THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

Environmental Sustainability and Housing Projects: Case of Housing Projects in Nairobi County, Kenya

Olivia Chepkemboi
Masters Student, School of Management and Leadership,
Management University of Africa, Kenya
Nicholas Musonye
Masters Student, School Of Management and Leadership,
Management University of Africa, Kenya
Nyaga Juster Gatumi
Lecturer, School Of Management and Leadership,
Management University of Africa, Kenya

Abstract:
Ensuring environmental sustainability is one the Africa's 2063 Goals. Kenya, being a signatory to the Africa's 2063 Goals by Africa Union (AU), has an obligation to incorporate and integrate the Africa's 2063 Goals by AU into its programs and policies. One of the key things that is lacking in today's environmental planning is African Union cooperation. The environment must be studied, understood and tamed or controlled. Beyond this, man must learn to define his relationship with the nature in more sustainable and friendly terms. This study looked at the Environmental Sustainability and Housing Projects: case of housing projects In Nairobi County. This study was a descriptive research as it investigated factors influencing environmental sustainability of housing projects. This study targeted all gated communities in Nairobi County that were constructed from 2007 to 2019. Regarding sampling techniques, this study applied both probability and non-probability sampling techniques to ensure a good representation in all categories. A simple random sampling technique was adopted for the gated communities. A minimum sample size of 220 respondents was taken. A total of 220 questionnaires were administered to tenants and out of this, a total of 180 questionnaires were returned. This accounted for 82% of all questionnaires distributed. Descriptive statistics showed that Environmental Planning had a mean of 3.45 and a standard deviation of 1.72.Environmental Awareness had a mean of 3.77 and a standard deviation and a standard deviation of 1.01. Environmental Sustainability of housing Projects on the other hand had a mean of 3.12 and a standard deviation of 1.15. Based on the above conclusions, study recommended that another study be done with an ai7m to investigate Factors influencing the adoption of modern technologies that influence environmental sustainability of residential estates, the role of ICT in promoting environmental awareness and adoption of modern technologies that enhance environmental sustainability of residential estates.

Keywords: Environmental sustainability, housing projects, environmental awareness, environmental planning

1. Introduction

There is an increased demand for Housing projects worldwide. The main determinants of the demand for housing projects are demographic. According to "The United Nations 2010 Revision of the World Population Prospects", the world population was at 7 billion in 2011(United Nations Conference on Environment and Development, 2015)

It is predicted that by 2030, the world population will be 8.3 billion with urban areas experiencing exponential population growth. In 2011, Nairobi County had 3.1 million people. It is predicted that by 2022, the population of Nairobi will be 4.8 million people. Owing to this trend of population growth, there is high demand for housing projects and consequently a big boom in the real estate industry today (Doyle, 2018).

The housing projects weigh heavily on the environment and consequently play a noteworthy role in the current global environmental crisis especially with their contribution to greenhouse gases. The greenhouse gases from housing projects are contributed by among other things the burning of fossil fuels like diesel which is used in generators. There is need for substantial reduction in the emission of greenhouse gases as emphasized by Intergovernmental Panel on Climate Change if we are to tackle climate change significantly. However, the more the world population grows, the more there will be big demand for residential estates. This will result into more emission of greenhouse gases especially carbon dioxide which increases carbon footprint and contributes to global warming and climate change.

The rapid population growth which increases demand for housing projects is one of the driving factors for environmental change in Nairobi County. Currently, the parameters of Nairobi and its outskirts are expanding to bursting point due to unprecedented demand for residential estates National Building Maintenance Policy (2015) documented that the rising demand for quality housing and modern posh office space is translating into innovative and futuristic

multibillion-dollar gated communities and mini cities in Kenya. In addition to the already constructed buildings, there are yet mega projects to come in the housing sector. Some of these projects are Northlands City, Tatu City which will accommodate 75,000 people, Thika Greens Limited (TGL) which will have 4,000 housing units in Thika upon completion, Four Ways Junction, Migaa Golf Estate which is a project set on 774 acres of land in Kiambu and it will feature 2,500 homes and Edenville Estate on the outskirts of Nairobi just to name a few (World Bank, 2016).

