

**FACTORS INFLUENCING PUBLIC PARTICIPATION IN  
URBAN PLANNING: A CASE OF NAIROBI CENTRAL WARD**

**BY  
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## DECLARATION

This research project report is my original work and has not been submitted for the award of a degree or certification in any other institution.

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## **DEDICATION**

I dedicate this research project report to my mother Rosemary Kanini Mburia. In her words, “Rome was not built in a day.”

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## TABLE OF CONTENT

DECLARATION.....	ii
DEDICATION .....	iii
ACKNOWLEDGEMENT .....	iv
TABLE OF CONTENT .....	v
LIST OF FIGURES .....	viii
LIST OF TABLES .....	ix
LIST OF ACRONYMS AND ABBREVIATION .....	x
ABSTRACT.....	xi
CHAPTER ONE: INTRODUCTION.....	12
1.1.    Background to the Study.....	12
1.2.    Statement of the Problem.....	13
1.3.    Purpose of the Study .....	14
1.4.    Objectives of the Study .....	14
1.5.    Research Questions .....	14
1.6.    Research Hypotheses .....	14
1.7.    Significance of the Study .....	14
1.8.    Delimitation of the Study.....	15
1.9.    Limitations of the Study.....	15
1.10.   Assumptions of the Study .....	15
1.11.   Definitions of Significant Terms in the Study .....	15
1.12.   Organization of the Study .....	16
CHAPTER TWO: LITERATURE REVIEW .....	17
2.1.    Introduction.....	17
2.2.    Public participation in urban planning projects .....	17
2.3.    Public awareness and Participation in urban planning projects.....	21
2.4.    Degree of accessibility and Participation in urban planning projects.....	23

2.5.	Financial Situation and Participation in urban planning projects .....	24
2.6.	Theoretical Framework .....	26
2.7.	Conceptual Framework .....	26
2.8.	Knowledge Gap .....	27
2.9.	Summary of Literature Review .....	28
CHAPTER THREE: RESEARCH METHODOLOGY .....		29
3.1.	Introduction .....	29
3.2.	Research Design .....	29
3.3.	Target Population .....	29
3.4.	Sample Size and Sampling Procedure .....	29
3.5.	Data Collection Instruments .....	30
3.6.	Validity of the Instrument .....	30
3.7.	Reliability of the Instruments .....	30
3.8.	Data Collection Procedure .....	30
3.9.	Data Analysis Techniques .....	30
3.10.	Operational Definition of Variables .....	31
3.11.	Ethical Considerations .....	31
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION .....		32
4.1.	Introduction .....	32
4.2.	Questionnaire return rate .....	32
4.3.	Characteristics of the study respondents .....	32
4.4.	Public awareness and public participation in urban planning projects .....	33
4.5.	Degree of accessibility and public participation in urban planning .....	37
4.6.	Financial Situation and public participation in urban planning projects .....	40
4.7.	Combined influence of the independent variables on the dependent .....	42
CHAPTER FIVE: SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS .....		44

5.1.	Introduction.....	44
5.2.	Summary of findings.....	44
5.3.	Discussion of the findings.....	45
5.4.	Conclusion .....	48
5.5.	Recommendations.....	49
5.6.	Suggestions for further research .....	51
	REFERENCES .....	52
	APPENDICES .....	60
	Appendix 1: Letter of Transmittal.....	60
	Appendix 2: Research Authorization .....	61
	Appendix 3: Factors Influencing Public Participation in Urban Planning: A Case of Nairobi Central Ward – Questionnaire.....	62
	Appendix 4 (a): Participants who attended meetings held in Sub-counties when developing the NIUPLAN master plan.....	65
	Appendix 4 (b): Participants who attended meetings meant for selected groups when developing the NIUPLAN master plan .....	66
	Appendix 5: Summary of Public Advertisement by the NCC and JICA when developing the NIUPLAN master plan.....	67

## LIST OF FIGURES

Fig 1 Conceptual framework .....	27
Fig 2 Map of Starehe Constituency (IEBC, 2013).....	68



## LIST OF TABLES

Table 3.1 Operational definition of variables.....	31
Table 4.1 Questionnaire return rate.....	32
Table 4.2 Employment status of respondents aggregated by age and sub-location.....	33
Table 4.3: Frequency accessing information from various sources and participation in urban planning projects.....	34
Table 4.4: Mean, Variance and SD of responses on public awareness .....	35
Table 4.5 Correlation of indicators of public awareness and participation in urban planning projects.....	36
Table 4.6 How frequently the respondents said they experienced certain aspects of accessibility when accessing places in Nairobi city .....	37
Table 4.7 Mean, Variance and SD of responses on the degree of accessibility .....	39
Table 4.8 Correlation of indicators for degree of accessibility and public participation in urban planning projects.....	40
Table 4.9 Financial situation of research participants.....	40
Table 4.10 Mean, Variance and SD of respondents financial situation.....	41
Table 4.11 Correlation of indicators for financial situation and public participation in urban planning projects.....	42

## LIST OF ACRONYMS AND ABBREVIATION

<b>AUI</b>	Urban Authority Initiative
<b>CBD</b>	Central Business District
<b>CBO</b>	Community-Based Organization
<b>Corr.</b>	Correlation
<b>EI</b>	Experts Initiative
<b>HSG</b>	Human Solidarity Group
<b>IAP2</b>	International Association for Public Participation
<b>ICT</b>	Information and Communication Technology
<b>JICA</b>	Japan International Cooperation Agency
<b>KRA</b>	Kenya Revenue Authority
<b>NC</b>	Nairobi City
<b>NCC</b>	Nairobi City County
<b>NCW</b>	Nairobi Central Ward
<b>NGO</b>	Non-Governmental Organization
<b>NIUPLAN</b>	Nairobi Integrated Urban Development Master Plan
<b>OTT</b>	over the top
<b>PAYE</b>	Pay as You Earn
<b>PI</b>	Public Initiative
<b>SD</b>	Standard Deviation
<b>SEA</b>	Specific Email Address
<b>SHMs</b>	Stakeholder Meetings
<b>TU</b>	Trade Union
<b>TV</b>	Television
<b>UN</b>	United Nations
<b>UN DESA</b>	United Nations, Department of Economic and Social Affairs
<b>UNDP</b>	United Nations Development Programme
<b>UNFPA</b>	United Nations Population Fund
<b>UN-Habitat</b>	United Nations Human Settlements Programme
<b>UNCHS</b>	United Nations Centre for Human Settlements
<b>Var</b>	Variance

## ABSTRACT

The purpose of the study was to establish how certain factors (public awareness, degree of accessibility, and one's financial situation) influence public participation in urban planning projects. These factors were: The study was conducted in Nairobi Central Ward. Nairobi was preferred because it recently adopted a new master plan: Nairobi Integrated Urban Development Master Plan (NIUPLAN) which was said to have been developed through a consultative process. The objectives of the study were to establish how: public awareness, degree of accessibility, and financial situation influenced public participation in urban planning projects. The study is significant in the sense that by exploring some of the factors that might influence public participation in urban planning, urban planners can come up with remedial approaches which would ensure that their future planning activities are more inclusive, pro-poor and hence sustainable. The study used cross-sectional survey research design. A sample size of 375 participants was selected from a population of 13,325 inhabitants within Nairobi Central Ward. This sample was divided equally into three regional clusters: City Square; Muthurwa; and Nairobi Central sub-locations found in Nairobi Central Ward. Up to 333 participants returned the 375 self-administered questionnaires making up for a response rate of 88.80%. Analyses of test-retest reliability gave an index of 0.79. A correlational analysis performed on the collected data established that there was a very weak relationship between public awareness and participation in urban planning projects but there was no relationship between degree of accessibility and public participation in urban planning projects. It was also established that there exists a weak positive correlation between a person's financial situation (income, expenditure and savings) and their participation in urban planning projects.

# CHAPTER ONE

## INTRODUCTION

### 1.1. Background to the Study

Urbanization leads to the concentration of people in dense human settlements called urban centers (US EPA, 2012). According to a 2014 report by the United Nations, Department of Economic and Social Affairs (UN DESA), settlements are often classified as urban based on “a combination of characteristics, such as: a minimum population threshold; population density; proportion employed in non-agricultural sectors; the presence of infrastructure such as paved roads, electricity, piped water or sewers; and the presence of education or health services” (UN DESA, 2014, p. 4).

The United Nations Centre for Human Settlements (UNCHS) established that at least 3 billion people in the world lived in towns and cities as of the year 2000. The world population then was projected to grow at a daily average rate of 211,000 with about 180,000 people being added to the urban population every day (UNCHS, 2001). Of all regions, Africa has the fastest rate of urbanization today and when combined with Asia, these two will have the highest numbers of urban dwellers by the year 2030. The sad reality to these explosive population growth rates is poverty with 750 million of the one billion poor people in the world live in urban centers today and a majority of the future urban population is expected to be poor (UNCHS, 2001).

It is now estimated that 62% of the urban population in sub-Saharan Africa resides in informal settlements (Arimah, 2009). These slum dwellers experience some of the worst environmental and living conditions known to man and they tend to be excluded from participating in the economic, social, political and cultural spheres of the city (Arimah, 2009). Sadly, the poor and other marginalized communities are ignored during urban planning processes (UNFPA, 2007). The United Nations also notes that even though urbanization is an indicator of development, developing countries are struggling with their rapid rates of urbanization. These struggles are far from over considering that 60% of the projected 8.2 billion people in the world are expected to reside in urban areas come the year 2030: 742 million of these 8.2 billion people are expected to reside in African cities alone and this is more than two and a half times the urban population in the year 2000 (UNDP, 2006). Over 2.2 billion more people are expected to be added to the urban populations in Asia and Africa

between 2014 and 2050 as urbanization in Africa is expected to grow by 56% in the same period (UNPD, 2006).

Urbanization is integrally connected to economic development, social development and environmental protection: the three pillars of sustainable development. This reality led the UN to conclude that unplanned urbanization, like rapid human population growth, is a serious threat to sustainable development (UN DESA, 2014). Therefore, all urban settlements need proper planning.

However, sustainable urban planning for future urban growth and development requires the explicit consideration of the needs of the poor, gender analysis, attention to youth and the needs of the elderly will become ever more important as population structures continue to change with time (UNFPA, 2007).

## **1.2. Statement of the Problem**

Experience from various urban planning projects has shown that very few members of the public wish to participate in urban planning projects (Kjaersdam, 1988). This is in spite of the many advantages associated with public participation in planning. For example, the greater the number of public participants: the more likely it is that the plan will reflect their needs and concerns accurately, the higher the chances that the plan will be implemented, and the harder it becomes for public officials to ignore the plan (Al-Kodmany, *Public Participation: Technology and Democracy*, 2000).

Take the example of the recently launched NIUPLAN master plan. NIUPLAN is said to be a product of rigorous consultations between multiple stakeholders including members of the general public (JICA, 2014). However, based on the poor attendance records obtained and summarized in Appendix 4 (a) and (b), it becomes apparent that, despite all the invitations sent out by the NCC as outlined in Appendix 5, very few members of the public participated in its formulation process.

But why do few people participate in urban planning projects? Could it be that the public is often unaware of such planning activities? Are they informed but choose not to participate because they have problems accessing meeting venues? Or does one's financial status influence his/her participation in urban planning projects?

### **1.3. Purpose of the Study**

The study sought to establish some of the factors influencing public participation in urban planning: a case of Nairobi Central Ward.

### **1.4. Objectives of the Study**

The objectives of the study were to:

1. Find out the extent to which public awareness influences participation in urban planning projects.
2. Establish the degree of accessibility within Nairobi city and how this influences public participation in urban planning projects.
3. Ascertain the extent to which people's financial situations influence their participation in urban planning projects.

### **1.5. Research Questions**

Questions that helped guide the study were:

1. How does public awareness influence participation in urban planning projects?
2. To what extent does the degree of accessibility influence public participation in urban planning projects?
3. How does financial situation influence public participation in urban planning?

### **1.6. Research Hypotheses**

The study sought to test whether the following hypotheses were true or not:

- H<sub>01</sub> There is no relationship between public awareness and participation in urban planning projects.
- H<sub>02</sub> There is no relationship between the degree of accessibility and public participation in urban planning projects.
- H<sub>03</sub> There is no relationship between people's financial situation and their participation in urban planning projects.

### **1.7. Significance of the Study**

This study is important to urban development planners. A key principle to sustainable urban development is implementing urban plans that are sensitive to the needs of the people. By exploring some of the factors that might influence public participation in urban planning

projects, urban planners can come up with remedial approaches which would ensure that their future planning activities are more inclusive, pro-poor and hence sustainable.

### **1.8. Delimitation of the Study**

The study focused on public awareness, degree of accessibility, and financial situation as the only factors influencing public participation in urban planning projects. The research was carried out in Nairobi Central Ward as shown in Figure 2 under the Appendix section.

### **1.9. Limitations of the Study**

The limitations of the study included: the high cost of undertaking the study and the short time frame within which the study was to be completed. To overcome these limitations, the research was conducted within Nairobi Central Ward (NCW) and with the selected sample being divided equally into three clusters: City Square; Muthurwa; and Nairobi Central sub-locations found in NCW.

### **1.10. Assumptions of the Study**

The study assumed that research respondents would be available and that they would readily respond to the research questions. The study also assumed that all secondary data used was accurate and reliable.

