

**INFLUENCE OF IMPLEMENTATION OF REAL ESTATE RESIDENTIAL
DEVELOPMENT PROJECTS ON COMMUNITY LIVELIHOOD IN MURANG'A
COUNTY, KENYA**

BY

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**A Research Project Report Submitted in Partial Fulfillment of the Requirement Award
of the Degree of Master of Arts in Project Planning and Management, University of
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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 any other award in any university or any other institution of higher learning.

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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

I dedicate this Research Project to my dear loving husband David Mbuki and my loving Mum, Dr. Monicah Waiganjo and Dad, Peter Waiganjo. I often felt overwhelmed by my tasks at work and many times failed to prioritize completion of the project but by God's help and the support and encouragement given to me helped me get to the end of it.

Lastly, I dedicate this piece of work to our God for giving me ability, the will, health, strength and peace.

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TABLE OF CONTENTS

Page

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGMENT	iv
LIST OF TABLES	viii
ABBREVIATIONS & ACRONYMS	ix
ABSTRACT	x
CHAPTER ONE:	1
INTRODUCTION.....	1
1.1 Background of the Study	1
1.2 Statement of the Problem	5
1.3 Purpose of the Study	6
1.4 Objectives of the Study	6
1.5. Research Questions	6
1.6 Significance of the Study	7
1.7 Delimitation of the Study	8
1.8 Limitations of the Study	8
1.9 Assumptions of the Study	9
1.10 Definition of Key Terms Used in the Study.....	9
1.11 Organization of the Study	10
CHAPTER TWO:	12
LITERATURE REVIEW.....	12
2.1 Introduction	12
2.2 Concept of real estate residential development project.....	12

2.3 Real estate residential development projects and access to food	14
2.4 Real estate residential development projects and access to Education	16
2.5 Real estate residential development projects and access to Shelter	19
2.6 Real estate residential development projects and access to health.....	22
2.7 Government policies influence on real estate residential development projects	24
2.8 Theoretical Framework	26
2.9 Conceptual Framework	29
2.10 Summary of literature Review and Research Gaps.....	31
CHAPTER THREE:	34
RESEARCH METHODOLOGY	34
3.1 Introduction	34
3.2 Research Design	34
3.3 Target Population	35
3.4 Sampling Size and Sampling Techniques	35
3.4.1 Sample Size	35
3.4.2 Sampling Procedure	36
3.5 Research Instruments	36
3.5.1 Piloting of Instrument.....	37
3.5.2 Validity of Instruments.....	37
3.5.3 Reliability of Research Of Instruments	37
3.6 Data collection methods	38
3.7 Data Analysis Techniques	38
CHAPTER FOUR:	40
DATA ANALYSIS PRESENTATION, INTERPRATATION AND DISCUSSIONS	40

4.1 Introduction	40
4.2 Questionnaire Return Rate	40
4.3 Reliability of Instrument	40
4.4 General Information Of The Respondents	41
4.5 Real estate residential development projects and access to food	44
4.6 Real estate residential development projects and Access to Education	46
4.7 Real estate residential development projects and access to Shelter	49
4.8 Real estate residential development projects and Access to Health.....	51
4.9 Concept of real estate residential development project.....	54
4.10 Regression analysis	58
CHAPTER FIVE:.....	62
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	62
5.1 Introduction	62
5.2 Summary of the Findings	62
5.3 Conclusions	64
5.4 Recommendation.....	65
5.5 Recommendation for further research	66
REFERENCES.....	1
APPENDICES.....	72
Appendix I: QUESTIONNAIRE	72
Appendix II: Budget Estimate for the Project	75

LIST OF TABLES

Table 4.1 Questionnaire Return Rate	40
Table 4.2 Reliability of Instrument	41
Table 4.3: General Information of the respondents.....	42
Table 4.4 Real Estate residential project and Access to food	44
Table 4.5: Real estate residential development projects and Access to Education.....	46
Table 4.6: Mean and standard deviations for access to Shelter	49
Table 4.7 Analyzing Access to Health	52
Table 4.8: Mean and standard of Real estate development.....	55
Table 4.9: Model Summary Representing the Linear Relationship between community livelihood Variables and real estate residential development projects.....	59
Table 4.10 An ANOVA Representing the Linear Relationship Between community livelihood Variables and real estate residential development projects.....	59
Table 4.11 Coefficients Representing the Linear Relationship Between community livelihood Variables and real estate residential development projects.....	61

ABBREVIATIONS & ACRONYMS

NEMA: National Environmental Management Authority

NAR: National Association of Realtors

REITs: Real estate investment trusts

SSA: Sub- Saharan Africa

SPSS: Statistical Package for Social Sciences

SSA: Sub- Saharan Africa

ABSTRACT

Real estate industry is recognized globally for taking a critical role in social, political and economic development. The real estate industry plays primal role in providing employment opportunities, enhancing income distribution and alleviating poverty all over the world. However, the real estate industry in Kenya continues to fail to fulfill this fundamental role due to a number of unique effects it possesses to the society more so in the rural area. The aim of this study was to examine the influence of implementation of Real estate residential development projects on community livelihood in Murang'a County. The specific objectives of the study were; to examine how implementation of Real estate residential development projects influence community's access to health in Murang'a county, to establish the extent to which the Real estate residential development projects influence community's access to education in Murang'a county, to determine how implementation of Real estate residential development projects influence community's access to shelter in Murang'a county, and to establish the extent to which the Real estate residential development projects influence community's access to food in Murang'a county. The study employed a descriptive survey design and the target population for the study was the households that have had to leave their homes for the implementation of Thika greens real estate project in Murang'a County. The target population was sampled using simple random sampling to obtain a sample of 54 Questionnaires were used to collect data which was analyzed using descriptive analysis and findings presented using tables summarized according to the common themes. The regression analysis revealed that every time real estate development projects increased by 1 unit, access to food decreased by 0.238 when all other variables are held constant. When real estate development projects increased by 1 unit, access to health decreased by 0.514 when all other variables are held constant. When real estate development projects increased by 1 unit, access to education decreased by 0.247 when all other variables are held constant and when real estate development projects increased by 1 unit, access to shelter decreased by 0.603 when all other variables are held constant. The study concluded that access to food by the members displaced by real estate development project has been negatively affected as the individuals do not have the ability to produce their own food as they used to before the real estates were developed. The study recommends the implementation of legislation to the set aside of arable land and lease it out to households in an effort to ensure that there is food security and that underprivileged household can produce their own food. Further research should be carried to establish the policy reforms needed to ensure that there is set aside arable land in an effort to promote food security.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The principal types of real estate property globally are categorized as: rural land use consisting of, as per Syagga (2007), farmland, forestry and mineral land. Another real estate property type is urban land that comprises properties that are commercial, residential and industrial. There also exist facilities with special purpose such as petrol stations, recreational facilities, hotels and restaurants, assembly halls and properties belonging to institutions. Factors that affect investment in commercial office property include location, design and rent-able area.