The housing projects also have considerable impact on the environment as they exploit a lot of natural resources like water and timber. In Nairobi County, water is already a scarce commodity in many households. With the boom in residential estates, more water will be needed. Therefore, if we are to tackle issues of dwindling natural resources, global warming and climate change, housing projects offer one of the largest possibilities of any sector in terms of mitigation (IFAD, 2014).

Ensuring environmental sustainability is one the Africa's 2063 Goals. Kenya, being a signatory to the Africa's 2063 Goals by Africa Union (AU), has an obligation to incorporate and integrate the Africa's 2063 Goals by AUinto its programs and policies. Kenya has endeavored to incorporate and integrate the Africa's 2063 Goals by AU through Kenya Vision 2030 among some of its policies and programs. In Kenya, there have been reforms from the environment point of view in the housing sector taken by various regulatory authorities like NEMA, City Council of Nairobi and Kenya Housing Cooperation as demonstrated in the literature review yet we continue to experience environmental challenges. With the boom in residential estates, it is necessary to review the existing mitigation measures and explore more ways of engaging in environmentally friendly housing projects if we are to tackle the global environmental crisis in a meaningful way; hence this study is timely.

2. Literature Review

2.1. Theoretical Literature Review

2.1.1. Resource Dependency Theory

Prior theorists had argued for the relevance inter-organizational power to strategy and structure (Latta, 1968), but resource dependence theory added an elaborate catalog of organizational responses to interdependence that could inform empirical work. The basic theory might be summarized by a piece of advice to top managers: "Choose the least-constraining device to govern relations with your exchange partners that will allow you to minimize uncertainty and dependence and maximize your autonomy." The array of tactics described by the theory forms a continuum from least- to most-constraining. If dependence comes from relying on a sole-source supplier, then an obvious solution is to find and maintain alternatives. The economic and cultural connections to the biophysical environment of "renewable resource communities" provide another dimension of consideration for resource dependency theory. Resource contamination threatens economic stability and quality of life, thereby producing "resource loss spirals" for victims dependent on harvests of renewable natural resources. Resource-dependency theory extends the scope of resource management to include traditional ethnic knowledge and economic harvesters as stakeholders in an expanded discourse on environmental degradation in the modern world.

2.2. Empirical Literature Review

2.2.1. Environmental Planning and Environmental Sustainability

Environmental planning involves decisions to create a better environment by realizing that natural and human forces play a role in environmental change. Usually, the people involved in this kind of planning get to know all the ways in which the environment is being affected. They then pick out the negative and the positive ones from each (Anderson, 2012). Planning then involves changing the negative and replacing them with more positive ones. It also involves finding out ways of minimizing the damage done to the environment. Since some of the activities that lead to change in the environment are typical day to day activities, it is important to understand that they could impact on the culture, economy, psychology and even the political scene (Afroz & Tuddin, 2015). In this paper, an opinion on the future of environmental planning in Africa taking into account all these factors will be given with an aim achieving 2063 goals.

One of the main issues in Africa is politics. Politics seem to affect many parts of people's lives today in Africa. One of these areas is environmental planning. In most countries in the Africa, policies that affect the general public are made politically (Constantine & Martini, 2014).). These include the decisions in the methods to take care of the environment. When talking about the African future, it is important that the general public understand what environmental planning in Africa entails. This way, they will elect leaders who have policies that aim at protecting the environment. Some of the political stands could involve merely acknowledging the fact that climate change is a happening (Wilson & Hunter, (2013).). This is one of the ways in which politics may help to shape the environmental planning future in Africa.