### **1.11. Definitions of Significant Terms in the Study**

<b>Degree of accessibility</b>	The ease with which people can get to or from one place to another within Nairobi City and its immediate environs
<b>Factors influencing public participation</b>	These include: public awareness, degree of accessibility, and financial situation
<b>Financial situation</b>	One's income, expenditure and accrued savings
<b>Public awareness</b>	Likelihood of people to be informed on what is happening in Nairobi city from the internet and public advertisements (on TV, radio, periodicals, and public notice boards) in a day.
<b>Public participation</b>	The number of meetings on urban planning attended by respondents
<b>Urban planning projects</b>	Engaging members of the general public in the process of drafting urban designs and development plans

### **1.12. Organization of the Study**

This study is organized into five chapters: Introduction; Literature Review; Methodology of the Study; Data Analysis, Presentation and Interpretation; and Summary of Findings, Discussions, Conclusions and Recommendations. Chapter one discusses the background to the study and the problem for the research study. An overview of the purpose, objectives, research questions and hypotheses is provided together with the scope, limitations and assumptions to be made in the study. The Literature Review in Chapter two describes public participation in urban planning projects, public awareness and participation in urban planning projects, ease of access and participation in urban planning projects, and financial situation and participation in urban planning projects formed be the basis of the study. The knowledge gap emerging from the reviewed literature, theoretical, and conceptual framework for the study are provided at the end of Chapter two. Chapter three presents the methodological approach to be used for the study by presenting the: research design; target population; sample size and sampling procedure; data collection instruments; validity of the instruments; reliability of the instruments; data collection procedure; data analysis techniques; operational definition of variables; and ethical considerations. The data analysis; interpretation; and presentation techniques are described in Chapter four. Chapter five (summary of findings; discussions; conclusions; and recommendations) form the last part of the study.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1. Introduction**

The literature to be reviewed is divided into the following parts: public awareness and urban planning projects; degree of accessibility within the city and urban planning projects, financial situation and urban planning projects, theoretical framework, conceptual framework, and a summary of reviewed literature.

#### **2.2. Public participation in urban planning projects**

Cities have been in existence for over 5,000 years but it wasn't until the Industrial Revolution that people began moving into urban centers at exponential rates. Most urbanization theories tend to link urbanization to industrialization but this notion may not hold true when it comes to some developing economies. It has been proven that urbanization can also be linked to: income per capita growth; large quantities of food imports and tradable goods production; and the abundance of natural resources (Gollin, Jedwab, & Vollrath, 2013). There are several other factors that cause urbanization but the underlying fact is that most urban settlements in developing economies are socially, economically and environmentally challenged. Urban cities in developing countries are characterized by: congestion and sprawl; poor infrastructure; high levels of crime and violence; environmental and health challenges; broken sewerage and limited solid waste management facilities among other sore sites (Cohen, 2006).

Well planned cities have a number of advantages: a city increases its number of jobs by 15% by simply being well planned; it encourages social cohesion by building houses that cater for all income classes within the same neighborhoods; the practice of mixed land use makes them more compact which cuts the need for long commutes; social exchange is cultivated by allocating at least 30% of their land to public recreational facilities like parks; they release less air pollutants by encouraging the use of clean transportation like bicycles and electric trains; and they are greener, healthier and more resilient to the adverse effects of climate change and global recessions (Janicki, 2014).

Urban planning goes as far back as the ancient Egyptian civilization. It was regarded as a profession around the year 1900 when theorists began developing planning models to mitigate the negative effects of the industrial age. The planning process involved consultations between visionaries, engineers and local councilors. Today, this web of

stakeholders has expanded to include politicians, members of the public and academicians among other stakeholders. The urban planning process involves coming up with a plan to guide development activities of a given urban settlement (Fainstein, 2014).

The urban planning process and profession has changed considerably over the years with the focus today being on its sustainability. In fact, experienced urban planners held a series of discussions in 2006 on issues regarding urban planning and sustainable development. These planners published a list of 10 principles to sustainable urbanization in a paper titled, “*Reinventing Planning: A New Governance Paradigm for Managing Human Settlements.*” This paper is what set out the thinking behind the Declaration of Principles and Best Practices for Sustainable Urbanization (World Planners Congress, 2006). The ten principles of sustainable urbanization include: promoting sustainable development; integrated planning; linking plans with budgets; involving partners and stakeholders; subsidiarity; market responsiveness; access to land; appropriate planning tools; pro-poor and inclusiveness; and embrace cultural diversity (Farmer, et al., 2006).

Kenya, and Nairobi to be specific, has had several urban plans: first was the 1898 Plan of Nairobi, followed by the 1926 Plan for a Settler Capital. The 1948 Master Plan for a Colonial Capital steered development activities within the city from then on and ten years into independence (Makworo & Mireri, 2011). All these plans had an underlying racial segregation theme in them.

After independence, Nairobi witnessed a proliferation of people from rural areas. Ten years later, the post-independence government launched the 1973 Nairobi Metropolitan Growth Strategy. Though the plan was ambitious, it neglected the interests of the urban majority and advanced segregation along economic and class lines. The 1984-1988 Nairobi City Commission Development Plan outlined the development needs of the housing; health and environment; sewerage; social services; transport and other sectors yet little came of its implementation. In 1993, the Nairobi City Council invited stakeholders, professionals and ordinary citizens to the Nairobi City Convention to participate in forging the kind of city they would like to have. However, most of their ideas were disregarded during the planning process (Owuor & Mbatia, 2008).

Realistic and sustainable urban plans must be all inclusive: providing equal opportunities for all inhabitants of a city to participate in its development and implementation. Excluding any class or group within an urban settlement erodes a people’s sense of social cohesion

which in turn compromises on the survival of the city (Farmer, et al., 2006). Social exclusion can be contained by encouraging the participation of all members of the public in the planning and implementation of projects (Barnes, 2005).

Public participation is involving people who will be affected by a decision in the decision making process. It “might involve public meetings, surveys, open houses, workshops, polling, citizen’s advisory committees and other forms of direct involvement with the public.” (IAP2, 2007). Public participation is at the center of sustainable urban planning and development which aims at improving the social, economic and environmental quality of urban settlements and the living and working conditions of everyone, especially the marginalized (Agenda 21, 1992). “Such improvement should be based on technical cooperation activities, partnerships among the public, private and community sectors and participation in the decision-making process by community and special interest groups such as women, indigenous people, the elderly and the disabled” (Agenda 21, 1992, p. 46).

There are varied opinions on what a good public planning process should be and, “this has inspired the search for principles that characterize good public participation processes” (Webler, Tuler, & Krueger, 2001, p. 435). Even so, a decent public planning process should capture the diversity of public views (Bastidas, 2004).

There are several factors which affect the willingness of citizens to voluntarily participate in consultative forums. These factors are either innate or influenced by the community and the reputation established by the inviting institution. Some of these factors include: costs/benefits analysis, affective and reactive emotions, perceived trust in institutions, sense of community, and personal curiosity (Mannarini, Fedi, & Trippetti, 2009).

Encouraging citizen participation in planning and development activities is beneficial to any urban settlement. For example, participation gives citizens a greater say in the decisions that affect their daily lives. Public participation improves the quality of construction and the management of local infrastructure projects (Mansuri & Rao, 2013). Involving the community in planning also enhances citizen commitment; increases user satisfaction; creates realistic expectations of outcomes; and aids in building mutual trust within the community and between the community and other stakeholders (Al-Kodmany, 1999).

When people are barred from participating in community development projects then it is said that they have been marginalized. Marginalization is a condition of social exclusion in which some people are barred from fully or partially accessing universal goods and services

(Barnes, 2005). These basic privileges include: natural resources; basic human rights; public goods and services; and the ability to participate in socioeconomic, cultural or political activities. Failing to share these privileges dilutes a people's quality of life and a society's sense of cohesion (Levitas, et al., 2007).

The concept of social exclusion can be traced back to Aristotle (384- 322 BC) while the phrase social exclusion has been used in many ways to describe different social, economic, cultural, political, and other systems of discrimination that existed at different times, places and contexts (Mathieson, et al., 2008).

Discrimination is the denial of equal rights based on prejudice and stereotypes (Sabrina, 2011). Prejudicial behavior is seen when one has an emotional reaction towards someone else based on his/her own preconceived notions/ideas (Fiske, 2009). For example, when South Africans lynch black immigrants based solely on exceptionalism (a feeling of superiority in relation to other Africans) (Mpubani, 2015). Stereotyping on the other hand is seeing someone based on the experiences one has had with others who are 'like' him/her (Fiske, 2009). An example is regarding all Muslims and Somalis as terrorists based on past experiences with the Al-Shabaab. Both prejudice and stereotypes are based on beliefs but discrimination is the conscious implementation of these beliefs (Sabrina, 2011) like flooding high profile positions with members of two or three communities while disregarding others (Shiundu, 2015).

Marginalized groups are categories of people disadvantaged by social exclusion. Social exclusion in Africa dates back to the colonial era where a mix of white settlers, immigrant workers and indigenous Africans led to the creation of hierarchical societies (Sian, 2007). The hierarchy system helped with cheap and easy exploitation of colonial territories but when the colonialists left, their systems survived and still thrive to date (Kaplan, 2010). For example: urban colonial planning laws and the failure by post-independence governments to address challenges of rapid urbanization led to intensified competition over land and the consequent emergence of slums (Wiik, 2014).

The Constitution of Kenya (2010) defines marginalized groups as people who have in the past been discriminated against on the basis of, “ race, sex, pregnancy, marital status, health status, ethnic or social origin, color, age, disability, religion, conscience, belief, culture, dress, language or birth.” According to Article 100, these people include: women; persons with disabilities; youth; ethnic and other minorities; and marginalized communities. A

marginalized community is regarded as a community (not necessarily ethnic) with a relatively small population that has for one reason or the other been unable to fully participate in Kenya's social and economic life.

The Constitution of Kenya (2010) also seeks to contain marginalization through several measures that include: promoting the universal implementation of rights and fundamental freedoms (Article 21(3)); promoting the representation of marginalized groups in political parties (Article 91(1) (e)), Parliament (Article 100), and county assemblies (Article 177(c)); and devolution (Article 174(e)) (Republic of Kenya, 2010).

Since the expiry of the 1973 Nairobi Metropolitan Growth Strategy in 2000 until March, 2015, Nairobi city lacked a consolidated development master plan (Mbaka & Otieno, 2015). In 2012, the NCC received development assistance from Japan to undertake a study and come up with the Nairobi Integrated Urban Development Master Plan (NIUPLAN). "The purpose of NIUPLAN is to provide a guiding framework to manage urban development in NCC from 2014-2030, integrate all urban development sectors and realize the goals of Kenya Vision 2030 for the city county of Nairobi" (NIUPLAN Masterplan, 2014).

In order to fulfill the requirements of the Constitution, and the provisions of other complementary Acts relating to urban planning, the process of developing the NIUPLAN master plan had to be consultative. It took inputs from: ministries; non-governmental organizations; the private sector; residential associations; investors; and residents of NC. Meetings meant for residents of Nairobi City were made open to the general public. These meetings often had few women, children, youth, the disabled, and the elderly in attendance. Stakeholders also held special meetings for these marginalized groups and their attendance was as shown in Appendix 4 (a) and 4 (b).

### **2.3. Public awareness and Participation in urban planning projects**

Awareness is knowledge or understanding of a subject, issue, or situation and being aware is synonymous to being informed on a specific issue. (Macmillan Dictionary). It can therefore be said that information is what breeds and sustains awareness.

An online source defines information as data that is: (first) accurate and timely, (second) specific and organized for a purpose, (third) presented within a context that gives it meaning and relevance, and (fourth) can lead to an increase in understanding and decrease in uncertainty. Information is valuable because it can affect behavior, a decision, or an outcome (WebFinance, Inc., 2015). This definition gives a somewhat wholesome perspective on what

information is (data); its characteristics (accurate, timely, specific, organized, meaningful, and relevant); what it does (informs or creates awareness); and its value (affects something). Information is worthless if things remain the same after receiving it (WebFinance, Inc., 2015).

Public awareness can only be achieved if the desired information is accessible. Accessibility of information is “a combination of intellectual, physical, and social elements that affect the availability of information to individuals” (Oltmann, 2009, p. 6).

In citing McCreadie and Rice (1999a, 1999b) Oltmann, (2009) quotes that there are six different ways in which one can conceptualize awareness (access to knowledge) like periodicals, digital data, visual sources among others.; access to technology like computer, phones, internet, TV, radio among others.; access as communication like making sense of things, using information, connectivity, and communication competence; access as control of participation and content; access as economic commodities or goods; and lastly access as participation like services, advocacy, and privacy.

When looking at access in the context of controlling access to content, we inevitably start invoking our concerns about citizens’ abilities to participate in social, economic, and political activities. In fact, “access as a means to participation in politics and in the global information economy is mentioned in nearly all access related research” (Oltmann, 2009, p. 12). This is because there is a strong and direct link between control of information and citizen participation (Lor & Britz, 2007). In addition, communication competencies are a prerequisite for participation in social, economic, and political spheres of the modern knowledge society (Oltmann, 2009).

Public campaigns are often carried out in order to highlight or raise the level of awareness on an issue. This is commonly done through: seminars, workshops/conferences, awareness materials (brochures, posters, and videos), exhibitions, public awareness events (visitors' days and field days), the media (newspapers, radio, TV), and websites among other internet-based tools (Mundy & Huggan, 2015).