A study conducted by Taylor (2004) found out that the real estate industry development is vital for any nation's general development. The study indicates that it makes contributions to employment, commercial banking development and eventually to the capital markets development. Also, very important is that it increases households' well-being by provision of superior shelter and assists in establishing of individual wealth- wealth that can be utilized in creation of more wealth.

Rapid urbanization has an effect on real estate and subsequently community development as the results of a study conducted by Berry (2000) found out that after transition of America from agricultural land to industrial land the values of urban properties skyrocketed. In urban America, the density paved way to opportunities for development of real estate such as housing, office buildings, industrial facilities, hotels and retail centers.

The shoot of the values of property influenced community development as and pushed people and businesses which could not meet the costs out of the city, Hall (2005). Transportation progress made it easier to move out of the city and suburbs, communities found just outside urban centers increased. Developers made the planned communities desirable by constructing along the transport routes to enable people to easily go to work within cities.

Real estate has always been a huge business in the in the world. After the revolutionary War, different governments began the process of transferring billions of acres of land to private owners through land sales and land grants. In the 1830s the government of America sold twenty million acres for about one dollar and twenty-five cents per acre a price which seems to be cheap now but was expensive then. This led to the formation of lobby groups such as the Free-Soil Movement that asked the government for an alternative land distribution method. It was the first time in the young county's history that there was a system that allowed an owner of land to transfer the rights to the property to another person through sale, lease or trade (Benjamin, 2003).

A study conducted by Hall, (2005) revealed that by the end of the 19th century, America was in transiting from an agricultural society to a manufacturing economy. The study points out that citizens moved to the urban areas for work purposes at the factories that were mushrooming all around. For example, Midwestern industrial center Chicago hit the populace of a million people faster than all other city. Chicago grew from about 1000 residents and became the fifth largest city in the globe by 1900. This is a true reflection of how the real estate development led to rapid urbanization and subsequently community development.

World Bank indicates that the median age of Africans is 19.7 years in 2012 and it is speculated to rise to 25.4 years in 2050 thereby making Africa the continent with the youngest populace. The international trend in relation to populations that are ageing and the subsequent rise in demand for retirement homes is hence unexpected to impact Africa significantly by 2020. Speculations indicate that in 2015, Africa will have a populace of 226 million between the age of 15 and 24. This is predicted to double up by 2045. This young populace will increase growth in housing demand. This might be inclusive of new or upcoming residential subsectors such as housing for students.

Africa is the second largest continent in the world and second most populated with 30.2million Km which translates to 20.4% of the total land on the globe. Mauritius has the highest population on the continent and has 639 people per kilometer whereas Namibia has the lowest population and has 3 people per kilometer. The major impact of continued urbanization will be seen by 2020 and past. The estimation is that Africa's populace will rise to 56% in 2050, making it the region that is urbanizing really fast in the world meaning that previous arable land might be converted for residential and commercial purposes a factor that might have some impact on social economic status of members of the society (PWC, 2014).

Land is the major requirement in real estate development projects yet the same asset (land) is of value to the Kenyan community for agriculture. Housing improvement for the Kenyan populace is of great concern to the government (National Housing Policy, 2004). The concern is impacted on by the fact that enhancement in housing stock is advantageously crucial investment both socially and economically. Additionally, housing that is planned well and infrastructure of accepted quality and affordable cost in combination with fundamental services affords dignity, security and privacy of individuals, the family and the community.

The occurrence of rapid urbanization experienced globally has come about with several challenges, the most important is that the living standards of most people living in the urban areas is deteriorating (National Housing Policy, 2004). Problems of urban housing in Kenya is characterized by severe shortage in dwellings numbers, overcrowding in the available housing stocks and availability of sub-standard human settlements like the slums and squatter settlements.

The construction and building industry in Kenya is well developed and has standard services of engineering, building and architectural design. The industry, as at now is an upward trend because of the execution of programs like the Urban and rural transport Infrastructure plan. The Kenya industry is benefiting from economic growth of the country and the inflow of foreign aid is being regarded as a very promising venture. The government is also heavily investing in this industry in several ways such as the inclusion of the ministry of housing in the government body, availing of funds to the housing ministry; enforcement of laws to do urban planning, regulatory laws in license permits.

According to Mwangi (2002) the severe scarcity in housing supply in Kenya has made landlords charge high rents. Most people in urban areas do not have homes as the owner occupancy level has been decreasing. Even the infrastructural facility provision has not sufficiently fulfilled the demand made by the population that is growing. However, there is a raising interest of rural development especially in the towns surrounding the main cities. This led to the formation of the National Housing Policy which tackles most of the significant matters in relation with delivery of housing in the country. It suggests procedures that will sort the problems related to housing in the rural and urban areas as well. it pays special

attention to groups that are vulnerable and gives dealings towards achieving a favorable environment for delivery of enhanced housing services (National Housing Policy, 2004).

1.2 Statement of the Problem

A study conducted by Arrondel and Lefebvre (2011) found out that sufficient shelter leads to prevention of instability caused by decadence and devastations of people living in slums and informal settlement. Global Monitoring Report (2002), reaffirms these sentiments by indicating that besides social function, housing is as well an investment that contributes directly and indirectly towards reduction of poverty through generation of employment, income raising, enhanced health and increased labor force productivity. A study conducted by Mwangi, (2002) however established that in spite of recent suggestion that the real estate business in Kenya is doing well, certain challenges still persist. The study alludes that these can be broadly categorized as; social, economic, cultural, legal and personal aspects.

Real estate development is taking root in the Muranga County where large farms are sold to investors and real estate residential development projects are set up. These farms initially had communities which grew up here in this place as their rural homes where they would farm their food in farm sections allocated to them, take their children to schools within the County ward, acquire health services in nearby hospitals and dispensary set up by the farm owners and occupy houses set up in the farm. The study will attempt to identify the influence of implementation of real estate residential development projects on community livelihood in Muranga County.

1.3 Purpose of the Study

The purpose of this project is to examine the influence of implementation of Real estate residential development projects on community livelihood in Murang'a County in Kenya.

