

2. What methods do you use in conducting EIA public consultation?

No.	Method used in conducting EIA public consultation	Is it effective (Yes or No)	Explain your answer of effectiveness
1.			
2.			
3.			
4.			
5.			

3. How do you measure effectiveness of the public consultation and participation methods you have listed above

No	Methods used in public consultation (as above)	Measure of effectiveness
1)		
2)		
3)		
4)		
5)		

4. How do you use the methods listed above to enhance adequate public participation and consultation?

5. Do you think the public find their participation necessary in EIA process? Yes.....
No.....

6. What kind of people from whom you generally get responses from?

Residential owners	
Tenants	
Passers by	
Anyone available at that moment	
Others(specify	

7. How do you ensure all stakeholders are engaged in the public consultation and participation process?

- a. ..
- b. ..
- c. ..
- d. ..

8. Which sectors have you conducted EIA in the last 5 years

- a. ...
- b. ,..
- c. ..
- d. ..

9. What are the differences experienced in conducting EIA in the difference sectors as listed above

- a. ..
- b. .
- c. ..
- d. ..

10. What barriers do you encounter when engaging the public?

- a. .
- b. ..
- c. ..
- d. ..
- e. .

11. What do you do when faced with these barriers as listed above?

- a. ,
- b. .
- c. .
- d. .
- e. .

12. Are there any EIAs you have done that licenses were not issued due to the concerns raised by the public? Yes.....& how manyNo.....

13. If Yes, Explain why the above said projects were not licensed / what were the concerns?

14. Any other comment on public participation.