With modern technology, the public has more awareness (Rodrigues, 2012). This is good for participation. For instance, having access to a computer and the internet alone makes the youth feel empowered, they become resourceful and participate more in the community (Valaitis, 2005). The encouraging thing is that over 77.4% of youngsters between the ages of 16 and 30 years use social networks to keep informed but this comes at the expense of

conventional press media (Plataforma SINC, 2012). Casero-Ripollés (as cited in Plataforma SINC, 2012) found out that only 28.8% of them read newspapers on a daily basis and three out of four youngsters within the same age range preferred getting updates online than from TV. Either way, public awareness is good for participation while limited access to public information marginalizes people's participation (Lor & Britz, 2007).

The Nairobi City County (NCC) and JICA employed a variety of tools to inform the general public about its activities while developing the NIUPLAN master plan. These included: posters, newspapers, TV, radio and the internet. The specifics are summarized under Appendix 4.

#### **2.4. Degree of accessibility and Participation in urban planning projects**

Accessibility is the, "ease with which a facility or location can be reached from other locations" (WebFinance, 2015). In the context of this research, accessibility refers to physical access to destinations (Litman, 2008). These destinations are locations in the city. Degree of accessibility refers to the convenience with which destinations (like meeting venues) can be accessed from its environs and vice versa. Obviously, "people can only participate in a meeting or event if they can actually get to (and from) it" (Save the Children UK, 2000, p. 31). Research shows "that individuals who have greater access to and who visit government offices related to decentralization policies more often are also more likely to participate in user groups created by state officials" (Agrawal & Gupta, 2005, p. 1101).

There are several factors that affect the accessibility of a place. Litman (2008) lists them as: transport demand and activity, mobility, transport options (modes), user information, integration, affordability, mobility substitutes, land use factors, transport network connectivity, transport management, prioritization, and inaccessibility.

Transportation demand is the expected amount of mobility and accessibility which people should consume under various conditions while transportation activity refers to the actual amount of mobility and accessibility experienced by people (Litman, 2008). Travel demand can be classified into: demographics like age, purpose (reason for travelling), destination, time, mode, and distance (Litman, 2008). Generally, people want to have a certain degree of mobility as long as they get to spend less time travelling (Litman, 2009).

Litman, (2008) defines mobility as the amount of physical distance covered within a certain time and it is directly proportional to accessibility. Congestion on the contrary tends to inhibit mobility and reduce accessibility (Litman, 2008). One can measure mobility using

indicators such as “average traffic speed and congestion delay” (Litman, 2008, p. 10). Observing the traffic flow is suitable for measuring the average traffic speed while congestion delay is based on the experience and perception of a commuter.

User information is how well an individual knows their travel routes, roadway conditions (peak and off peak hours), vehicle services, availability and price of parking, transit routes, schedules, fares, comfort factors, access to destinations, recommended routes among others. (Litman, 2008). This information can be accessed from maps, brochures, internet, and telephones systems. What user information does is “affect the functional availability and desirability of mobility and accessibility options” (Litman, 2008, p. 13). The lack of information on the other leads to confusion and consequent inaccessibility of a location. The ease with which one can switch between different destination/departure points and modes of transport is what is referred to as integration and it has a direct effect on the accessibility of a place (Litman, 2008).

Spending less than 20% of one’s budget on transport is considered affordable and vice versa (Lipman, 2006). Transportation costs are dependent on several factors but it is generally agreed that affordability has an inverse effect on accessibility: high prices mean lower accessibility. One can also access goods and services without having to be there physically. This is referred to as mobility access (Litman, 2008). An example is the iTax system which eliminates the need to go into the central business district (CBD) to pay taxes (Gibendi, 2014). Mobility access tends to either stimulate and/or complement alternative modes (Lipman, 2006).

## **2.5. Financial Situation and Participation in urban planning projects**

Financial situation “measures the extent to which a person feels they are in control of their financial circumstances. Are they able to pay their bills? Can they save? Do they generally feel they are comfortably well off rather than that life is financially difficult?” (Ferragina, Tomlinson, & Walk, 2013, p. 11). Income is closely associated with participation even when taking account of gender, type of family, employment status, ethnic group, educational levels, and region of residence (Ferragina, Tomlinson, & Walk, 2013).

Many people are aware of the benefits associated with participating in community development projects (like urban planning projects) but are less likely to participate in these activities because of their financial situation (Ngesu, Gakuru, Gunga, & Kahigi, 2013). This reality can be interpreted in several ways. One such interpretation is that people tend to



withdraw from social participation in order to avoid financial stress through a deliberate attempt of avoiding material deprivation by reducing their social spending (Ferragina, Tomlinson, & Walk, 2013). People also keep off public participation to avoid their precarious financial status from becoming public knowledge or out of fear that the more prosperous individuals in society will shun them (Chase & Walker, 2013).

Agrawal & Gupta (2005) highlighted that people who are both economically and socially better-off are more likely to participate in community-level user groups compared to their financially challenged counterparts. Ferragina, Tomlinson, & Walk (2013) went further to state that the level of public participation will continue to decline with falling income until this reaches a floor level where “rises or falls in income do not translate into measurable differences in participation” (p. 15). When this happens, Ferragina, Tomlinson, & Walk (2013) attribute further variations in the levels of public participation to other causes of social exclusion other than poverty. These include: race, ethnicity, unemployment, disability, age, gender, family type, and educational attainment. It also tends to vary with region.

The World Bank estimated that between 34% to 42% of the 44.4 million Kenyans live in poverty (below \$1.00 a day) while 25% of these Kenyans live in urban areas (The World Bank, 2015). The risk of becoming poor depends on a host of factors such as age, gender, size of one’s family, level of education and the sector of employment (Odhiambo & Manda, 2003). High levels of urban poverty in Kenya have often been linked to high levels of unemployment: the urban population highly depends on earned income (employment) to acquire their basic goods and services (Odhiambo & Manda, 2003). The minimum monthly wage, excluding housing allowance, in Nairobi (Mombasa and Kisumu) was KES 15,357 as of 1 May, 2015 (Republic of Kenya, 2013). This was revised upwards by 12% during the year’s Labor Day celebrations. However, its intended beneficiaries bore mixed reactions: being skeptical of its implementation or were simply dissatisfied with the tiny bump (Obiria, 2015). Limited jobs and poor wages are what bred and nurtured the informal sector which accounts for 75% of all urban employment in Kenya (Odhiambo & Manda, 2003).

A “larger proportion of Nairobi city population remain very poor, 60% of them living in informal settlements” (Kuria, et al., 2005). These high levels of urban poverty have led to the marginalization of the urban population especially the youths (Muiya, 2014). The urban youth in Kenya, like most developing countries, are either unemployed or work for poor wages, have limited interaction with the ‘outside world’ and often believe that their

contributions are never taken seriously when they participate in discussion forums (Muiya, 2014).

## **2.6. Theoretical Framework**

Some of the theories that guide urban planning processes include: rational-comprehensive (where planners follow a sequence of predetermined steps); incrementalism (where planners issue a number of options to the public, take note of the public's reaction before choosing the option with the least public resistance); transactive (the public is more active in the policy setting process while planners act as distributors of information and sources of feedback); communicative (aims to make the different parties understand each other); advocacy (campaigns for the interests of the socially excluded to be given first priority); equity or bargaining model (sees planning as a give and take exercise among all stakeholders while planners simply implement the public's agreements) (Lane, 2005).

The transactive planning theory forms the theoretical framework for the research. Proposed by John Friedmann, a pioneer urban theorist of the late twentieth century, it emphasized that citizens and civic leaders (not planners) should always be at the center of urban planning projects if such plans are ever to be implemented (Stiftel, 2000). According to Friedmann's transactive theory, participation and empowerment should be considered as goals to be achieved rather than methods to be used in the planning process (Lane, 2005).

The transactive planning approach focuses on intact experiences of people's lives since these tend to reveal policy issues which should be addressed (Friedmann, 1973). According to the transactive theory, urban planning should be carried out in a face-to-face fashion with the people affected by decisions and not with respect to anonymous target communities/beneficiaries. It should be centered on interpersonal dialogues and viewed as a process of mutual learning. Transactive urban planning is meant to enable people take increasing control over the social processes that govern their urban welfare (Friedmann & Huxley, 1985)

## **2.7. Conceptual Framework**

The conceptual framework shows the research variables are related.

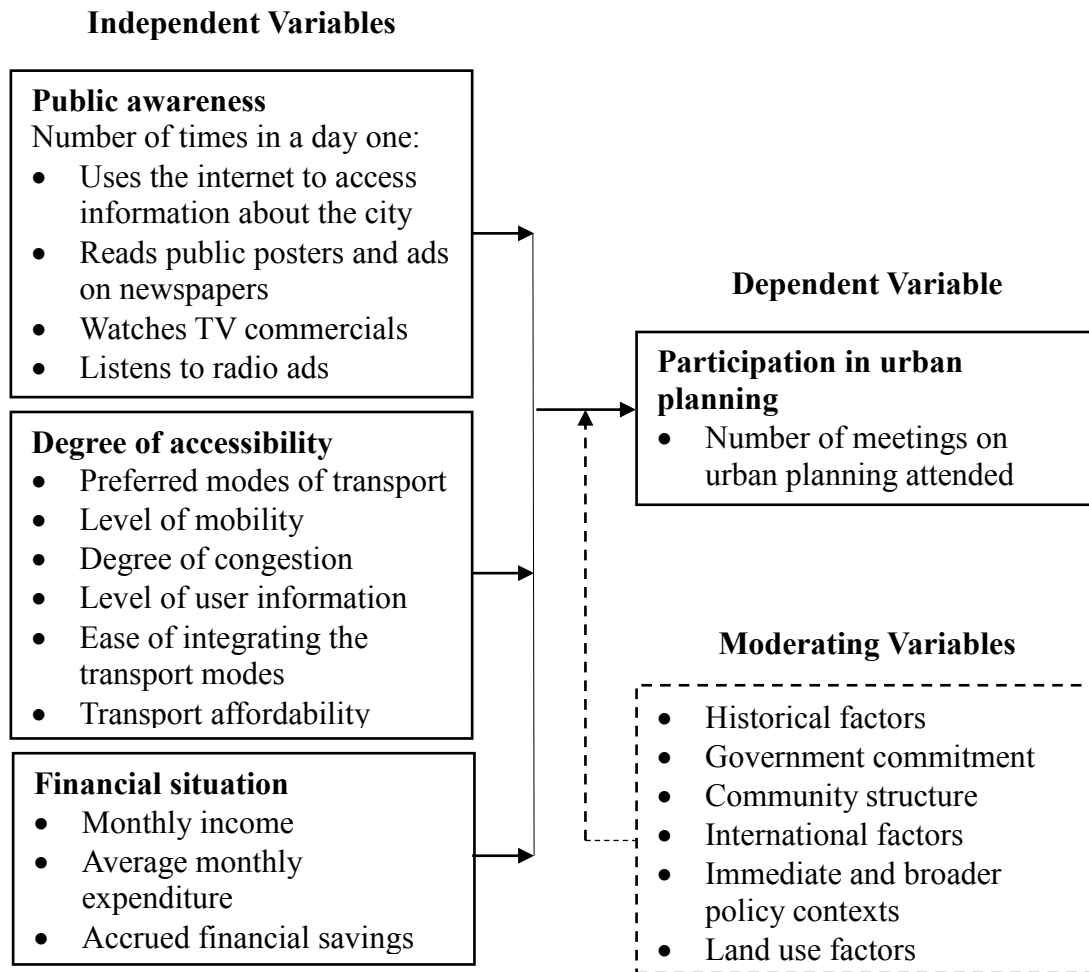


Fig 1 Conceptual framework

The independent variables include: public awareness; degree of accessibility within the city; and financial situation. The dependent variable is participation. The moderating variables which are also likely to influence participation but were not investigated under the study include: historical factors (experience, perception); national government commitment; community structure; international organization factors; client characteristics; agency characteristics; and the immediate and broader policy contexts.

## 2.8. Knowledge Gap

The reviewed literature illustrates how public awareness, degree of accessibility and financial situation tend to influence public participation in varied community development activities or just the society as a whole. This gives limited perspective on how the same factors might specifically influence public participation in urban planning projects. The importance of public participation cannot be over emphasized and neither can the value of

urban planning in a world that is rapidly urbanizing. The research attempts to bridge this gap in a bid to contribute to the sustainability of urban settlements and the planet.

## **2.9. Summary of Literature Review**

The objectives of the study have been covered under the literature review. Under public awareness and urban planning projects, we have looked at how being informed is essential to youth participation. Degree of accessibility can be looked at in terms of: the available and frequently used modes of transport, mobility, congestion in the city, user information, integration of transport modes, and affordability. Financial situation of a participant affects his/her capacity to participate in community development projects. One's financial status can be measured in terms of income, expenditure and accrued savings.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1. Introduction**

This chapter provides information about the applied research process for the report. This includes: research design, target population, sampling design, data collection instruments, validity of the instrument, reliability of the instrument, data collection procedure, data analysis techniques, operational definition of variables, and ethical considerations.