1.4 Objectives of the Study

This study was guided by the following objectives:

- i) To examine how implementation of Real estate residential development projects influence community's access to health in Murang'a County.
- ii) To establish the extent to which the Real Estate residential development projects influence community's access to education in Murang'a County.
- iii) To determine how implementation of Real estate residential development projects influence community's access to food in Murang'a County.
- iv) To establish the extent to which the Real Estate residential development projects influence community's access to shelter in Murang'a County.

1.5. Research Questions

The study aimed at answering these research questions;

- i) How does implementation of Real estate residential development projects influence community's access to health in Murang'a County?

- ii) How does implementation of Real estate residential development projects influence community's access to education in Murang'a County?
- iii) How does implementation of Real estate residential development projects influence community's access to food in Murang'a County?
- iv) How does implementation of Real estate residential development projects influence community's access to Shelter in Murang'a County?

1.6 Significance of the Study

The hope is that the study findings will be of importance to stakeholders and players Real Estate Industry. The study reveals the authority on community livelihood from the real Estate Residential development projects and is anticipated that this knowledge shall aid them in their processes of decision making as they are projected to improve the factors that have been assessed.

The study will focus on those enterprises in the real estate industry thereby allows other enterprises within same industry to have information that may have an impact on them and hence be in a position to execute the required study recommendation or combat limitations that could have an impact on them from the prescribed solutions. The enterprises will have information on issues that may affect them and hence be able to place measures or blockades to protect them from the issues and deal with the problems before they are affected.

The findings of this study may provide the public a chance to gather information on the real estate industry, hence a reference point. It will also show opportunities of employment portrayed by the industry that they can grab. The information will also be useful to people

who intend to build properties and be home owners. They can refer to the study for the different players in the sector.

Lessons drawn from this study may be utilized by the National and County Governments being the industry regulator because the study hopes to indicate how the regulations that have been implemented impact community livelihood in the real estate industry and hence be of use for future planning, and benchmarking activities in this crucial segment of the economy.

This will be a reference point for researchers in the future as the gathered information will input in their understanding of the aspects and also contribute to consequent studies. It will a foundation and inspires research so as to develop better understanding of impact of implementation of real estate residential development projects on community livelihood.

1.7 Delimitation of the Study

This study was aimed at the implementation of real estate development projects and its influence on community livelihood in Murang'a County. The focus was on Murang'a County because the concept of gated estates in Kenya is relatively new and this concept is being followed in Murang'a County despite being arable for Agriculture. The study was to be carried out between January 2016 and December 2017.

1.8 Limitations of the Study

Some respondents had fear of their intrusion on their privacy. To counter this limitation, the confidentiality of the respondents was guaranteed. To assure them of this, it was clearly indicated on the questionnaire. The respondent's name was not indicated on the questionnaire and this encouraged truthful, frank, honest response without prejudice.

Further to this, the respondents had a busy working schedule and many did not find enough time. In order to counter this limitation, the researcher ensured that the questions were clear and simple this gave the respondent the shortest time possible to respond to the questions. The researcher also picked the best time to issue the questionnaires.

1.9 Assumptions of the Study

It was hoped that the respondents would participate and offer the correct information and that the community groups that previously worked in the farms lacked direct influence over the real estate development projects.

1.10 Definition of Key Terms Used in the Study

Community Livelihood- Structured intervention that gives communities greater control over the conditions that affect their lives. It seeks to enable individuals and communities to grow and change according to their own needs and priorities, and at their own pace, provided this does not oppress other groups and communities, or damage the environment. Community livelihood looks to ensure the society is enabled to access the basic needs on their day to day living which entails access to food, shelter, and basic education and health services.

Real Estate Residential Development projects - Construction projects on a piece of land, inclusive of the air above it and the ground below it, and any building or structure on it. Real-estate can comprise of business and/or residential

properties, and are normally sold either by a middle man or directly by the owner of the property (for sale by owner).

Access to Food; The availability and affordability of sufficient quantities and the appropriate quality of food whose means of supply can be either domestic, imports or through aid.

Access to Education; The capacity of each person to have the same opportunities in regard to education despite the social class, gender, ethnicity or physical and mental disabilities. With well-equipped classes, a 1:30 teacher student ratio and not further than 3km² radius from the residence.

Access to Shelter; The ability of people to live in a secure environment, which has social (hospitals, schools and play grounds) and economic amenities (shops,) within the vicinity and houses that are affordable, habitable; and easily accessible.

Access to Health; The ability of a person to receive affordable health care services from qualified personnel who is equipped with sufficient medical supplies and the right equipment.

1.11 Organization of the Study

The study is organized into five chapters; the first chapter is the introduction that gives the background of the study, a general overview of the research problem, study objectives as well as the research questions. Chapter two examines the past Studies done on the same area while identifying the gaps that this study seeks to address. The independent variables are clearly examined and how they influence similar studies done in the past and the gaps that they left

which is a major concern for this study. In chapter three, research design, target population and data collection tools are outlined. Chapter four includes data analysis, presentation and interpretation while Chapter five discusses summary of findings, conclusions and recommendations.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter begins with broad idea of the real estate industry. The chapter then reveals information regarding influence of implementation of real estate residential development projects on community livelihood in Murang'a County, Kenya alongside the theories that affect real estate development. The chapter also contains the summary of the conceptual framework that shows a picture presentation of the study model.

2.2 Concept of real estate residential development project

Development that is noticeable and the environmental transformation is tied u with and expected on the industry that constructs this is according to Roy (2002). Nwachukwu (2008), emphasizes that the building construction industry is a huge part in the integrating the social and political society and is ranked among the developing economies' budgetary area Hill & Ryan (2004), states that the building construction industry is confirmed to be the corner stone of rapid economic growth of any country. Nwachukwu went on to point out that the products of the construction industry are required mostly for the services they aid in creating. In other words, most business, social, religious, economic, industrial activities, among others function on building infrastructure. As per Eric (2003), the industry has the potential of remaining a major development area as the need for infrastructure provision and replacement becomes more vital in the years to come.

Inexpensive homes targeting the people with low-middle income are coming up in capital cities all through Africa. Since houses are insufficient, these kinds of residential properties give

investors the potential to create good yields this is pointed out by Kelly (2008). Unlike the developed global economies, the African continent has thus far come out unharmed by the credit crunch. The financial system is only exposed slightly to the kind of loans like the sub-prime mortgages that have destabilized financial institutions in the US and Europe thus leading to development of real estate development such as Thika greens. The critical issue surrounding housing project success in Africa is that systems of construction have always been developed on the developed world's experience as contended by Taylor et al (2004). The historical assumption is that systems that come up from a specific experience set in the developed world can be readily borrowed by underdeveloped nations. This kind of thinking became common at the economic growth stage, where the economic emergencies of countries were thought to be similar globally and consistently, hence ignoring national issues, system values or the current and challenges facing the sovereign countries.