On a general level, the economy independent on climate (Kamau, 2013). Some of the economic activities carried out today depend directly on the climate of a place. One of these activities is farming. Most industries also release a lot of toxic gases to the environment (Verzuh, 2015). Environmental planning may involve asking those industries to come up with filters or to reduce the amount of gases that are released to the environment. Such reductions in the amounts of gases may lead to a change in the economy of an African country, especially if the industries are large enough to cause significant changes (Brueggeman, & Fisher, 2014). Another way in which environmental planning may affect the economy is when the industry is located near the seas. In this case, deliberate efforts may be made to stop water pollution which could affect the economy.

Psychologically and culturally, environmental protection involves changes on the general lifestyle of a person. Any environmental planning strategy should take into consideration these changes. Some of these changes may affect the culture and the person psychologically. For example, having to use less plastic wraps for food or changing the overall way in which food is wrapped (Mbogo, 2013).

One of the key things that is lacking in today's environmental planning is African Union cooperation. Most African countries experience this without consulting each other. As a result, the environment in Africa is still not spared from the negative effects. Also, it is common for a country's change in environmental policies to affect trade between it and another country. If there is no cooperation between African countries, such change will be futile (Moran, 2008). Another challenge is the lack of expert knowledge at the local level. This usually comes from the lack of engagement between the local people and the experts (Waitathu, 2013). The implication is that people at the local level may not see the need to make any changes even after the plans have been laid out. This challenge also goes to affect a country at the national level.

2.3. Environmental Awareness and Environmental Sustainability

Studies in the different fields of learning are circumstantial. The various fields of human endeavors are products of their times. They emerged to satisfy the needs of the moment. Until a challenge arose, new fields don't emerge, in most cases. Just as students of the past battled with conflict-related issues arising out of colonialism, apartheid, cold wars, nuclear armament etc., the students of today should naturally focus on the natural disasters of today such as hurricanes, tsunamis, cyclones, bush fires, flooding, mudslides, volcanic eruptions, animal poaching, etc. These are the headaches of the current world. So the study of nature-related courses is the gateway to the future of realizing 2063 goals in Africa (OECD, 2014).The environment must be studied, understood and tamed or controlled. Beyond this, man must learn to define his relationship with the nature in more sustainable and friendly terms. Environmental courses are the subjects of the now (Langat, 2014).

According to Education for Sustainable Development: Implementation Strategy (2016) disaster study is an emerging field. It is more or less located in the happenstance of recent natural history all over the world. The global distribution of disaster or natural crisis is such that should command serious attention. From 9/11, hurricane Katrina, the oil spill in the gulf of Mexico, the earthquake in Haiti, the floods in South Africa and Pakistan to the tsunami of Fukushima (Japan) and the accompanying nuclear radiation, the world is daily confronted with disaster and there seem to be no end in sight (Getter & Rowe, 2016).

With the unexplainable disruptions in spatial templates in Iceland and recently, Chile. African countries have to look beyond science and technology for understanding these issues. Studies of today must look into non-traditional sources for explanation of the various natural crises in the earth. The future of African countries now rest more on disaster management than in building sophisticated weapons of warfare (Hoerisch, 2012).

Emergency response, public safety administration, disaster science, hazard policy, emergency preparedness, humanitarian action, all represent labels in the field of studies concerned with disaster and environmental response. Whatever label you attach to programs in the field matter very little (Human Development Report, 2016).). What is important is their function and viability in application. Every African countries or environmental institution approaches the issue base on their understanding and expertise (Martin. & Wallace, 2014).). There is a diversity of methodology in instruction and interpretation. However, the beauty of the whole process is that in this field, you are bound to meet a marriage of disciplines. Psychology, ethics, environment, law, medical aid, sociology, mass communication, performance studies, social media, law enforcement, safety and security, behavioral science, public policy and other fields all come together to define the context of disaster mitigation in a world that increasingly admits new challenges of existence.