#### **3.2. Research Design**

A cross-sectional survey research design was used. In cross-sectional survey, the information gathered about the relationship between independent variable X and dependent variable Y represents what is going on at only one point in time (Olsen & St. George, 2004). A cross-sectional study was preferred because it: is relatively inexpensive; takes a short period to carry out; and there is no loss to follow-up (Levin, 2006).

#### **3.3. Target Population**

The target population is Nairobi Central Ward (NCW) which had a population of 13,325 according to the 2009 National Census (Kenya National Bureau of Statistics (KNBS), 2010). NCW is one of six wards in Starehe Constituency. Starehe Constituency is one of seventeen electoral boundaries in Nairobi County (IEBC, 2013). Nairobi County is one of the 47 counties which Kenya has under its current system of devolved governance (Republic of Kenya, 2010).

Nairobi is preferred because it was the only city in Kenya that had launched a new master plan at the time of drafting the proposal to the study. The Nairobi CBD is located within NCW and this happens to be the most active part of Nairobi, Kenya and East Africa at large. At the heart of Nairobi CBD are both national and local administration headquarters. The population within Nairobi Central Ward is also largely heterogeneous and well informed.

#### **3.4. Sample Size and Sampling Procedure**

Seeing that the population was more than 10,000 but less than 15,000, a sample size of 375 participants was selected for the study (Krejcie & Morgan, 1970). This sample was divided equally into three clusters: City Square; Muthurwa; and Nairobi Central sub-locations found in Nairobi Central Ward. The main reason behind the cluster sampling was cost efficiency. Simple random sampling was then used to select respondents from the clusters.

### **3.5. Data Collection Instruments**

A structured questionnaire was used to collect data. The questionnaire employed a 5-point Likert scale. A Likert scale is made up of several Likert items. A Likert item is a statement to which a participant responds to by indicating his/her degree of agreement or disagreement. Likert scales are commonly used in social sciences research projects (Croasmun & Ostrom, 2011). The research instrument is attached under Appendix 3.

### **3.6. Validity of the Instrument**

Validity indicates whether the research instrument measures what it is intended to measure or not. To ensure content validity, the contents of the questionnaire were made to match the objectives of the research. Apart from the introduction and background information, the questionnaire was divided into the following parts: public awareness, degree of accessibility, financial status, and participation in urban planning. The instrument was also reviewed by an expert for validity.

### **3.7. Reliability of the Instruments**

Reliability is the degree to which a research tool produces stable and consistent results. Test-retest was used to determine the reliability of the research instrument; the same questionnaire was administered twice over a period of 2 months. Analyses of test-retest reliability gave a reliability index of 0.79.

### **3.8. Data Collection Procedure**

Data was collected from all respondents using self-administered paper and pencil questionnaires. Respondents with special needs (like persons with disability) were approached with the assistance of someone close to them or who understands their mode of communication like sign language, braille, language translation.

### **3.9. Data Analysis Techniques**

Spearman's rank correlation ( $\rho_{X,Y}$ ) was used to obtain the correlation between each influencing factor ( $X_n$ ) and participation ( $Y$ ). Spearman's correlation is preferred instead of Pearson correlation when handling non-parametric data which was the case in this research. In addition, respondents were asked to choose one of five possible responses to each research question. These responses were ranked from 1 to 5 and thus making it convenient to use Spearman's rank correlation when calculating for correlations.

### 3.10. Operational Definition of Variables

The 3.1 gives the operational definition of variables.

*Table 3.1 Operational definition of variables*

<b>Type of Variable</b>	<b>Variable</b>	<b>Indicators</b>	<b>Scale</b>
Dependent	Participation	Number of meetings/workshops on urban planning attended	Ordinal
Independent	Public awareness	Likelihood of: surfing the internet for information about the city; reading public posters and ads on newspapers; watching TV commercials; and listening to radio ads	Ordinal
Independent	Degree of accessibility	Likelihood of: experiencing delays/ time wastage when accessing using various modes of transport to access places in the city, experiencing congestion in the city, getting lost and confused in the city, experiencing difficulty in switching from one mode of transport to another, spending more on transport than was anticipated	Ordinal
Independent	Financial situation	Monthly income	Interval
		Average monthly expenditure	Interval
		Accrued financial savings	Interval

### 3.11. Ethical Considerations

All participants were debriefed on the objectives of the study before commencing to fill the questionnaire. Participation was voluntary with harmlessness whenever a subject refused or opted to withdraw from responding to the research questions. All findings (expected and unexpected) were disclosed. This was regardless of whether they put into question the design of the research itself. All relationships that emerged after data analysis were also disclosed regardless of whether they conformed to or disprove the research hypotheses. Data findings and their analyses were presented in an honest and transparent way. Problem experienced during the research have also been disclosed to the reader.

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1. Introduction

This chapter presents the collected data in a manner that gives logical interpretation of the research findings. These findings have also been compared with the expected findings. The data, collected using questionnaire, was analyzed, presented and interpreted according to the individual objectives of the study.

#### 4.2. Questionnaire return rate

A total of 333 questionnaires were collected out of the targeted 375 respondents. This makes for a return rate of 88.80%. Table 4.1 gives a summary of the questionnaire return rates broken down into individual sub locations.

*Table 4.1 Questionnaire return rate*

Region	Targeted responses	Collected responses			Response Rate
		female	male	total	
City Square	125	39	65	104	83.20%
Muthurwa	125	40	65	105	84.00%
Nairobi Central	125	42	82	124	99.20%
Nairobi Central Ward	375	121	212	333	88.80%

#### 4.3. Characteristics of the study respondents

The questionnaire used in the study was designed in such a manner that it would allow for the collection of demographic information from the respondents. These characteristics include: gender, age, ethnicity, disability, and employment status.

Most of the respondents, 230 (69.07%), gave their telephone numbers while only 143 (42.94%) provided their e-mail addresses. These details were meant to be used for clarification and follow ups in the future.

Only 26 (7.81%) of the 333 randomly selected respondents came from minor ethnic groups like African Indians, Somali, Suba, and Borana while only three (3) respondents had some sort of disability. 154 (46.25%), 98 (29.43%), and 81 (24.32%) respondents were either employed, self-employed and unemployed respectively.



The youth ( $18 \leq \text{age} \leq 35$ ) made up for 260 (78.08%) of all the responses, only 13 (3.90%) of the respondents were senior citizens age  $> 53$  years while the rest were of middle age  $36 \text{ years} \leq \text{age} \leq 53$  years.

Table 4.2 gives an overview of respondents based on their occupation and age group distribution in each sub location.

*Table 4.2 Employment status of respondents aggregated by age and sub-location*

	City Square			Muthurwa			Nairobi Central			Total
	Youth	Mid	Senior	Youth	Mid	Senior	Youth	Mid	Senior	
<b>Employed</b>										
female	11	4	0	18	1	1	17	2	0	54
male	29	6	1	12	7	0	35	9	1	100
<b>Self-employed</b>										
female	6	5	0	3	4	0	13	4	0	35
male	15	1	5	11	5	0	18	8	0	63
<b>Unemployed</b>										
female	12	1	0	12	0	1	6	0	0	32
male	5	0	3	28	2	0	9	1	1	49
<b>Total</b>	<b>78</b>	<b>17</b>	<b>9</b>	<b>84</b>	<b>19</b>	<b>2</b>	<b>98</b>	<b>24</b>	<b>2</b>	<b>333</b>

*Note.* Respondents of:  $18 \leq \text{age} \leq 35$  are classified as ‘youth’;  $36 \text{ years} \leq \text{age} \leq 53$  years make up for the ‘mid’ age group; and respondents with age  $> 53$  years are regarded as ‘senior’

#### **4.4. Public awareness and public participation in urban planning projects**

Respondents were asked how likely in a day they are to:  $x_1$ = surf the internet for information about their city (Nairobi),  $x_2$ = read posters on public notice boards,  $x_3$ =read advertisements in newspapers,  $x_4$ =watch commercials on TV stations, and  $x_5$ = listen to announcements on radio stations. Participants were required to respond to these questions based on a 5-point Likert scale with the following responses: ‘highly unlikely =  $k_1$ ’, ‘likely =  $k_2$ ’, ‘never =  $k_3$ ’, ‘likely =  $k_4$ ’, and ‘highly likely =  $k_5$ ’.

Table 4.3 illustrates how frequently respondents access information from various sources in a day and the number of urban planning projects they have attended in the past.

Table 4.3: Frequency accessing information from various sources and participation in urban planning projects

Response, $k_n$	Frequency, $f_{x,y}$					
	$f_{x1}$	$f_{x2}$	$f_{x3}$	$f_{x4}$	$f_{x5}$	$f_y$
Highly unlikely	30, 9.12%	17, 5.15%	19, 5.81%	20, 6.10%	26, 7.90%	28, 8.41%
Unlikely	72, 21.88%	86, 26.06%	53, 16.21%	32, 9.76%	57, 17.33%	45, 13.51%
Never	56, 17.02%	35, 10.61%	14, 4.28%	12, 3.66%	26, 7.90%	242, 72.67%
Likely	104, 31.61%	129, 39.09%	132, 40.37%	123, 37.50%	121, 36.78%	16, 4.80%
Highly likely	67, 20.36%	63, 19.09%	109, 33.33%	141, 42.99%	99, 30.09%	2, 0.60%
Total	329	330	327	328	329	333

About half (171) of the respondents said they were both likely and highly likely to surf the internet for information about Nairobi city while 72 (21.88%) were unlikely and 30 (9.12%) were highly unlikely. Only 56 (17.02%) said they never use the internet for this purpose.

Most (129) of the respondents said they were likely to read posters on public notice boards in a day while 138 (41.82%) were highly unlikely, unlikely and never do the same. 63 (19.09%) of the respondents said they are very likely to read posters on public notice boards in a day.

Over 240 (73%) of the research participants said they were both likely and highly likely to read advertisements in newspapers leaving about 86 (26%) saying that they never, are unlikely and highly unlikely to do the same in a day.

Most respondents (132) said they were very likely to watch TV ads in a day. On the other hand, 123 (37.5%), 32 (9.76%), 20 (6.10%) and 12 (3.66%) of the respondents said they were likely, unlikely, highly unlikely, and never watch TV commercials in a day respectively.

On listening to radio classified, 121 (36.78%) of the respondents said they were likely to do so in a day, 25 (8%) were either highly unlikely or never do, 100 (30.09%) said they were highly likely and 57 (17.33%) highly unlikely to do so in a day.

It is also possible to obtain the weighted means  $\bar{x}_n$  of each indicator under the variable: awareness having assigned numeric values to each response  $k_n$ . Table 4.4 shows the average likelihood of respondents to access information from various sources in a day. It also gives the variance (var.)  $s^2$  and standard deviation (SD) =  $\sqrt{s^2}$  of the collected responses on information access. The weighted mean of 3.64 lies between 3 (never) and 4 (likely). It is however closer to 4 than it is to 3. It can therefore be concluded that at face value, respondents were more ‘likely’ to access information about Nairobi city from various sources in a day. The same data has a standard deviation of 1.24.

Table 4.4: Mean, Variance and SD of responses on public awareness

$x_n$	Source of information	$\sum f_{x_n}$	$\sum k_n f_{x_n}$	$\bar{x}_n = \frac{k_n \sum f_{x_n}}{\sum x_n}$	Var.	SD
$x_1$	Internet	329	1093	3.32	1.62	1.27
$x_2$	Public notice boards	330	1125	3.41	1.46	1.21
$x_3$	Newspapers ads	327	1240	3.79	1.51	1.23
$x_4$	TV commercials	328	1317	4.02	1.41	1.19
$x_5$	Radio classifieds	329	1197	3.64	1.66	1.29
Average				3.64	1.53	1.24

### **Hypothesis 1: There is no relationship between public awareness and participation in urban planning projects**

The research set out to answer the question, “How does public awareness influence participation in urban planning projects?” The answer to this question can be obtained by testing whether the first null hypothesis, “there is no relationship between public awareness and participation in urban planning projects” holds or not.

In order to test this null hypothesis, Spearman’s correlation coefficient ( $\rho_{X,Y}$ ) was calculated between each independent indicator ( $x_1$  to  $x_4$ ) and public participation,  $y$ . The results of these computations are summarized in Table 4.5.

*Table 4.5 Correlation of indicators of public awareness and participation in urban planning projects.*

N	Description	( $\rho_{x_ny}$ )
x <sub>1</sub>	Internet	-0.07
x <sub>2</sub>	Public notice boards	-0.02
x <sub>3</sub>	Newspapers ads	0.16
x <sub>4</sub>	TV commercials	0.11
x <sub>5</sub>	Radio classifieds	0.14

*Note.* Since the correlation values of -0.07 and -0.02 are statistically insignificant, they are ignored in calculating the overall correlation value (0.14).

A correlation value of -0.07 implies that there is a very weak negative correlation between the likelihood of respondents to surf the internet for information about Nairobi city and the number of meetings/workshops that involve planning the city attended by the respondents. This correlation value is too close to zero and is considered as being statistically insignificant.

A correlation value of -0.02 means that there is a very weak and negative correlation between respondents who frequently read posters on public notice boards and the number of meetings/workshops that involve planning Nairobi city that they have attended. Since it is closer to zero than those obtained between surfing the internet and public participation, it can also be concluded as being statistically insignificant.

A correlation value of 0.16 goes on to imply that there is a weak positive correlation between likelihood of reading advertisements in newspapers in a day and the number of urban planning meetings/workshops attended by research participants.