Housing projects are not a fixed homogenous state but a change process whereby resource exploitation, technological development orientation and institutional change are made consistent with the future and also the current needs (Molles and Kelly, 2000). Snuri & Frank (2002), asserts that poverty is a big challenge that makes sustainable development elusive for several countries in Africa and most countries fail to benefit from the globalization opportunities. This has worsened the continent's marginalization further. Attaining sustainable development in Africa has had challenges seen in situations such as limited access to market opportunities and inadequate investment in the housing projects hence forcing the developers to concentrate on the low income housing at the expense of quality.

2.3 Real estate residential development projects and access to food

UN-Habitat (2003) reports that in Kenya, per capita availability of food has reduced by over 10% in the last ten years. The policy paper indicates that availability of food and access in Kenya is influenced by the capability of people and households to bring forth their own food in adequate amount and to create income to buy food, the report further points out that areas that were considered arable, are being turned to commercial and residential subdivided parcels. Other contributing factors are the sufficiency of infrastructure, efficiency of systems of food distribution and the affordability of food prices. A major factor that has led to food insecurity in Kenya is the access to and control of productive resources (land, seed and water), governance, legal and regulatory structures, the macroeconomic environment, dynamics of gender, HIV/AIDS and other diseases, emergencies and conflicts.

According to KNBS (2014), availability of food and access in Kenya are influenced by individuals' capability and households to bring forth their own food in adequate amount and to create income to buy food, infrastructure sufficiency, efficiency of the systems of food distribution and the affordability of prices of food. The African Women Studies Centre (2014a), Study shows that approximately 18 per cent or about 7.1 million Kenyans are chronically food insecure, being often or always hungry. The AWSC (2014a) Food Security Baseline Study also found that female headed households were more food insecure than the male headed ones. This could be attributed to various factors such as gender based discrimination, which renders female-headed households more vulnerable to food insecurity and poverty. The study further alludes that women in agriculture come upon many challenges

because of restricted land rights, insufficient education and outdated social traditions which normally limit their capability to enhance the food security status of their households and communities at large. Women also face different forms of discrimination, such as greater reluctance on the part of input providers to lend credit for fertilizer purchases to female headed households in comparison to male headed households as well as fewer opportunities to borrow money or to buy food on credit. Most of the households in Thika greens moved from the land they used to far to *Kiandutu* slum a factor that led to the breakup of many households leading to single families. The study will endeavor to ascertain whether the female led households are facing difficulties compared to their male led counterparts.

The right to own, control and access land is important to both food security and gender equality this is as asserted by Copeland and Guertin (2013). Ownership, control and access to land can ensure that land is used to produce food for household consumption while the surplus can be sold to provide additional income that can be used to purchase food, or meet healthcare and other livelihood needs. They further state that property ownership for women increases their bargaining rights, improves family stability and bolsters household economies. Most international statutes and national constitutions protect gender equality, especially with regard to land and other property rights, this was witnessed in the farms before they were the development of real estate projects.

Half of the world's food is produced by rural women and in 60%-80% developing nations. It is also likely for women to use their earnings on their families' wellbeing such as more nutritious food, children's school fees and health care as compared to men (Yates, 1996). Their study also proclaims that a crucial failing of previous attempts to lower hunger and raise

rural earnings has been the lack of attention to women as farmers, producers and farm workers – both wage and non-wage and especially the rural women who practice small scale farming. All the persons working in Thika greens farm were allocated small farms and were allowed to plant food crops in between the coffee plants at no extra cost, this led to food secure families which had a source of income. This was however taken away when the farm was turned into a real estate venture. Women who farm on small scale signify the majority of rural poor populace in developing nations. Majority of the low earning women live and work in rural areas and their chief source of employment is agriculture. They produce food and cash crop and have several varied tasks. They work on their plots and also other's, they work as workers who are paid or unpaid, employers and employees and as wage-laborers in both on- and off farm enterprises (Meyer & Wieand, 1996).

2.4 Real estate residential development projects and access to Education

Even though free primary education was introduced by Kenya in 2003, several children still cannot access education because of the long distance between home and school and poor learning environments and methods of teaching amongst other challenges because of that, most coffee farms decided to develop academies inside the camps as a motivating factor. Retention and this saw an improvement in retention and completion rates, particularly for girls and susceptible children like orphans (Unicef, 2010). The development of real estate projects pushed most all the children from the school to the nearby slum where about 70-80 percent of household live below the poverty line. Mostly living beyond where the government services are accessible, poor infrastructure in the village and limited education access.

The argument of Hill et al. (2004) is that parents' socio-economic status affects the academic performance and also makes it possible for low background children to compete well with others from high socio-economic background under the same environment academically. Furthermore, the assertion of Smith, Fagan and Townsend (2005) is that noteworthy intellectual performance predictor at the 8 years old includes parental SES, social economic status a factor that was affected by the introduction of real estate project in the parent's area of operation and employment.

The Global Monitoring Report (2002) indicates that family is the most significant locus for making decisions in regard to participation in schooling because here, concepts of gender relations are passed on from generation to generation. Certainly, family, education, culture, socioeconomic status, religion and ethnicity take a crucial part in accesses to education, (Global Monitoring Report, 2002). Consequently, whereas women in several communities take the chief responsibility of taking care of the family, men are associated with work away from home. If families are disoriented through the development of real estate projects, there is a likelihood of education of the children being disrupted this is due to the fact that the major economic endeavor has been disrupted forcing the family to live in deplorable conditions and in most worse cases breakup.

Most of the persons who had access to education in the coffee schemes are forced to take their children to public schools which already are overpopulated. Education access is limited and of poor quality and the curricula is not relevant to the learners' needs and the development of social, economic and culture. This is bearing in mind that emerging industries need entrepreneurs, managers and skilled laborers so as to be competitive in our outdated system of

education, (Sifuna, 2006). Quality education depends on available infrastructure requirements for accessible and gender-sensitive schooling. Creative solutions must be found in situations where children have to travel long unsafe distances so as to get to school (Eileen, 2004). If not, children, will plainly keep off.