Moreover, engagement in a field like this is a bold statement that the days of disciplinary dichotomy is over. What counts today is multi-disciplinary study (Klein, 2009). Science should draw meaning from the arts and knowledge should cross borders. The new society of the twenty first century is one where one does not need to create a fence around what he/she knows. The current emphasis is on open access to knowledge resources for the betterment of humanity (Kimani & Musungu, 2015). Knowledge is now an international commodity and achieves better relevance when it is applicable in non-traditional fields. Multi-disciplinary engagement of development issue is more encouraged now than it has always been because of the benefits derived according to recent research findings (Muigua, 2014).

Where is Africa in all of these? Africa is a notable continent of immense natural resources yet it also accommodates lots of challenges. Most African countries parade massive coastal locations. These coastal sites are potential eruption points. Who can predict when the sea will become angry and spew out volumes of water in an uncontrollable display of natural angst? Not to wait until it happens and turn to a global "crisis" and provide job for international agencies and the media is wisdom in its true sense. What will you do if disaster strikes the next minute, day, month?" represent the question that student of the field of disaster and environmental study try to answer.

2.4. Gaps in Literature Review

There are a myriad of benefits that come with housing projects in Kenya in terms of improving the quality of life of people. However, the housing projects come at an environmental cost as noted above. Efforts are being taken in Kenya to engage in housing projects that are environmentally friendly. For instance, NEMA is encouraging private developers to increase green cover around houses by planting trees among other things which act as carbon sinks. Also, tenants are encouraged to reduce carbon footprint by emitting as little carbon dioxide as possible in their daily undertakings. Reduction of carbon footprint is one of the ways of reducing green-house gases responsible for global warming and climate change. Various private developers and stakeholders in Kenya are being encouraged to go green by adopting eco-homes technology like in the United Kingdom and green building technology.

There is growing development effort to increase housing projects especially in urban areas in Kenya in order to meet the rising number of population and improve the quality of life of people. From the literature review, very little has been said about how environmental planning and awareness by various stakeholders in Kenya influences environmental sustainability of housing projects. This study therefore aims at fulfilling this gap.

2.5. Conceptual Framework

Mugenda & Mugenda (2003) define conceptual framework as a graphic or written upshot that explains using a description or graphics significant variables to be studied and the expected relationships between them. This framework is very vital in sanitizing the study goals, creating research questions, selecting study methods and classifying issues that may overturn the conclusions arrived at by the study. A pictorial representation is presented below.
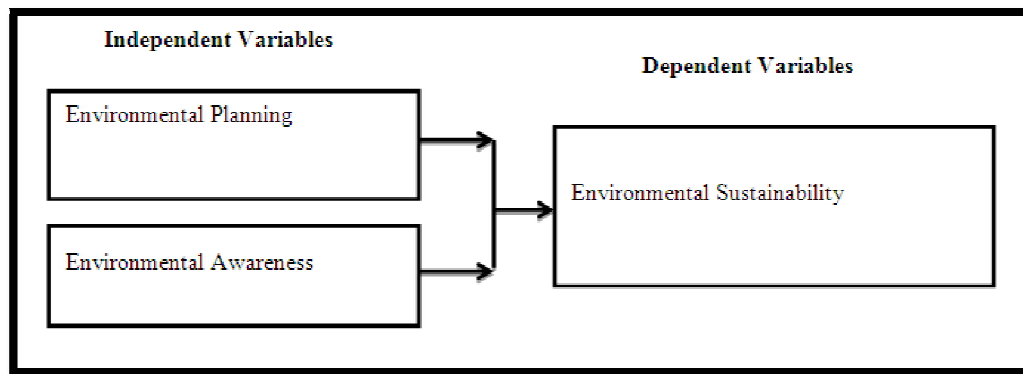

Figure 1: Conceptual Framework

2.6. Hypothesis of the Study

The study was guided by the following hypothesis:
- H01: Environmental Planning has no significant effects on the Environmental Sustainability of Housing Projects.
- H02: Environmental Awareness has no significant effects on the Environmental Sustainability of Housing Projects.