Respondents who are more likely to watch TV commercials in a day were also likely to attend meetings/workshops that involved planning their city. However, a correlation of just 0.11 implies a weak correlation between likelihood of watch TV commercials in a day and the number of meetings/workshops on urban planning attended by participants.

It was also established that there was a weak correlation (0.14) between the likelihood of respondents to listen to radio announcements in a day and the number of meetings/workshops that involved planning Nairobi city attended by the research participants.

The overall correlation (0.14) calculated from the five indicators imply that the relationship between respondents likelihood to acquire information about Nairobi city from various sources in a day and the number of meetings/workshops that involved planning Nairobi city attended by the research participants was very weak. Therefore, the alternate hypothesis holds true: there is a weak relationship between public awareness and participation in urban planning projects.

#### 4.5. Degree of accessibility and public participation in urban planning

Respondents were asked how often they experience delays and time wastage when accessing places within the city of Nairobi by: walking =  $x_{6a}$ , cycling =  $x_{6b}$ , personal vehicle (car, motorcycle) =  $x_{6c}$ , taxi =  $x_{6d}$ , matatu =  $x_{6e}$ , boda-boda =  $x_{6f}$ , and tuk-tuk =  $x_{6g}$ . They were also asked how often they experience the following while in the city of Nairobi: difficulty when switching from one mode of transportation to another =  $x_7$ , being lost of feel confused in the city =  $x_8$ , congestion and/or encounter crowds =  $x_9$ , and spending more on transport than was budgeted for =  $x_{10}$ . Table 4.6 shows how often the respondents said they experienced certain aspects of accessibility when in Nairobi city. Participants were required to respond to these questions based on a 5-point likert scale with the following response items: very rarely =  $k_1 = 1$ , rarely =  $k_2 = 2$ , never =  $k_3 = 3$ , often =  $k_4 = 4$ , and very often =  $k_5 = 5$ .

*Table 4.6 How frequently the respondents said they experienced certain aspects of accessibility when accessing places in Nairobi city*

Frequency, $f_x$	Response, $k_n$					Total
	$k_1 = 1$	$k_2 = 2$	$k_3 = 3$	$k_4 = 4$	$k_5 = 5$	
$f_{x6a}$	52, 17.93%	108, 37.24%	45, 15.52%	56, 19.31%	29, 10.00%	290
$f_{x6b}$	46, 19.57%	58, 24.68%	113, 48.09%	11, 4.68%	7, 2.98%	235
$f_{x6c}$	23, 8.61%	29, 10.86%	40, 14.98%	94, 35.21%	81, 30.34%	267
$f_{x6d}$	15, 5.79%	67, 25.87%	31, 11.97%	79, 30.50%	67, 25.87%	259
$f_{x6e}$	7, 2.23%	34, 10.83%	13, 4.14%	98, 31.21%	162, 51.59%	314
$f_{x6f}$	36, 13.64%	102, 38.64%	59, 22.35%	43, 16.29%	24, 9.09%	264
$f_{x6g}$	25,	59, 26.82%	70, 31.82%	48, 21.82%	18, 8.18%	220

*Table 4.6 How frequently the respondents said they experienced certain aspects of accessibility when accessing places in Nairobi city*

Frequency, $f_x$	Response, $k_n$					Total
	$k_1 = 1$	$k_2 = 2$	$k_3 = 3$	$k_4 = 4$	$k_5 = 5$	
	11.36%					
$f_{x7}$	30, 10.00%	90, 30.00%	44, 14.67%	81, 27.00%	55, 18.33%	300
$f_{x8}$	48, 15.29%	83, 26.43%	101, 32.17%	56, 17.83%	26, 8.28%	314
$f_{x9}$	9, 2.83%	13, 4.09%	11, 3.46%	132, 41.51%	153, 48.11%	318
$f_{x10}$	9, 2.87%	33, 10.51%	10, 3.18%	106, 33.76%	156, 49.68%	314

Based on the Table 4.6, 214 (70.69%), 217 (92.34%), 197 (74.63%), and 154 (70.00%) of the respondents said they both never, rarely or very rarely experience delays and time wastage when they commute on foot, ride bicycles, use boda-boda and tuk-tuk as means of transportation within Nairobi city respectively. On the other hand, 175 (56.37%), 146 (65.55%), and 260 (82.80%) participants said they experience delays and time wastage both often and very often when using either a taxicab, personal motor vehicle, or matatu within Nairobi city respectively.

A majority of the respondents, 90 (30.00%), said they rarely experience difficulty in switching between different modes of transportation. This was only 3% more than the number of respondents who claimed to often experience problems when switching from one mode of transportation to another.

Most respondents find it easy to navigate around Nairobi city with only 82 (26.11%) respondents saying that they get lost or feel confused in the city both often and very often. In fact, most of the respondents (32.17% to be exact) said they never have this problem.

Up to 285 (89.62%) of the respondents said they experience human congestions and encounter stagnant crowds when moving around the city. This happens both often and very often giving the impression that crowds and human traffic are a common eyesore.

About half (49.68%) of the research participants spend more on transport than was very often intended. An additional 106 (33.76%) of the respondents said this often happens to them. These make up for up to 83.44% of all the gathered responses. The remaining 10

(3.18%), 33 (10.51%), and 9 (2.87%) said they either never, rarely, and experience spending more on transport than was previously budgeted for very rarely respectively.

It is also possible to compute the weighted mean, variance, and SD of indicators  $x_6$  to  $x_{10}$  based on Table 4.6. These are summarized in Table 4.7.

*Table 4.7 Mean, Variance and SD of responses on the degree of accessibility*

	$x_6$							$x_7$	$x_8$	$x_9$	$x_{10}$	
	$x_{6a}$	$x_{6b}$	$x_{6c}$	$x_{6d}$	$x_{6e}$	$x_{6f}$	$x_{6g}$					
$\sum f_{x_n}$	290	235	267	259	314	264	220	300	314	318	314	
$\sum k_n f_{x_n}$	772	580	982	893	1316	709	635	941	871	1361	1309	
Mean	2.66	2.47	3.68	3.45	4.19	2.69	2.89	3.15	3.14	2.77	4.28	4.17
Var.	1.57	0.92	1.57	1.64	1.16	1.36	1.26	1.35	1.7	1.34	0.86	1.18
SD	1.25	0.96	1.25	1.28	1.08	1.17	1.12	1.16	1.3	1.16	0.93	1.09

*Note.*  $x_{6a}$  to  $x_{6g}$  indicated how often the respondents experienced delays and time wastage when using seven different modes of transportation. These are thus pooled together under  $x_6$ .

The overall weighted mean for the above data set is 3.50 which can be rounded off to 4 giving the impression that the respondents ‘often’ experienced challenges when accessing different places within the city of Nairobi. The same data has standard deviations of 1.13.

**Hypothesis 2: There is no relationship between the degree of accessibility within the city and public participation in urban planning projects**

The research set out to answer the question, “How does degree of accessibility influence public participation in urban planning projects?” The answer to this question can be obtained by testing whether the first null hypothesis, “there is no relationship between the degree of accessibility and public participation in urban planning projects” holds true or not. In order to test this null hypothesis, Spearman’s correlation coefficient ( $\rho_{X,Y}$ ) was calculated between each independent indicator ( $x_6$  to  $x_{10}$ ) and public participation,  $y$ . The results of these computations are summarized in Table 4.8.

Table 4.8 Correlation of indicators for degree of accessibility and public participation in urban planning projects.

N	Description	( $\rho_{x_ny}$ )
x <sub>6</sub>	Delays/time wastage	0.03
x <sub>7</sub>	Switching difficulties	0.04
x <sub>8</sub>	Lost/confused	0.01
x <sub>9</sub>	Crowds/congestion	0.06
x <sub>10</sub>	Overspend on transport	0.10

All the correlational values in Table 4.8 are positive. However, these values are very close to zero and are therefore considered as being statistically insignificant. Seeing that the average correlation for all indicators is only 0.048 (statistically insignificant), it can be concluded that there is no relationship between degree of accessibility and public participation in urban planning projects.

#### 4.6. Financial Situation and public participation in urban planning projects

Three indicators were used to measure the financial situation of the respondents. These included their income = x<sub>11</sub>, expenditure = x<sub>12</sub>, and accrued financial savings = x<sub>13</sub>. Table 4.9 gives the financial situation of the respondents distributed across the five monetary intervals.

Table 4.9 Financial situation of research participants

Weight, $k_n$	Amount (KES )	Frequency, $f_{x,y}$		
		$f_{x11}$	$f_{x12}$	$f_{x13}$
$k_1 = 1$	Less than 10,165.00	75, 26.69%	84, 32.43%	147, 59.51%
$k_2 = 2$	10,166.00 – 19,741.00	52, 18.51%	68, 26.25%	25, 10.12%
$k_3 = 3$	19,742.00 – 29,317.00	46, 16.37%	38, 14.67%	21, 8.50%
$k_4 = 4$	29,318.00 – 38,893.00	27, 9.61%	24, 9.27%	6, 2.43%
$k_5 = 5$	More than 38,893.00	81, 28.83%	45, 17.37%	48, 19.43%
Total		281	259	247

Note. The ‘amount’ ranges used in this table are similar to those used by the Kenya Revenue Authority (KRA) in the pay as you earn (PAYE) taxation system during the period of carrying out the research.



The figures in Table 4.9 illustrate that 81 (28.83%) and 75 (26.69%) of the respondents made more than KES 38,893.00 and less than KES 10,165.00 per month respectively. These two income brackets have a margin of only 2.14% and it can be said that there were as many participants who made more than KES 38,893.00 as there were those who made less than KES 10,165.00 per month. Note that the above monetary ranges were obtained from the pay as you earn (PAYE) tax brackets used in Kenya as at the time of carrying out the research.

A majority of the participants (152) said they lived on less than KES 19,741.00 per month. Assuming that a month to has 28 days, this figure translates to KES 705.04 per day. KES 705.04 is equivalent to USD. 6.19 (USD. 1.00 = KES 101.15). Also, using the same criteria, up to 32.43% of the respondents lived on USD 3.59 per day; nearly twice the number of participants who spent more than USD. 13.73 per day.

Most research participants 147 (60%) said they had less than KES 10,165.00 in accrued savings. This was three times the number of participants who said they had more than KES 38,893.00 in savings.

The weighted means, variance, and SD for the income, expenditure and accrued savings are summarized in Table 4.10.

*Table 4.10 Mean, Variance and SD of respondents financial situation*

$x_n$	Financial Situation	$\sum f_{x_n}$	$\sum k_n f_{x_n}$	$\bar{x}_n$	Var.	SD
$x_{11}$	Income	281	830	2.95	2.51	1.58
$x_{12}$	Expenditure	259	655	2.53	2.13	1.46
$x_{13}$	Accrued savings	247	524	2.12	2.52	1.59

A weighted mean of 2.95 can be rounded off to 3 meaning that the average monthly income for the respondents was between KES 19,742.00 - KES 29,317.00. The average expenditure for the respondents was also between the same income brackets but the average accrued savings was in the second monetary bracket (KES 10,166.00 – KES 19,741.00).

**Hypothesis 3: There is no relationship between financial situation and public participation in urban planning projects.**

The research set out to answer the question, “How does financial situation influence public participation in urban planning projects?” The answer to this question can be obtained

by testing whether the first null hypothesis, “there is no relationship between financial situation and public participation in urban planning projects” holds true or not.

In order to test this null hypothesis, Spearman’s correlation coefficient ( $\rho_{X,Y}$ ) was calculated between each independent indicator ( $x_{11}$  to  $x_{13}$ ) and public participation,  $y$ . The results of these computations are summarized in Table 4.11.

*Table 4.11 Correlation of indicators for financial situation and public participation in urban planning projects.*

n	Description	( $\rho_{x_n y}$ )
$x_{11}$	Income	0.16
$x_{12}$	Expenditure	0.14
$x_{13}$	Accrued savings	0.12

An overall correlation value of 0.14 indicates that there is a very weak positive correlation between financial situation and public participation in urban planning projects: when a person’s financial situation increase by a significant amount, he/she tends to participate a little bit more in urban planning projects. Therefore, reject the null hypothesis and adopt the alternate hypothesis: there is a (weak) relationship between financial situation and public participation in urban planning projects.

#### **4.7. Combined influence of the independent variables on the dependent**

The research had one dependent variable: public participation in urban planning projects and three independent variables: public awareness, degree of accessibility, and financial situation. Each of these variables had a set of indicators which gave varied correlational values as summarized in Table 4.12.

Table 4.12 Correlational values of all indicators of public participation in in urban planning projects

$x_n$	Description	( $\rho_{x_n y}$ )
$x_1$	Internet	-0.07
$x_2$	Public notice boards	-0.02
$x_3$	Newspapers ads	0.16
$x_4$	TV commercials	0.11
$x_5$	Radio classifieds	0.14

Table 4.12 Correlational values of all indicators of public participation in in urban planning projects

$x_n$	Description	$(\rho_{x_n y})$
$x_6$	Delays/time wastage	0.03
$x_7$	Switching difficulties	0.04
$x_8$	Lost/confused	0.01
$x_9$	Crowds/congestion	0.06
$x_{10}$	Overspend on transport	0.10
$x_{11}$	Income	0.16
$x_{12}$	Expenditure	0.14
$x_{13}$	Accrued savings	0.12

*Note.* Since the correlation values of -0.07, -0.02, 0.03, 0.04, 0.01, and 0.06 are statistically insignificant, they are ignored in calculating the overall correlation value (0.13).