A lot of times, public schools have poor water supplies and dirty, broken latrines. In numerous occasions, water and sanitation facilities are not available at all. The health education curriculum is challenged if children cannot practice what they have been taught about drinking of clean water or hand washing. If parents think schools dangerous for their children, they will not send them to school home hence having a negative effect on community livelihood. Improvement of water and sanitation will shift gender disparity in education and also enhance the attainment of health-related Millennium Development Goals. Household poverty also makes access to school difficult. When a country like Kenya has huge debts to pay off, most of its budget goes to repayment of loan and education often is the first victim of cost cutting (Johannes, 2010). Schools that are dilapidated are neither fixed nor replaced, books and other supplies are unavailable, teachers are untrained and are insufficiently paid and fees are high. These conditions allow only few families to send their children to school and in most situations, would not want to send them even if they are capable.

2.5 Real estate residential development projects and access to Shelter

The effect of real estate development on access to adequate housing in developing countries has been seen in sociological, economic and demographic terms. There always exists uncontrolled movement of people from land they once occupied that is harboring real estate projects to areas with resultant outcome on housing thereby shortage of housings, informal settlements growth and urban poverty. Currently in Kenya, the estimate is that 23.3% of the total populace resides in urban areas with 67.7% living in the rural areas. It is also estimated that 60 – 80% of residents of Kenya's largest urban centers like Nairobi, Mombasa and Kisumu reportedly live in informal settlements (UN- Habitat, 2003). It is further projected that more than 50% of populace of Kenya will live in urban areas by 2030 (vision 2030).

A study conducted by UN-Habitat (2003) established that urbanization of poverty in developing nations is most noticeable in the spread and expansion of slums and informal settlement. The characterization of urban poverty is rapid growth of either expensive or substandard housing and slums which is often brought by negligence of already existing houses or decline of residential neighborhood and unavailability of expenditure of capital on existing housing stocks. This trickles down to acute unemployment and underemployment, failure to afford three meals a day, high crime rate and prostitution (World Bank, 2015). The informal housing delivery system in the slums are providing at least basic shelter for the rapidly growing number of urban poor households where the vast majority resides who have been displaced by real estate development. In this case given the prevailing level of income and other constrains, informal settlement can be seen as a solution not a problem because the

informal rental housing is the only mode of providing cheap and affordable housing (UN-HABITAT, 2003).

All is not lost though since housing production and consumption of housing services has multiplier effect on the macro-economy. This is because a flourishing housing sector can contribute to growth of the economy through job opportunities creation in building materials' and construction sector. Sales of building materials and housing services generates revenue at same time improve circulation of currency in the economy Seiler (1999), argues that "rapid urbanization calls for high capital spending on housing to meet the escalating housing demand and this further contributes to better performance of the National economy. This is however short-lived since once the construction is over the services of the construction persons is no longer needed (a lost livelihood is visible in this juncture as a community that once had a constant source of income is left without a stable source)

The location where a person lives, the environment and dwelling type affects the quality of the life of an individual strongly. Arable land and agricultural projects offer varied facilities, services, and housing-market characteristics, and thus varied opportunities and constriction this is according to Brueckner (1997). Aluoko (2011) indicates that each occupant in a residential area has requirements which must be fulfilled in the larger community. Education, transport, worship, health care, shopping and recreation facilities are aspects to be available or in the close vicinity. Choices of location also vary from urban, suburban and rural. Residents who once had all these facilities available and then are taken away from them are bound to experience stress due to their habitat disturbance (Van, 2006).

Following from the empirical study by Townsend (2005), it can be argued that social and economic problems that determine location choices manifest in varied forms. For example, a study by Smith & Ulvund (2002), established that the features believed to be stressful to residents were noise level, degree of crowding, amount of traffic and levels of maintenance for homes and yards. Consistent with this finding, Erbas and Nothaft (2002), avers that difference in locations could influence factors like social status, private goods consumption, the availability of public goods, jobs and other desired destinations, therefore making location a crucial determinant of the quality of housing and domestic wellbeing.

Another lost aspect in when real estates are developed in arable land is convenience. Iman (2011) the study further states that displaced persons loss the convenience due to time and transport cost savings associated with specific locations. This is applicable in the sense that most coffee estates had well organized road networks unlike the slums that the former employees relocate to among the household level commute variables, commute time is negatively related with residential location choice suggesting that people in general try to locate within proximity to social amenities and economic hubs. Nonetheless, this habit seems to be less conspicuous for higher income households and more pronounced for lower income households, maybe since the capability of the higher earning can afford costs of transport (Curtis and Montgomery, 2006).

One of the aspects of family development that coffee plantations schemes had taken care of is the expansion and family development this is largely drawn from the life-cycle model of the family, the assertion of Jansen (2011) was that the family is among the most vital models to explain the choices of housing. In the family lifecycle model, various phases of formation

expansion, contraction and dissolution of nuclear family lead to household size and components and also their preferences on residence and needs. Entry into new stage in the phase can bring about mismatch because features of housing like bedroom numbers may not meet the family needs and preferences. The size of the family and change in structure shift the housing environment demand in various household. Families moving from such housing projects to smaller houses have a great tow on the community livelihoods of the households since they might be forced to squeeze in one small house due to affordability.

2.6 Real estate residential development projects and access to health

Several factors affect the ability of a nation's provision for health services for its citizens (Syagga, 2007), All around the world, governments hold the major responsibility for ensuring equitable access to such services for the populations they govern. While health ministries are vital actors, supporting stakeholders including other government departments, donor organizations, civil society groups or Non-Governmental organizations and the communities themselves also play important roles. Residence of evergreen enjoyed access to health in the firm's dispensary a privilege that was taken away from them. Investments in roads can enhance health service access and civil service reform can create opportunities or limits to hiring more health workers. Kenya as a developing country faces wide and varied challenges in providing health care services, especially in the resource constrained environments within which their governments operate.

From previous studies, it is obvious that the demand for health services far outstrips the available resources and therefore continuous efforts must be made by various stakeholders, to

periodically assess performance of the health system, to strive for continual improvements in quality of health care services provided and increased access to the same by the population. It is evidence that Kitts and Roberts also explain that “difficulties in reaching health facilities, as a result of distances, lack of transportation, or poor roads, are well-documented impediments to care” (World Bank, 2015). The former residence of Thika greens were pushed further from a health facility since the one in their premise was closed hence forcing them to walk a longer distance in search for health service. A study on malaria and visceral leishmaniasis carried out in Baringo showed that distance was a determinant in health care Curtis & Montgomery, (2010).