3. Methodology

This study was a descriptive research as it investigated factors influencing environmental sustainability of housing projects. This study targeted all gated communities in Nairobi County that were constructed from 2007 to 2019.Regarding sampling techniques, this study applied both probability and non-probability sampling techniques to ensure a good representation in all categories. A simple random sampling technique was adopted for the gated communities.

The size of the sample was selected as representatively as possible to minimize sampling error. A minimum sample size of 220 respondents was taken. The minimum figure was arrived at after considering the finances available for data collection and the length of time available to collect data. For the population of gated communities, 10% of the total number of 103 gated communities was sampled as guided by Kothari (2008). . In order to ensure validity in this study, there was a pre-test of the interview guides conducted by using ten respondents within the target population before the study was conducted as recommended by Mugenda and Mugenda (2003). As a way of enhancing reliability, the study strove to reduce random error (deviation from true measurement) because an increase in random error decreases reliability. This was done by ensuring accurate coding of data and offering clear instructions to the subjects.

Variable	No. of Items	α = Alpha	Comment
Environmental Planning	10	0.750	Acceptable
Environmental Awareness	10	0.688	Acceptable
Environmental Sustainability	10	0.699	Acceptable

Table 1: Reliability Test Results

The descriptive statistics such as mean, standard deviation and correlation was used whereas the relationship between the study variables was determined using the linear regression model. The regression model was of the form:

$Y = \beta0 + \beta_1 X_1 + \beta_2 X_2 + e$

Where:

Y = Environmental Sustainability

$\beta0$ = Constant

β_1, β_2 = The Coefficient for the independent variables

X_1 = Environmental Planning

X_2 = Environmental Awareness

The findings were presented in tables. Ethical considerations included moral standard and the respondent's consents obtained prior to data collection. In addition, inclusion of the respondents was on voluntary basis. Confidentiality of the information and non-disclosure of the respondents identify was also assured.

4. Results and Discussions

4.1. Descriptive Statistics

A total of 220 questionnaires were administered to tenants and out of this, a total of 180 questionnaires were returned. This accounted for 82% of all questionnaires distributed. A total of 10 questionnaires were distributed to the estate managers and all were returned representing a response rate of 100%. This was a very good return rate as Babbie (2010) recommends that for survey research, 60% response rate is good and 70% response rate is very good and can ensure valid findings. Four officials from four regulatory authorities namely NEMA, Ministry of Housing, Ministry of Water and Irrigation and City Council of Nairobi were interviewed. Out of 180 tenants, there was no respondent in the age group of 18-25; the age group of 26-35 had 38 respondents (21%), the age group of 36-45 had 88 respondents (49%) and the age group of 46-95 had 54 respondents (30%). The age of the tenants was noted as it had some relationship with the possession of cars.

Descriptive statistics shows that Environmental Planning had a mean of 3.45 and a standard deviation of 1.72 implying that the most respondents" opinions were within a maximum of three showing that diversity in views. Environmental Awareness had a mean of 3.77 and a standard deviation and a standard deviation of 1.01 also indicting diversity in respondents "opinions. Environmental Sustainability of housing Projects on the other hand had a mean of 3.12 and a standard deviation of 1.15 which indicates lesser variation in opinions of the respondents. The correlation analysis of the study variables all returned significant relationships with environmental planning and environmental sustainability had r=0.514 and p≤0.05 and environmental awareness and environmental sustainability had r=0.514 and p≤0.05.

4.2. Hypothesis Testing

Hypothesis for this paper were tested at 95% confidence level. To investigate factors influencing environmental sustainability of housing projects, a multiple linear regressions were run and Table 2 shows the summary of the data obtained.