The combined influence of the independent variables on the dependent variable is obtained by calculating the mean for the correlation values as shown in Table 4.12. In this regard, the overall correlational value of 0.13 indicates that there is a very weak correlation between the independent and dependent variables.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Introduction

This chapter presents a summary of the findings, conclusions and recommendations of the study. The study had three objectives: to establish how public awareness influences participation in urban planning projects, find out how degree of accessibility influences public participation in urban planning projects, and to establish the influence of one's financial situation on public participation in urban planning projects.

#### 5.2. Summary of findings

The findings of this study are based on a survey carried out in City Square, Muthurwa, and Nairobi Central sub-locations of Nairobi Central Ward. The findings indicate that there is a very weak relationship between the independent variables (public awareness, degree of accessibility, and financial situation) on one hand and public participation on the other hand.

The study established that urban dwellers were generally likely to access information about their city from various sources in a day. The relationship between public awareness and participation in urban planning was also found to be very weak.

It was also established that the inhabitants of NCW often experienced challenges when accessing different places within their city but this had no influence on participation in urban planning projects.

A majority of dwellers in NCW live on less than USD. 6.19 per day and very few had more than KES 38,893.00 in savings. Their monthly income, expenditure and accrued savings were found to have a very small effect (0.14) on their participation in urban planning projects.

The three independent variables were combined to establish their overall correlation with public participation. It was then found that public awareness, degree of accessibility, and financial situation when combine together, have a very weak correlation (0.13) with public participation in urban planning projects.

### **5.3. Discussion of the findings**

This section is divided into four sub-sections: public awareness and participation in urban planning projects; degree of accessibility and participation in urban planning projects; financial situation and participation in urban planning projects; and combined influence of the independent variables on the dependent.

#### **5.3.1 Public awareness and participation in urban planning projects**

The research established that inhabitants of NCW were generally likely to access information about their city from multiple sources in a day. These sources included: the internet, public notice boards, newspapers ads, TV commercials, and radio classifieds. This gives the impression that people living in NCW would likely know what the NCC is up to and when the NCC runs an advertisement through these mediums. One such ad would be invitations to members of the general public to attend a series of open meetings/workshops meant to engage them in planning their city. It is generally thought that if public awareness is present, so should participation be present as well (Babooa, 2008). However, the research established a very weak relationship between public awareness and participation in urban planning.

There are several explanations to this observation. One is to look at the observed phenomenon at an individual's level. Even though one person is likely to surf the internet for information about their city, they might be less likely to listen to radio ads or read noticeboards, newspaper ads among other sources. Therefore, if the NCC runs an ad on radio, it is highly unlikely that someone who rarely listens to the radio yet reads local periodicals will be informed of such an invitation. In addition, being likely to listen to the radio in a day does not translate into listening to multiple radio stations either simultaneously or successively in a day. Hence, though an ad might be running on radio station A at a certain point in time, it might not be doing the same on radio station B where a potential participant is tuned in and at the period when he/she switches to radio station A, the ad might be running on station B or simply just not being aired on station A. Note that Kenya has over 116 radio stations, more than 4 daily newspapers, and at least 10 TV stations. It goes without saying that Kenya is more exposed to hundreds, if not thousands, of international TV stations courtesy of the digital migration.

Also note that such invitations are often run within a very short window of time over a few number of days yet tend to mature in a very short period of time which leads to the

likelihood of people being likely to miss out on such announcements or get to learn about them when it is already too late. Also, a high likelihood of someone seeing TV commercials in a day does not mean that the same person watches TV and hence sees TV commercials all the time to be aware of such invitations.

Another explanation is that even though the inhabitants of NCW might be aware of NCC's invitations, they lack the need to participate: there exists a profound and common need for improving the services being rendered by the NCC yet inhabitants of NCW are simply not sensitive to this need and are yet to be affected to such an extent that they are ready to willingly participate in urban planning projects.

In another case, the public might already be sensitive to this need and hence know it is important to participate but they still do not because the invitations themselves do not clearly highlight the benefits of individually participating in urban planning projects. Note that by highlighting that it is a person's right to participate in a public development endeavor is not the same as noting the benefits of individual involvement in the same project.

### **5.3.2 Degree of accessibility and participation in urban planning projects**

The research established that people living in NCW often experience challenges when moving from one place to another within the city. These challenges included: frequently experiencing time wastage and delays especially when using matatu, taxicabs and personal vehicles as means of transportation within the city, encountering stagnant crowds and human congestion very often, and being compelled to spend more money on transportation than was originally budgeted for very often. Switching between different modes of transportation and the tendency to feel confused in the city were perceived as non-issues. All in all, inhabitants of NCW often experience challenges when moving around the city of Nairobi. The only people who can attend a meeting are those who are both informed of the meeting and can actually access the meeting venue. However, according to this research, there is no relationship between the degree of accessibility of a (meeting) venue and public participation in urban planning projects: if the NCC was to invite inhabitants of NCW to attend a public meeting where they would be required to voice their concerns about Nairobi within the locale of the city itself, two things would be evident. One, the inhabitants of NCW will experience several challenges when trying to access the designated meeting venue. Two, the number of people who attend (or fail to attend) these meetings will not be influenced by these challenges.

One way to explain this observation is that the indicators used to measure the two variables: degree of accessibility and public participation were either inadequate or insufficient. Inadequate in the sense that the indicators used were simply incapable of establishing a correlation between the two variables. Insufficient in that; more indicators were required in order to establish a relationship between them.

### **5.3.3 Financial situation and participation in urban planning projects**

The research found out that the number of people in Nairobi who make KES 38,893 and above were almost equal to those who made less than KES 10,165 per month. A majority of city dwellers live on less than USD. 6.19 per day and very few of them had more than KES 38,893 in saving. It was also established that a big change in a person's income, expenditure and accrued savings would lead to a very small change in the number of meetings/workshops on urban planning that he/she attends. Agrawal & Gupta (2005) established that people who are both economically and socially better-off are more likely to participate in community-level user groups compared to their financially challenged counterparts.

Peter Townsend (1965) argued that poverty is less about shortage of income and more about the inability of people on low incomes to actively participate in their society. In fact, according to Peter Townsend, poverty can be identified as the point in the income distribution at which participation begins to fall disproportionately. Ferragina, Tomlinson, & Walk (2013) went on to further state that the level of public participation tends to decline with falling income until it reaches a floor level where rises or falls in income do not translate into measurable differences in participation. Interestingly, this supposition is exactly what was observed by this research: a big rise or fall in income translates into a minute change in public participation.

This explanation can further be strengthened by looking at Table 4.9 where it is evident that over 70% of the respondents had an income of less than KES 38,893 per month, 82.63% spend less than this amount within the same period of time and only 19.43% had more than KES 38,893 in accrued savings. Also note that a massive 72.67% of the respondents said they had never participated in any urban planning project. This is highlighted in Table 4.3. If poverty is the inability of people on low incomes to participate actively in society (Smith & Townsend, 1965), then this research has established two things. One, a majority of inhabitants in NCW fall under the 'low income bracket' and two, inhabitants of NCW can be regarded as being poor because they hardly participate in society projects like urban planning.

#### **5.3.4 Combined influence of the independent variables on the dependent**

When the three independent variables were combined it was established that they had very weak correlation with public participation in urban planning projects. This observation implies two things. One, the studied factors (public awareness, degree of accessibility and financial situation) do indeed influence public participation in urban planning. Two, there are other variables which have greater influence on public participation in urban planning projects. These were not covered under the research hence the weak correlation observed.

Take for example a variable such as the lack of a desire to improve. Obviously, the only way that people can participate is if they have the desire to do so in the first place (Leach, 2000). This desire should be so strong to the extent that members of the general public become aware of the need to improve (Babooa, 2008). Climate (mood) also influences participation. According to Leach (2000), when both the public and institutions are in favor of participation, then the climate is also conducive for participation. On the contrary, a hostile public or NCC is simply bad for participation. When people voice their concerns, they need to receive feedback in order to participate next time. This feedback lets the people know that their ideas are valued by the implementing body and will thus be synthesized with others before being implemented as a whole (Leach, 2000). Lack of feedback today, leads to poor participation tomorrow. The Nairobi City Council (now the NCC) was notorious for this: it would invite people to participate in forging the kind of city that they wanted, collect their opinions, and then turn around and disregard everything that had been said during the planning and implementation process (Owuor & Mbatia, 2008). Ignoring the public's input once is bad for the next participation exercise. However, this could be resolved by incorporating the public's opinions in the next plan. A repetition or notoriety of the same simply turns the participation process into a mediocre exercise that is not worth attending.

#### **5.4. Conclusion**

It is evident that the NCC sends out invitations to members of the general public to participate in urban planning projects. It is also evident that inhabitants of NCW do not attend these meetings/workshops even though they are likely to access this information from various sources every day. This observation leads the research to conclude that invitations sent out by the NCC fail to reach the targeted guests. A lot of what the people of NCW know about their city comes from sources other than the government of NCC.



It was noted that inhabitants of NCW find the city to be inaccessible. However, this challenge has no influence on their participation in urban planning. Therefore, urban planners should prioritize other issues when inviting members of the general public to attend urban planning meetings/workshops other than the inaccessibility of the city. Further research needs to be done in order to establish what these other issues are.

The overall financial situation of people living in NCW does not favor their participation in urban planning projects. Public participation involves hearing the voices of everyone especially the socially excluded like people in the low income bracket. This poses a dilemma for urban planner: how do they encourage this group to participate in urban planning projects? By adopting innovative mechanisms that encourage participation with anonymity should be adopted. Some of these methods are discussed under the recommendations section.

There are several other factors that influence public participation in urban planning not covered under this study. This research can only speculate on the extent to which these variables might influence participation. Literature on factors that influence public participation in urban planning projects is either limited or just difficult to come by and it would be advisable if more research was carried out in this area.

## **5.5. Recommendations**

The recommendations provided in this section are based on the findings of this research and are meant to encourage public participation in urban planning. These recommendations are:

### **5.3.1 Public awareness, degree of accessibility, and public participation in urban planning projects**

It is recommended that participation in urban planning be made a continuous program (not a once in a while event). Its key objectives should include: gathering views from divergent stakeholders on issues regarding their urban settlement; periodic dissemination of these compiled views and any other relevant information to the public; planning, organizing and hosting of key events such as the launch and adoption of a public-endorsed urban plan. In order to realize these objectives:

1. This proposed urban planning program (UPP) should be conceptualized as being composed of three consultative projects running concurrently with each other. These three projects are: the urban authority initiative (UAI), the expert initiative (EI), and the public initiative (PI).

2. The EI should focus on engaging experts both within and without the urban planning fields like architects, engineers, academics and researchers, the private sector, foundations, financial institutions, among other professionals. Experts know how and what it takes to get things done.
3. The PI project should engage inhabitants of the urban settlement, non-governmental organizations (NGOs), community-based organizations (CBOs), human solidarity groups (HSG), trade unions (TU), the informal employment sector, the self-employed, the unemployed, youth, women, children, the elderly, the disabled, and other marginalized communities.
4. The UAI project should focus on rallying the support of the national executive, county executive, parliamentarians, and county representatives among other democratically elected leaders in advocating for and endorsing a people centered urban development plan.
5. These three projects should interact at several instances in order to complement each other. Adopting and implementing such an UPP will increase public awareness and participation in urban planning activities.

### **5.3.2 Degree of accessibility, financial situation, and public participation in urban planning**

Kenya had 34.8 million mobile phone subscriptions (a penetration level of 85.5%), 18.8 million mobile data subscriptions, 29.1 million internet users (an internet penetration of 71.7%) and there were 6.5 billion text messages sent and received between the period of January and March 2015 (CA, 2015). The CA also noted that there was an increased usage of over the top (OTT) “services such as WhatsApp, Viber, and Hangout, among others” (CA, 2015, p. 16). It is recommended that urban planners should employ these ICT tools to complement activities of the proposed UPP program. These include the use of:

1. OTT services to circulate announcements, gather opinions, hold discussions, and distribute media files and documents. OTT services are generally affordable and easily accessed via internet connected devices such as smartphones, smart TVs, tablets, computers and these are widely available. OTT services conceal people’s identity, body language, socio-economic status, and personal concerns. This instills a sense of anonymity which encourages

the participation of excluded individuals in urban planning activities. Participation via OTT services eliminates the need for physical movement.

2. Social media. Kenyans use the social media to write on issues of their own interests like the condition of their cities. As of June this year, there were at least 4.3 million Kenyans on Facebook and nearly 2.1 million users on Twitter with over 700,000 monthly active users (BAKE, 2015). Advertising on social media is far much cheaper and effective than traditional media, it allows for interactions with the target audience, and its results are measurable making it possible to spot trends and re-align campaigns.