There were reports of gender differences and 62% of women as compared to 48% of men showed that distance affected their behavior in seeking health. In a situation where there is no health care facility, malaria can be a fundamental problem "many ... have died of illness before getting to hospital" (Roy, (2000),). This directly impacts on maternal health care and contributes directly to the high maternal mortality, as many of child birth complications suffer the same consequence. The effects of real estate development on the healthcare of persons cannot be overemphasized since most of the former beneficiaries are forced to seek for health care services in public hospitals. Implications of health budget cost have been considerable at the level of health services, infrastructure shortages, instruments and human resources now comprise the majority blockage. The biggest identified problems are limited access to finance, geography and poor services, human resource shortage in quality and quantity, low health worker motivation and big gaps in trainings, both initial and continuing, weak management capacity of institutions and inadequate structures of support at central regional and local levels (Munyao, 2013).

What shapes health access to a big extent is the social, economic and physical environments that people live in. Ensuring improvement of daily life conditions from before birth to older ages provides opportunities both to enhance health of the population and lower the risk of diseases related to social inequities (WHO 2012). There is need for comprehensive action across life but scientific consent is considered in giving each child the best start in generation of greatest health benefits. However, these Actions should be universal and be balanced to need so as to level the social rise in outcomes of health. There now exists a significant body of work that insists on the need for a lifetime approach to understanding and solving inequalities of physical health. This will consider the differential experience and social determinants impacts throughout. In addition, there exists a growing body of evidence from high earning nations and also growing in low and middle income countries that show efficient acts can be executed successfully in all nations at all development stages (Mbugua , 2006)

2.7 Government policies influence on real estate residential development projects

The issue of concern is to establish whether there is a relationship between real estate development and community livelihood. This is based on assumption of linear relationship but other factors can bring interplays by moderating or intervening. In this study there are extraneous variables likely to influence the relationship and these are government policy variables related to other development agencies and the socioeconomic status of the target population respectively.

The government is a big force that has effects on business enterprise running. It implements taxes in real estates based on the incomes that sometimes puts off investors. The government

is also a body of regulation and has laws that must be adhered to by real estate businesses such as the planning regulations, land use permits, title deeds for ownership of land and rules that must be adhered to by businesses such as business registration.

The government boosts demand for real estate temporarily by tax credits, deductions and subsidies. Awareness on the current government incentives can aid in determining changes in supply and demand and find out potential trends. In 2009 for example, the American government introduced tax credit on first time home buyers to homeowners so as to jump start sales of homes in a slow economy.

According to the Stephen (2007), only this incentive led to 900,000 people to buy homes. This was a good increase even though not permanent and with no knowledge of the increase being because of tax incentive you may have drawn the conclusion that housing demand was skyrocketing on the basis of these aspects.

Policies are instruments for setting of standards public goods and service provision. They provide protection to consumers, investors and the general public whereas by-laws put controls in place to make sure that urban areas are safe and clean Margret (2005). Berry and Hall (2005) have identified aspects of public policy that are particularly pertinent to availing public housing of low rent in Australia. Van Hubbard (2013) reviewed and assessed the private rental sectors of seven European countries thereby giving an international perspective.

Policies affecting the business environment in Kenya can be grouped into four broad groups that is; macroeconomic policies which include inflation and money supply policies, interest rate policies, credit policies and business income tax, Cleland, & Ireland (2007), there are also incentive policies for example banking and financial laws and requirement on collateral or

security. The institutional policies are licensing, registration requirement, product standards and certification and infrastructure policies including utility development and land policies. Okatch (2002) says that there are three aspects of the political environment which can affect an entrepreneur's ability to carry out its business activity, the influence of pressure group and politics of a country and those of the internal environment do affect business. The government is also a big market for the business community.

The conclusion of these studies is that the projected outcome from investing in residential income property is rising. This enhanced view is related with shift in the policies of the government separate from provision of rental housing to private rental housing provision. Nonetheless, authors contend that investment expansion in residential income property might not result in provision of lower costing housing. Marzluff et al (2011) discuss a similar point when analyzing the reduction and partial restoration of the private rental sector in the UK. Their conclusion is that even though this sectors deregulation was a necessity for healthy rental sector revival, it cannot make sure that there is provision of full range accommodation by itself. This brings up the question, should small income property investors be subsidized to provide low-rent housing?

2.8 Theoretical Framework

The study is guided by Life Cycle Theory, Real Estate Simulation theory and Structural Form Theory. This are explained in the following subsequent themes

2.8.1 Life Cycle theory

This theory was formulated by Arrondel & Lefebvre (2001), it concentrates on the level at which the investment in real estate, mainly home ownership fits with the wealth accumulation

path that is hump shaped projected by the hypothesis of the lifecycle. The issue of macroeconomy is on how investment in real estate impacts the welfare of the general community. The suggestion of the summary proof is that investment in real estate has an adverse effect on community welfare ranging from the social economic to the political welfare of the people. Nonetheless, research in the literature show that the modification of the life-cycle theory is adjusted to comprise of costs of transaction, joint consumption possibility with other goods and investment liquidity.

This theory implies investment in real estate boosts smoothing consumption. The outcome of the results show that variables of standard life cycle like age and permanent earning should be shown in the model model that tries to ascertain the effect of real estate in of income property investment. This study captures the variables in the social effect of real estate investment to the community welfare of Murang'a residents.

2.8.2 Real Estate Simulation Theory

Laibson (2007) developed this theory. It assesses the degree to which markets assist in providing for housing finance across a broad range of nations. Housing is a purchase that requires major financing and the aspects related with housing finance systems that are well functioning are those that aid in providing for long term finance. Additionally, the theory states that nations with legal rights that are stronger for borrowers and lenders via laws on collateral and bankruptcy, systems with deeper credit information and an environment that is macroeconomically stable. Due to the strong economic growth in Kenya, most middle-income

earners have access to house loans as compared to the growth in the Agriculture sub sector where coffee farming falls.

This theory was used by Crook and Kemp (2006) to explain the housing finance differences across upcoming market economies focused on Australia. Another study that applied the theory was by Berry and Hall (2005) who endeavored to ascertain the public policy aspects that are specifically pertinent to low rent cost housing provision across countries that are developed, which have low macroeconomic volatility and comparably broad systems of credit information, difference in legal strength assists in explaining the degree of housing finance.

This Theory will be relevant as it will focus on mortgage characteristics such as the cost of taking out a mortgage as a financial constraint to both the developer and interested parties. The theory will also shed light on the effects of the direct and indirect subsidies, including deductibility of interest, factors with huge effect on the actual costs and subsequent housing project success bearing in mind that some successful housing project will have a negative impact on farming projects.

2.8.3 Structural-Form theory

In the year 2007, Li formulated this theory. It compiles the growth of mortgage finance in SSA (Sub- Saharan Africa) in determination of what steps should be taken to increase it to the middle-class, to help them their needs of housing to the level of affordability. The theory exposed that there have been several problems regarding delivery of formal housing finance among most, if not every country.