Model	R	R Square	Adjusted R Squire	Std. Error of the Estimate
1	0.721a	0.654	0.523	0.611

Table 2: Model Fitness

Predictors: (Constant), environmental planning, environmental awareness. This model summary table represents an R^2 value of 0.654 which means that environmental planning and environmental awareness explain 65.4% of the total variability in the environmental sustainability. The remaining 38.6% of the variation are explained by other factors including by chance. The further Analysis of Variance (ANOVA) performed on the model gave the results indicated in Table 3.

	Sum of Squares	df	Mean Square	F	Sig.
Regression	14.144	2	436	20.333	.000b
Residual	20.434	178	0.329		
Total	34.545	180			

Table 3: Analysis of Variance

ANOVA results indicate the model is statistically significant (p≤0.05) and strong F value (20.333). This indicates that environmental planning and environmental awareness are significantly related to the environmental sustainability of housing Projects. Environmental sustainability of housing Projects was measured in different ways. The results of tests of regression coefficients are presented in Table 4.

	Un standardized Coefficient		Standardized coefficient		
	B	Std. Error	β	t	Sig.
Constant	0.017	0.411		2.011	0.001
Environmental planning	0.478	0.320	0.115	6.320	0.037
Environmental Awareness	0.714	0.014	0.131	2.142	0.000

Table 4: Regression Coefficients

The model can be fit as: $Y = 0.017 + 0.478 X_1 + 0.714 X_2 + e$

From the results in Table 4, regression coefficient for environmental planning is 0.478 and significant (p = 0.037) which implies that the relationship between Environmental planning and environmental sustainability of housing projects is very strong. Therefore, the null hypothesis that there is no relationship between environmental planning level and environmental sustainability of housing Projects was rejected an indicator that there is a relationship between the environmental planning and environmental sustainability of housing projects.

In addition, regression coefficient for environmental awareness is 0.714 and significant (p = 0.000) which implies that the relationship between Environmental Awareness and Environmental sustainability of housing Projects is very

strong. Therefore, the null hypothesis that there is no relationship between environmental awareness and environmental sustainability of housing Projects was rejected an indicator that there is a relationship between the environmental awareness and environmental sustainability of housing Projects.

From the focus group discussion, the respondents indicated that environmental planning was important in ensuring the environmental sustainability of housing projects inNairobi County. Most members reported that higher environmental planning is very useful in ensuring environmental sustainability of housing Projects in Nairobi County and that why those who are selected as part of the management needed had to have environmental planning.

5. Conclusion and Recommendations

In conclusion, the political, economic, psychological and cultural aspects of African environmental planning have been discussed. From the above, it is clear that one of the main things that needs to be done in Africa is realize what the problems are, then look for means of solving them before 2063. In addition, it is also clear that African cooperation may make the process of environmental planning more effective. Generally, environmental planning can be achieved but it will take time, resources and effort. More academic engagement is needed in this field in Africa now than ever before. Environmental studies arethe future in Africa, if you ask any development oriented persons in Africa. In light of the findings, the study recommends the following areas for further study: Factors influencing the adoption of modern technologies that influence environmental sustainability of residential estates.The financial and economic sustainability of residential estates in Nairobi County. The role of ICT in promoting environmental awareness and adoption of modern technologies that enhance environmental sustainability of residential estates.