#### **5.6. Suggestions for further research**

It has been established that other variables which might influence public participation in urban planning projects were not covered under the study. Therefore, research that includes these other variables should be conducted in order to get a complete picture of the factors that influence public participation in urban planning projects. In addition, research that includes more indicators under both the independent and dependent variables that were studied herein should also be conducted. This will establish the extent to which public awareness, degree of accessibility, and financial situation influence public participation in urban planning

## REFERENCES

- Agenda 21. (1992). *United Nations Conference on Environment & Development*. Rio de Janeiro: United Nations Division for Sustainable Development.
- Agrawal, A., & Gupta, K. (2005, July). Decentralization and Participation: The Governance of Common Pool Resources in Nepal's Terai. *World Development*, 33(7), 1101-11114.
- Al-Kodmany, K. (1999). Using visualization techniques for enhancing public participation in planning and design: process, implementation, and evaluation. *Landscape and Urban Planning*, 37±45.
- Al-Kodmany, K. (2000). Public Participation: Technology and Democracy. *Journal of Architectural Education (1984-)*, 53(4), 220-228.
- Arimah, B. C. (2009). *Slums as Expressions of Social Exclusion: Explaining the Prevalence of Slums in African Countries*. Nairobi.
- Babooa, S. K. (2008). *Public participation in the making and implementation of policy in Mauritius with reference to Port Louis' local government*. Thesis, university of South Africa.
- BAKE. (2015). *The State of Blogging & Social Media in Kenya 2015 Report*. Bloggers Association of Kenya (BAKE).
- Barnes, M. (2005). *Social Exclusion in Great Britain. An empirical investigation and comparison with the EU*. London: Ashgate Publishing Limited.
- Bastidas, S. (2004). The Role of Public Participation in the Impact Assessment of Trade Process. *Speaker paper for the Impact Assessment for Industrial Development – IAlA'04*. Vancouver.
- CA. (2015). *Quarterly Sector Statistics Report: Third Quarter of the Financial Year 2014/15 (Jan-Mar 2015)*. Communications Authority of Kenya (CA), Nairobi.

- Chase, E., & Walker, R. (2013). The Co-construction of Shame in the Context of Poverty: Beyond a Threat to the Social Bond. *Sociology*.
- Cohen, B. (2006, January–April 20). Urbanization in developing countries: Current trends, future projections, and key challenges for sustainability. (G. Bugliarello, & A. S. George, Eds.) *Technology in Society*, 28(1–2), 63-68.  
doi:10.1016/j.techsoc.2005.10.005
- Croasmun, J. T., & Ostrom, L. (2011, Number 01). Using Likert-Type Scales in the Social Sciences. *Journal of Adult Education*, 40, 19-22.
- Fainstein, S. S. (2014, December 14). *Urban planning*. Retrieved March 12, 2015, from A Encyclopædia Britannica, Inc. Web site:  
<http://www.britannica.com/EBchecked/topic/619445/urban-planning>
- Farmer, P., Frojmovic, M., Hague, C., Harridge, C., Narang, S., Shishido, R., . . . Vogelij, J. (2006). Reinventing Planning: A New Governance Paradigm for Managing Human Settlements. *World Planning Congress*. Vancouver. Retrieved August 28, 2014, from <http://www.globalplannersnetwork.org/pdf/reinventingplanningenglish.pdf>
- Ferragina, E., Tomlinson, M., & Walk, R. (2013). *Poverty, Participation and Choice*. York: Joseph Rowntree Foundation.
- Fiske, S. T. (2009). *Social beings: Core motives in Social Psychology*. Hoboken, New Jersey: Wiley.
- Friedmann, J. (1973). *Retracking America;: A theory of transactive planning*. Anchor Press.
- Friedmann, J., & Huxley, M. (1985). Transactive planning and life space. *Urban Policy and Research*, 3(3), 37-40.
- Gibendi, R. (2014, September 1). KRA postpones roll-out of iTax to March 2015. *Daily Nation*.

- Gollin, D., Jedwab, R., & Vollrath, D. (2013, October 01). Urbanization with and without Industrialization. *The George Washington University, Institute for International Economic Policy*.
- IAP2. (2007). *IAP2: Good public participation results in better decisions*. Retrieved March 17, 2015, from The International Association for Public Participation (IAP2) Web site: <http://www.iap2.org/>
- Janicki, M. (Director). (2014). *Paper City: an Urban Story* [Motion Picture].
- JICA. (2014). *The Project on Integrated Urban Development Master Plan for the City of Nairobi in the Republic of Kenya*. Final Report (DRAFT), Nairobi City County, Nairobi. Retrieved August 28, 2014, from <http://citymasterplan.nairobi.go.ke/index.php/downloads>
- Kaplan, S. (2010). *Social Exclusion and Social Protection: The Role of Creed*. Retrieved March 13, 2015, from <http://sethkaplan.org/doc/ERD%2010,%20Cohesion%20&%20Ideology%20Matter%2011.10.doc>.
- Kenya National Bureau of Statistics (KNBS). (2010). *The 2009 Kenya Population and Housing Census*. Nairobi.
- Kjaersdam, F. (1988). Public Participation in Physical Planning in Denmark. *Journal of Architectural and Planning Research*, 5(2), 163-172.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*.
- Kuria, D., Mwanzia, P., Ngombalu, J., Balla, P., Okoth, S., & Yoachim, A. (2005). *Livelihoods and Gender in Sanitation, Hygiene Water Services among the Urban Poor: Maili Saba Research Report*. Intermediate Technology Development Group.

- Lane, M. B. (2005). Public Participation in Planning: An Intellectual History. *Australian Geographer*, 36(3), 283–299.
- Leach, J. (2000). *Democracy and civil society*. London: Verso.
- Levin, K. A. (2006). Study design III: Cross-sectional studies. *Evidence-Based Dentistry*, 7, 24-25.
- Levitas, R., Pantazis, C., Fahmy, E., Gordon, D., Lloyd, E., & Patsios, D. (2007). *The Multi-dimensional Analysis of Social Exclusion*. Bristol.
- Lipman, B. J. (2006). *The Combined Housing and Transportation Burdens of Working Families*. Washington DC: Center for Housing Policy.
- Litman, T. A. (2008). *Evaluating accessibility for transportation planning*. Victoria Transport Policy Institute, Victoria, Canada.
- Litman, T. A. (2009). *Transportation Cost and Benefit Analysis: Techniques, Estimates and Implications* (2nd ed.). Victoria, Canada: Victoria Transport Policy Institute.
- Lor, P. J., & Britz, J. J. (2007). Is a knowledge society possible without freedom of access to information? *Journal of Information Science*, 22(4), 387-397.
- Macmillan Dictionary*. (n.d.). (Macmillan Publishers Limited) Retrieved September 28, 2015, from Awareness: <http://www.macmillandictionary.com/dictionary/british/awareness>
- Makworo, M., & Mireri, C. (2011, August 11). Public open spaces in Nairobi City, Kenya, under threat. *Journal of Environmental Planning and Management*, 54(8), 1107-1123.
- Mannarini, T., Fedi, A., & Trippetti, S. (2009, December 08). Public Involvement: How to Encourage Citizen Participation. *Journal of Community & Applied Social Psychology*, 262–274.
- Mansuri, G., & Rao, V. (2013). *Localizing Development: Does Participation Work?* Washington DC: The World Bank.
- Mathiesen, K. (2004, June 10). What is Information Ethics? *Computers and Society*, 32(8).

- Mathieson, J., Popay, J., Enoch, E., Escorel, S., Hernandez, M., Johnston, H., & Rispel, L. (2008). *Social Exclusion Meaning, measurement and experience and links to health inequalities: a review of literature*. Institute for Health Research. Lancaster University.
- Mbaka, J., & Otieno, J. (2015, March 06). Kenya: Kidero Unveils New City Master Plan. *The Star*.
- Mpubani, R. (2015, April 22). Why South Africans hate African migrants. *Daily Monitor*. Retrieved May 12, 2015, from <http://www.monitor.co.ug/artsculture/Reviews/Why-South-Africans-hate-African-migrants/-/691232/2693574/-/hocdg2/-/index.html>
- Muiya, B. M. (2014). The Nature, Challenges and Consequences of Urban Youth Unemployment: A Case of Nairobi City, Kenya. *Universal Journal of Educational Research*, 2(7), 495-503.
- Mundy, P., & Huggan, B. (2015, September 28). *Introduction to public awareness and education: Key concepts, tools and approaches*. Retrieved from [www.mamud.com/presentations/001\\_intro\\_to\\_public\\_awareness.ppt](http://www.mamud.com/presentations/001_intro_to_public_awareness.ppt)
- Ngesu, L., Gakuru, A., Gunga, S. O., & Kahigi, C. (2013, July). Factors hindering community participation in the development of ECDE centres. *International Journal of Education and Research*, 1(7).
- NIUPLAN Masterplan. (2014). *Background*. Retrieved March 12, 2015, from Intergrated Urban Development Masterplan for the City of Nairobi Web site: <http://citymasterplan.nairobi.go.ke/index.php/niuplan/background>
- Obiria, M. (2015, May 15). Does minimum wage increase actually help those in need? *Daily Nation*.
- Odhiambo, W., & Manda, D. K. (2003). *Urban poverty and labour force participation in Kenya*. Kenya Institute for Public Policy Research and Analysis (KIPPRA).



- Olsen, C., & St. George, D. M. (2004). *Cross-Sectional Study Design and Data Analysis*.  
College Entrance Examination Board.
- Oltmann, S. M. (2009). *Information Access*. Indiana University, School of Library &  
Information Science, Bloomington.
- Owuor, S. O., & Mbatia, T. (2008). Post Independence Development of Nairobi City, Kenya.  
*Workshop on African capital Cities* . Dakar.
- Plataforma SINC. (2012, December 10). *Just 28% of young people read either online or  
conventional newspapers each day*. Retrieved May 15, 2015, from ScienceDaily:  
<http://www.sciencedaily.com/releases/2012/12/121210080736.htm>
- Republic of Kenya. (2010). The Constitution of Kenya. *Kenya Law Reports*.
- Republic of Kenya. (2013, July 30). The Regulation of Wages (General) (Amendment) Order,  
2013. *Kenya Gazette*.
- Rodrigues, A. (2012, October 01). Youth have increased access to information. *The  
Manitoban*.
- Sabrina, K. (2011). Social Bias: Prejudice, Stereotyping, and Discrimination. *Journal of Law  
Enforcement*, 1(3). Retrieved May 12, 2015, from  
<http://jghcs.info/index.php/l/article/viewFile/62/63>
- Save the Children UK. (2000). *Access for All: Helping to make participatory processes  
accessible for everyone*.
- Shiundu, A. (2015, April 15). Parliament wades into heated debate on tribalism. *Standard*.  
Retrieved May 12, 2015, from  
[http://www.standardmedia.co.ke/article/2000158072/parliament-wades-into-heated-  
debate-on-tribalism](http://www.standardmedia.co.ke/article/2000158072/parliament-wades-into-heated-debate-on-tribalism)
- Sian, S. (2007). Patterns of prejudice: Social exclusion and racial demarcation in professional  
accountancy in Kenya. *Accounting Historians Journal*, 34(2), 001-042.

- Smith, A. B., & Townsend, P. (1965). *The poor and the poorest*. London: G. Bell and Sons.
- Stiftel, B. (2000). Planning Theory. In B. Stiftel, *The National AICP Examination Preparation Course Guidebook* (pp. 4-16). Washington DC, Washington.
- The World Bank. (2015, April 25). *Kenya Overview*. Retrieved June 11, 2015, from The World Bank: <http://www.worldbank.org/en/country/kenya/overview>
- UN DESA. (2014). *World Urbanization Prospects: The 2014 Revision*.
- UN DESA. (2014). *World Urbanization Prospects: The 2014 Revision*. Economic and Social Affairs, . New York: United Nations.
- UNCHS. (2001). *Urbanization: Facts and figures*. New York.
- UNDP. (2006). *World Urbanization Prospects: The 2005 Revision*. New York: United Nations.
- UNFPA. (2007). *State of World Population 2007: Unleashing the Potential of Urban Growth*. New York: United Nations.
- US EPA. (2012, July 31). *CADDIS Volume 2: Sources, Stressors & Responses*. Retrieved March 2015, 10, from United States Environmental Protection Agency (EPA) Web site: [http://www.epa.gov/caddis/ssr\\_urb\\_urb1.html](http://www.epa.gov/caddis/ssr_urb_urb1.html)
- Valaitis, R. K. (2005, October 04). Computers and the Internet: Tools for Youth Empowerment. (G. Eysenbach, Ed.) *Journal of Medical Internet Research*, 7(5).
- WebFinance. (2015). *Accessibility*. Retrieved May 12, 2015, from BusinessDictionary.com: <http://www.businessdictionary.com/definition/accessibility.html>
- WebFinance, Inc. (2015). *Information*. Retrieved May 12, 2015, from BusinessDictionary.com: <http://www.businessdictionary.com/definition/information.html>
- Webler, T., Tuler, S., & Krueger, R. (2001). What Is a Good Public Participation Process? Five Perspectives from the Public. *Environmental Management*, 27(3), 435–450.

- Wiik, T. K. (2014). *Social Exclusion, Urban Poverty and the Vulnerability to Forced Evictions: a Case Study of Kibera, Nairobi*. Department of Political Science. Representralen, University of Oslo.
- World Planners Congress. (2006). Declaration of Principles and Best Practices for Sustainable Urbanization. Vancouver.