This theory was applied by Laibson (2007) who explored the function of private residential income property investors in the provision of low rent housing in the sub-Saharan region. The study revealed that project success is curtailed by a macroeconomic instability record, an extreme institutional, legal and regulatory environment that has led to ineffective, housing asset collateralization of housing assets. The theory was also applied Kotler (2000) who established that; poor public housing banks records, building societies and other housing specialist are damaged because of poor management and unavailability of finance and limited provision for long term financing sources to conduct intermediation that can spread the house cover cost over a comparably long-time period hence guaranteeing project success.

This theory will be applied by the study in an effort introducing legislation that will assist in the separation of arable land and land that can be used for development purposes. It will base its recommendations on mortgage success rate since most buyers buy houses using mortgages.

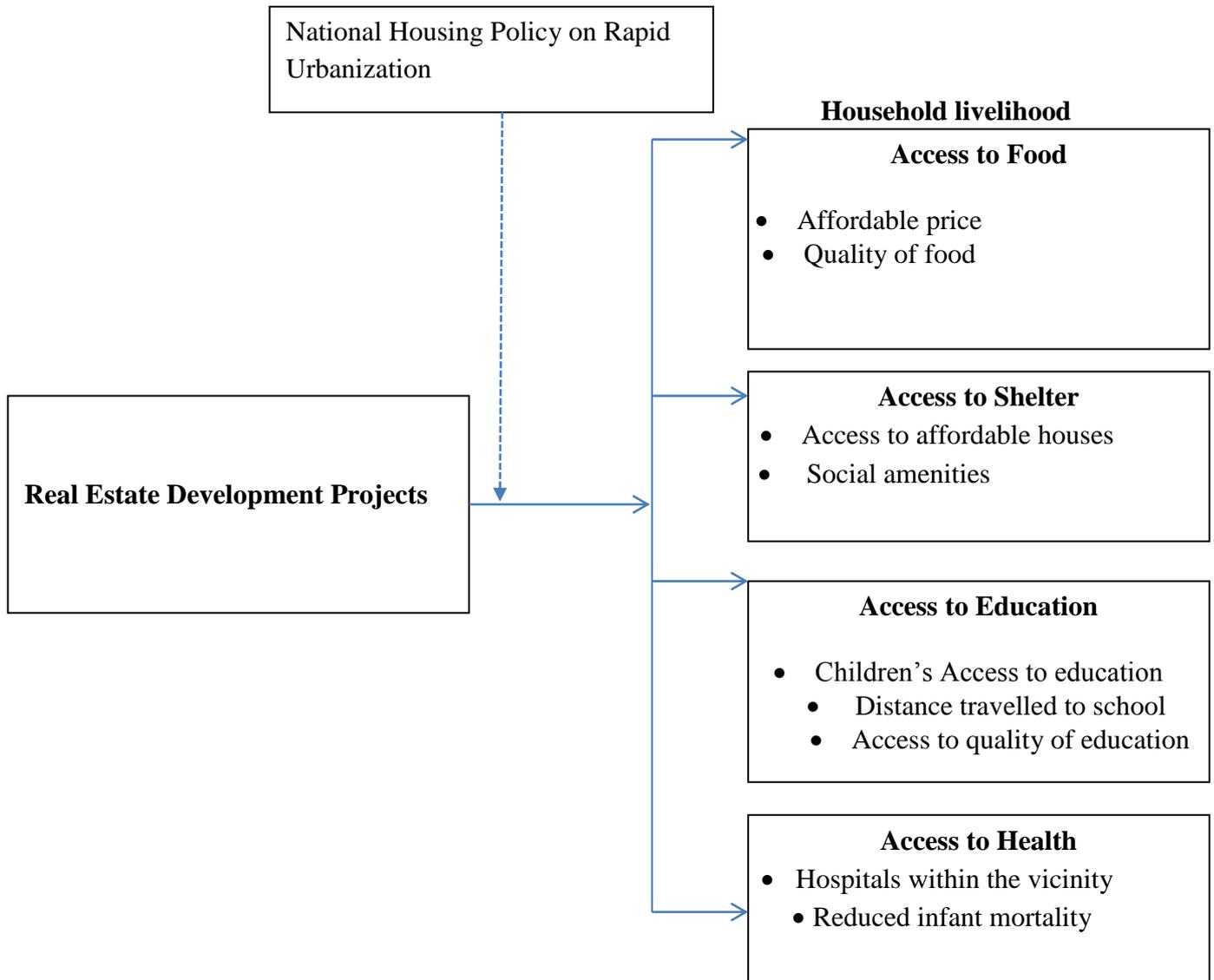
2.9 Conceptual Framework

Real estate development is the dependent variable for this research whereas the independent variables are factors including; access to food, shelter, health and education.

. Independent Variable

Moderating Variables

Dependent Variables



2.10 Summary of literature Review and Research Gaps.

Variable	Year (s)	Title of the study	Findings	Knowledge gap
Access to Food	KNBS (2014)	Sessional Paper No. 1 of 2005 on a Policy Framework for Education, Training and Research	A major factor that has led to food insecurity in Kenya is the access to and control of productive resources (land, seed and water), governance, legal and regulatory frameworks	Study fails to point out the weather how residential properties affect the quantities of food and the quality consumed.
Access to Food	KNBS (2014),	Multiple Indicator Cluster Survey, 2012. Monitoring the Situation of Children and Women; Kitui District	8 per cent of Kenyans are chronically food insecure thus they are always hungry.	The study doesn't show how the trend before and after the people are displaced from their arable land.
Access to Food	AWSC (2014a)		There are several challenges faced by women in agriculture face several challenges because of land right restrictions scarce education and outdated customs which usually limit their ability to enhance the food security status of their households.	The study fails to point out that the same affects male headed households more so the once that have been displaced from areas where they used to farm.
Access to education	UNICEF, (2010).	State of the World's Children 2009	The development of real estate projects in Murang'a pushed all of the children from	Study does not show how the welfare of the children is equally affected

			the resident school to the nearby slum where up to 70-80 percent of household live below the poverty line affecting quality of learning	through lack of quality education
Access to Education	Munyao, W. L, (2013),	Gender Issues Affecting the Girl Child in Kenya	socio economic status (SES) affects the intellectual performance of children at age of 8 years	The study does not show the extent to which the shock in social economic status affects the intellect and the social welfare of a child
Access to Shelter	UN-Habitat (2003)	Modelling Tenants Choices in the Public Rented Sector	Urbanization of poverty in developing countries the main cause in the spread and expansion of slums and informal settlement	The study doesn't measure community welfare using the end user satisfaction as a parameter.
Access to Shelter	Eric(2003),	What works in Girls' Education	The place and how an individual life and the kind of environment affect the quality of a person's life strongly.	The study doesn't vividly interpret the concept of wellbeing
Access to Shelter	Marzluff et al (2011)	An International Perspective on the Interaction between Humans and Nature	A stressful neighborhood resident is measured by the noise level, degree of crowding, amount of traffic and maintenance levels for homes and yards	The study fails to show how the stressful neighborhood affects the welfare though a slum is considered as stressful.