6. References

i. Afroz, R., Hanaki, K., & Tuddin, R. (2015). The Role of Socio-Economic Factors on Household Waste Generation: A Study in a Waste Management Program in Dhaka City, Bangladesh. Research Journal of Applied Sciences, 2010, volume 5, 183-190.
ii. Anderson, P. (2012), *The Complete History of US Real Estate Bubbles Since 1800.*
iii. Babbie, E.R. (2010), *The Practice of Social Research,* 12th ed. New York.
iv. Brueggeman, W., & Fisher, J. (2014). *Real Estate Finance and Investments* (5th ed.). New York: McGraw Hill.
v. *Cities and Climate Change,* OECD (2014). Paris.
vi. *Composite Indicators of Environmental Sustainability,* OECD (2014). Prague: Charles University Environmental Press.
vii. Constatini, V., & Martini, C. (2014). A Modified Environmental Kuznets Curve for Sustainable Development Assessment using Panel Data. Int. J. Global Environmental Issues, 10(1/2), 84-122.
viii. Doyle, A. (2018). *Environment Correspondent,* OSLO, blogs.reuters.com/environment.
ix. *Draft National Building Maintenance Policy* (2015). Nairobi: Ministry of Housing, Republic of Kenya. *Education for Sustainable Development: Implementation Strategy,* Nairobi: NEMA, 2016.
x. Getter, K. & Rowe, B. (2016), The Role of Extensive Green Roofs in Sustainable Development. *Journal of Horti Science,* Vol. 41, No.5 pp. 1276-1285
xi. Hoerisch, H. (2012). A Comparative Study on Environmental Awareness & Environmentally Beneficial Behaviour in India. CMS Envis Centre.
xii. *Human Development Report* (2016). United Nations Development Programme, New York: Oxford University Press.
xiii. Kamau, L. (2013). Sustainability in Building & Climate Change. *The Quantity Surveyor Official Journal of the Quantity Surveyors of Kenya.* Vol. 14 Issue 002.
xiv. Kimani, M. & Musungu, T. (2015). Reforming and Restructuring Planning and Building Laws and Regulations in Kenya for Sustainable Urban Development, 46th ISOCARP Congress.
xv. Klein, E. (2009, May 28). Bill Clinton and the Housing Bubble. *Washington Post.* Retrieved 2013-03-20.
xvi. Kothari, C. (2008). Research Methodology: Methods and Techniques 2ed Liberalized Economic Environment", Annals of Public and Cooperative.
xvii. Langat, L. (2014). A Study of Materials Availability for Teaching and Learning Environmental Education in Primary School in Emkwen Location, *Bomet Division. Kericho District:* Kenya.
xviii. Latta, A, (1968). *Introduction to Sustainable Development,* The Tragedy of the Commons, by Garrett Hardin.
xix. Martin-Ortega O., & Wallace R.M. (2014). *International Law* (6th ed.). London: Thomson Reuters (Professional) UK Limited.
xx. Mbogo, S (2013). *Nairobi Gets Taste of Green Architecture.*
xxi. Moran, D.D., Wackernagel, M., Kitzes, J.A., Goldfinger, S.H., & Boutaud, A. (2008). Measuring Sustainable Development – Nation by Nation. Ecological Economics, 64, 470-474.
xxii. Mugenda, O. M., and Mugenda, A.G. (2003), Research Methods Quantitative and Qualitative Approaches. Nairobi: Applied Research and Training Service Press.
xxiii. Muigua, K. (2014). *Environmental Impact Assessment (EIA) in Kenya.* Nairobi.
xxiv. Sustainability of Rural Development Projects. International Fund for Agricultural Development (IFAD), 2014.
xxv. *United Nations Conference on Environment and Development Rio de Janerio,* Brazil, (3 to 14 June 2015). Agenda 21

xxvi.   *Urban Development website of the World Bank.* Retrieved from http://go.worldbank.org PQE9TNVD 10 (accessed November 2016).

xxvii.   Verzuh, E. (2015). *The Fast Forward MBA in Project Management,* New Jersey: John Wiley & Sons, Inc.

xxviii.   Waitathu, N., (2013, Monday, May 20). Poor Funding of Water Storage Returns to Bite Nairobi County. *The Standard.*

xxix.   Wilson, A., Uncapher, J.L., McManigal, L., Hunter, L., Cureton, L.M., Browning, W.D. (2013). *Green Development: Integrating Ecology & Real Estate.* New York: John Wiley & Sons. Inc.