## APPENDICES

### Appendix 1: Letter of Transmittal

  
**UNIVERSITY OF NAIROBI**  
COLLEGE OF EDUCATION AND EXTERNAL STUDIES  
SCHOOL OF CONTINUING AND DISTANCE EDUCATION  
DEPARTMENT OF EXTRA-MURAL STUDIES  
NAIROBI EXTRA-MURAL CENTRE

Your Ref: \_\_\_\_\_  
Our Ref: \_\_\_\_\_  
Telephone: 318262 Ext. 120

Main Campus  
Gandhi Wing, Ground Floor  
P.O. Box 30197  
NAIROBI

19<sup>th</sup> June, 2015

REF: UON/CEES//NEMC/22/37

**TO WHOM IT MAY CONCERN**

**RE: BERNARD W. NAMANO - L50/69469/2013**

This is to confirm that the above named is a student at the University of Nairobi, College of Education and External Studies, School of Continuing and Distance Education, Department of Extra- Mural Studies pursuing Master of Arts in Project Planning and Management.

He is proceeding for research entitled "factors influencing public participation in urban planning". A case of Nairobi Central ward.

Any assistance given to him will be appreciated.

  
**CAREN AWILLY**  
CENTRE ORGANIZER  
NAIROBI EXTRA MURAL CENTRE



## Appendix 2: Research Authorization



### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,  
2241349, 310571, 2219420  
Fax: +254-20-318245, 318249  
Email: secretary@nacosti.go.ke  
Website: www.nacosti.go.ke  
When replying please quote

9<sup>th</sup> Floor, Utalii House  
Uhuru Highway  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref: No.

Date:

**10<sup>th</sup> August, 2015**

**NACOSTI/P/15/9234/6850**

Bernard W. Namano  
University of Nairobi  
P.O. Box 30197-00100  
**NAIROBI.**

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "*Factors influencing public participation in urban planning: A case of Nairobi Central Ward,*" I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for a period ending **25<sup>th</sup> September, 2015.**

You are advised to report to the **County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

  
**DR. S. K. LANGAT, OGW**  
**FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner  
Nairobi County.

The County Director of Education  
Nairobi County.

*National Commission for Science, Technology and Innovation is ISO 9001: 2008 Certified*

## **Appendix 3: Factors Influencing Public Participation in Urban Planning: A Case of Nairobi Central Ward – Questionnaire**

### **A. Introduction**

Your views should always be considered before and during any community development project. This is because such projects have a long lasting effect on your community, you as an individual, and future generations to come.

However, there are several factors that might motivate or hinder someone from participating in the planning and implementation of community projects. For example, the Nairobi City County (NCC) recently launched a master plan called: *Nairobi Integrated Urban Development Master Plan (NIUPLAN)*. This plan will guide all development projects and activities in Nairobi City until the year 2030 yet very few people attended public meetings when they were invited by the NCC as it was developing the NIUPLAN master plan.

By accurately filling out this questionnaire, you will assist the researcher, urban planners, community facilitators, and other interested stakeholders to understand how: public awareness, degree of accessibility within Nairobi City, and financial status might influence your participation in urban planning projects. Stakeholders will use this knowledge to take measures that will empower you to be more involved in future planning activities.

### **B. Background Information**

1. Gender (Tick only one):

Male ( ) Female ( )

2. Age (Tick only one):

18 – 35 years ( ) 36 – 53 years ( ) Above 53 years ( )

3. Ethnicity:

---

4. Describe the nature of your disability (if any):

---

5. Occupation:

---

6. Mobile phone number (optional):

---

7. Email address (optional):

---

**C. Public awareness**

8. In a day, how likely are you to: (Tick the most appropriate box)

		Highly unlikely	Not likely	Never	Likely	Very likely
a	Surf the internet for information about Nairobi city?					
b	Read posters on public notice boards?					
c	Read advertisements in newspapers?					
d	Watch commercials on TV stations?					
e	Listen to announcements on the radio?					

**D. Degree of accessibility within Nairobi City**

9. When moving around Nairobi, how often do you: (Tick the most appropriate box)

		Very rarely	Rarely	Never	Often	Very often
a	Experience delays and time wastage when using the following modes of transportation?					
	Walking					
	Bicycle					
	Wheelchair					
	Personal vehicle (car, motorcycle)					
	Taxicab					
	Matatu					
	Boda-boda (motorcycle taxi)					

		Very rarely	Rarely	Never	Often	Very often
	Tuk-tuk (auto rickshaw)					
	Others (Specify)					
b	Experience difficulty when switching from one mode of transportation to another?					
c	Get lost or feel confused in the city?					
d	Experience congestion and/or encounter crowds?					
e	Spend more on transport than was budgeted for?					

**E. Financial Status**

10. What is your gross monthly income? Average monthly expenditure? And how much money do you have in savings? (Tick the most appropriate box)

	Amount (KES)	Gross monthly income	Average monthly expenditure	Accrued savings
a	Less than 10,165			
b	10,166 – 19,741			
c	19,742 – 29,317			
d	29,318 – 38,893			
e	More than 38,893			

**F. Participation in Urban Planning**

11. How many meetings and workshops that involve planning Nairobi City have you ever attended? (Tick only one)

Very few ( )    Few ( )    None ( )    Many ( )    Very many ( )



**Appendix 4 (a): Participants who attended meetings held in Sub-counties when developing the NIUPLAN master plan**

	Date	Attendance	Date	Attendance
Sub County/ District	Focused Groups		Public Meetings	
Kamukunji	Nov 26, 2013	15	Nov 26, 2013	160
	Jan 14, 2014	22	Jan 14, 2014	84
Kasarani	Nov 27, 2013	16	Nov 27, 2013	114
	Jan 08, 2014	19	Jan 08, 2014	74
Dagoretti	Nov 29, 2013	15	Nov 29, 2013	32
	Jan 09, 2014	13	Jan 09, 2014	79
	Dec 2, 2013	18	Dec 2, 2013	95
Lang'ata	Jan 13, 2014	13	Jan 22, 2014	98
	Dec 2, 2013	34	Dec 3, 2013	66
Njiru	Jan 15, 2014	29	Jan 15, 2014	93
	Dec 5, 2013	20	Dec 5, 2013	92
Embakasi	Jan 17, 2013	29	Jan 17, 2014	107
	Dec 4, 2013	42	Dec 4, 2013	70
Makadara	Jan 16, 2014	13	Jan 16, 2014	141
	Dec 11, 2013	18	Dec 11, 2013	82
	Jan 10, 2014	21	Jan 10, 2014	26
Westlands	Dec 9, 2013	18	Dec 17, 2013	108
	Jan 21, 2014	10	Jan 21, 2014	99
Starehe				
<b>Total</b>		<b>365</b>		<b>1620</b>

*Note.* Source: JICA, 2014

**Appendix 4 (b): Participants who attended meetings meant for selected groups when developing the NIUPLAN master plan**

Target Groups	Date	Attendance
Women	Jan 9, 2014	3
Elderly	Cancelled	-
Youth	Jan 9, 2014	8
Disabled	Jan 10, 2014	3
Children	Dec12, 2013	7
Residents Associations	Jan 13, 2013	22
Professional Associations	Jan 14, 2014	8
Business Associations	Jan 14, 2013	4
Implementing Agencies	Jan 23, 2013	7
Regulatory Agencies	Jan 23, 2014	13
Universities	Jan 16, 2014	11
County Executives	Cancelled	-
Kiambu	Mar 4, 2014	30
Machakos	Feb 25, 2014	17
Kajiado	Feb 27, 2014	31
Nyandarua	Mar 5, 2014	27
Murang'a	Cancelled	-
National Level	Cancelled	-
Solid Waste Management	Cancelled	-
<b>Total</b>		<b>191</b>

*Note.* Source: JICA, 2014

**Appendix 5: Summary of Public Advertisement by the NCC and JICA when developing the NIUPLAN master plan**

Information tool	Descriptions
Poster	500 copies of advertisement posters were put on notice boards at City Hall, District Commissioner’s Office and other public places (e.g. bus stop, railway stations, churches, mosques, venue of meetings) across the city at following four different times: August 24, 2013 (for Preliminary SHMs); November 22, 2013 (First Campaign of SHMs); January 3, 2014 (Second Campaign of SHMs); January 13, 2014 (Third Campaign of SHMs)
TV	Four time advertisements in English and Kiswahili were conducted. As of March 2014, following two TV advertisement were done: August 27, 2013 (First Campaign of SHMs); March 19 and 20, 2014 (Civic Education)
Radio	Eight time advertisements in English and Kiswahili were conducted: late of August of 2013; January 9, 2014 (Third Campaign of SHMs); January 13, 2014 (Third Campaign of SHMs); (9 days x 4 times/day = 36 times): March 18, 19, 20, 21 and March 24, 25, 26, 27 and 28 (Civic Education)
Newspaper	Eleven time advertisement in English were conducted (As of March 2014): July 22, 2013 (for First Workshop); July 31, 2013 (for First Workshop); August 24, 2013 (for preliminary SHMs); August 29, 2013 (for preliminary SHMs) ; November 22, 2013 (for 1st Campaign of SHMs); January 3, 2014 (for 2nd Campaign of SHMs); January 13, 2013 (for 3rd Campaign of SHMs); March 7, 2014 (Civic Education); March 14, 2014 (Civic Education); March 21, 2014 (Civic Education); and March 27, 2014 (Civic Education)
Website	Specific website for NIUPLAN study and its SEA was established as follows, <a href="http://citymasterplan.nairobi.go.ke/">http://citymasterplan.nairobi.go.ke/</a> Specific Email Address for Proposed Master Plan, <a href="mailto:citymasterplan@nairobi.go.ke">citymasterplan@nairobi.go.ke</a> Its full-scale operation started on September 10, 2013

*Note.* Source: JICA, 2014

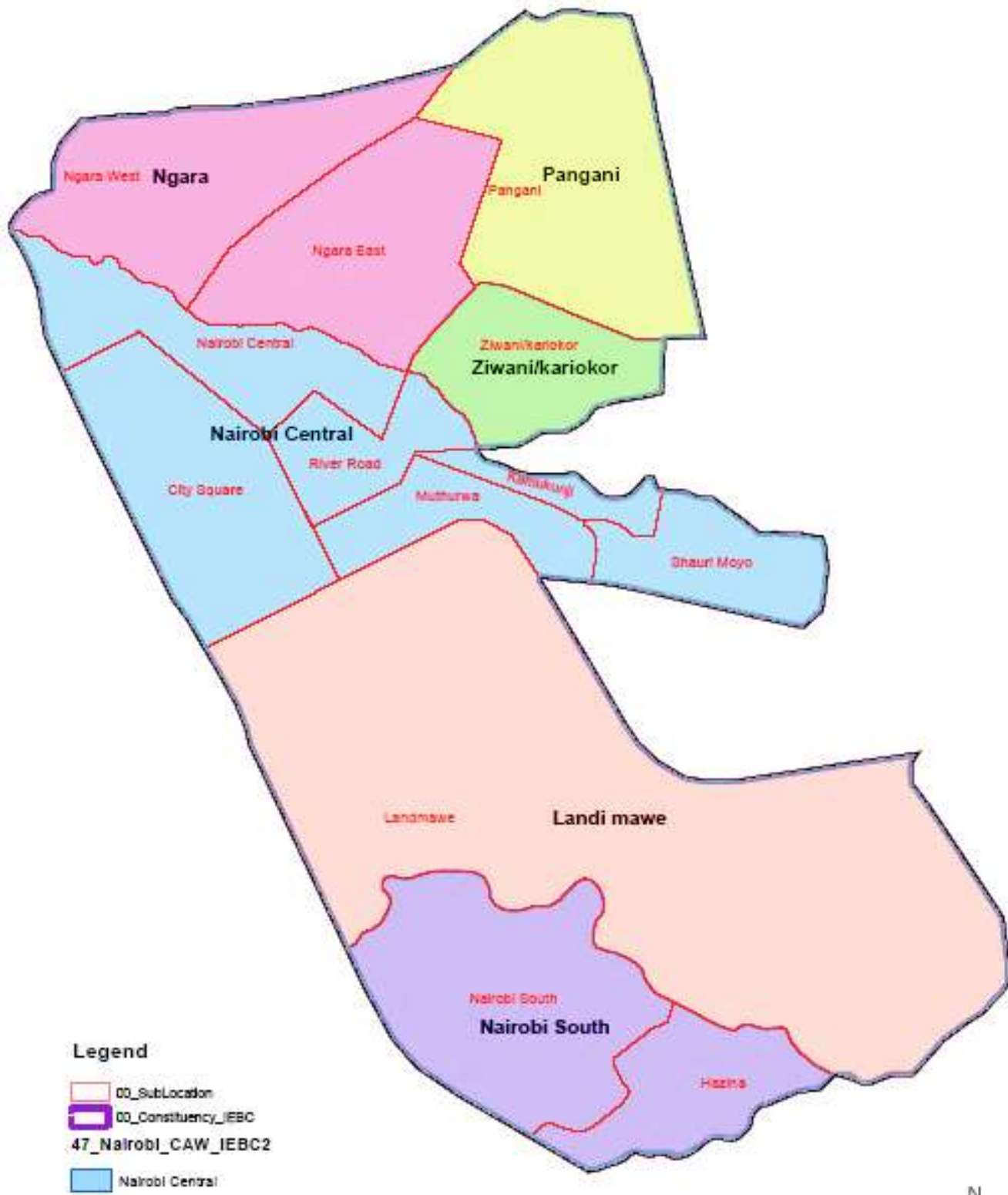


Fig 2 Map of Starehe Constituency (IEBC, 2013)