Access to Health	World Bank, (2015)	Food, Education and HIV/AIDS: Engendering Development	The demand for health services far outstrips the available resources	Study fails to point out how this resource available are constrained by closing hospitals due to real estate development
Access to Health	Akinyi et. Al., (2012)	Gender And Education In Kenya And Re-Alignment Of Education To The Constitution Gender	Distance affects women more than the male.	Study fails to point out how the average distance displaced persons have to walk in search for health care services.

CHAPTER THREE:

RESEARCH METHODOLOGY

3.1 Introduction

This chapter will focus on the steps that will be adopted in carrying out the research. It will outline the research design, sampling procedure, methods of collecting and analyzing data as well as ethical considerations prior to data collection. The methodology will help to achieve the research objectives as well as answer the research questions.

3.2 Research Design

The research design employed by the research is descriptive survey. Kothari (2005) explains that research design is a plan, a structure and strategy used in investigating to get to answer the research questions and control variance.

Kothari (2005) defines descriptive survey research as a method of information collection by interviewing or administration of questionnaires to a group of people. The main aspect of descriptive survey research design description of specific features of a large group of people, through questionnaires and is recommended where the researcher wants to establish certain facts about the problem (Kothari 2004).

The design was used because of its descriptive nature to aid the researcher in data collection from sample populace members for estimation of populace parameters purpose.

3.3 Target Population

The target population for the study consisted of 560 households that worked in Wangu farm. This is according to management payroll records provided by a farm supervisor from the farm that was purchased by the investors for construction of Thika Greens Residential homes project in Murang'a County from which a sample will be drawn.

3.4 Sampling Size and Sampling Techniques

This section describes the sample size and sampling procedure that was used to conduct the study. These are further explained in the following sub sequent sub themes.

3.4.1 Sample Size

The sample size for this study was 58 households. 54 are from farmer's households while 4 are from Farm supervisor's households. Purposive sampling was utilized to choose the primary informants such as the house hold heads in the supervisory role. A sample is a smaller group or sub-group gotten from the accessible populace Mugenda Mugenda (2008), the sub-group here was selected keenly to represent the entire populace with the pertinent features. Individual members or cases in the sample is known as subject, respondent or interviewee. In the study therefore, representative percentage are used for farmer's households. According to Mugenda Mugenda (2003) if well chosen, a sample size of between 10-20 percent of the populace is sufficient for finding generalization of findings to the whole populace provided that the sample size is objectively selected. This translates into a sample of 56 respondents as shown in table 3.1

3.4.2 Sampling Procedure

Simple random sampling was used to select samples that participated in this study. This design was preferred because the community that left the Wangu farm for the sake of construction of Thika greens moved to one locality. Respondents were randomly selected and given an equal chance of participating; the data collected was generalized to the entire population in the area hence bias selection was eliminated. The researcher gave numbers to all dwellers in this area.

The sample size is as shown in the table below

Table 3.1: Sample size distribution

Location	Population	Sample Proportion %	Sample Size
Farmer's	554	10	54
Households			
Supervisor	4	Purposive selection	4
Totals	560		58

3.5 Research Instruments

The study employed questionnaires as the key tool of collecting data. The questionnaire is subdivided into six sections. The first section focused on personal aspects of the respondents while the other five sections each focused on a single research objective. The research objectives are on real estate residential development projects influence community's access to health, community's access to shelter, community's access to food and community's access to education in Murang'a County This research utilized a structured questionnaire to collect the primary data. A questionnaire is a document with a set questions intentionally designed to get

respondents to answer them or informants of research for the sake of data or information collection.

3.5.1 Piloting of Instrument

The researcher identified a community with the same characteristics as the community of study and administers the questionnaires. The researcher ensured that they can answer and collect and analyze the responses. In the case that the respondents cannot answer, the pilot study permitted for pre-testing of the research instrument and therefore the issues were addressed and the questionnaire administered again until the pilot group could answer the questionnaires. The study selected a pilot group of 3 people from the targeted population from to test the research instrument reliability. The rule is for 1% of the sample to constitute pilot test (Kothari 2005). The pilot data was not inclusive of the actual data,

3.5.2 Validity of Instruments

The overriding principle of Validity is that it focuses on how a questionnaire or assessment process is used. The researchers looked at the phrasing of the questions, for clarity and vagueness in relation to addressing the objectives? Expert opinion was sought to make a comment on the importance and suitability of questions and give advice for correction that require to be made to make up of the research instruments.

3.5.3 Reliability of Research Of Instruments

The researcher ensured that the questions in the questionnaire achieve the objectives of the research by subjecting the questions to the supervisor. The questionnaire was tested and re-tested and the first results analyzed as well as the re-test results to ascertaining consistency of

responses collected by the instruments. Reliability means the preciseness of the measurement procedure. It measures the research instrument level to ensure it gives consistent outcomes. The author states that the concern of reliability is with degree estimates to which measurement is free of random or unstable error.

3.6 Data collection methods

In relation to the data collection procedure, after the proposal was approved by the school's academic board. A permit was sought and an assistant booked an appointment with the respondents to administer the questionnaire. A timetable was developed for data collection. The respondents were assisted by the researcher in understanding and interpreting the data collection instruments as the questionnaires were delivered and the respondent answered as the researcher waited.

3.7 Data Analysis Techniques

Data analysis refers to various precise procedures and methods. Data analysis comprises objectives, correlations, making of decisions and ideas further to work with the real data itself. In simple terms, analysis of data comprises methods of working to back up the objectives and research plans. An efficient process of analyzing data is functional, that is, it is important and adds value to the services of the organization and personal practices.

Qualitative data collected was analyzed using discourse analysis whereas quantitative data was analyzed using descriptive and inferential statistics. The form of descriptive statistics was mean and standard deviation whereas inferential statistical methods used are both correlation and linear regression analysis.

To establish the impact of the independent variable on the dependent variable, a linear regression analysis was used.

The formula;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \text{ Where;}$$

Y= the dependent variable (Real estate development projects)

α - Is a constant. It's the Y value when all the predictor values (X_1, X_2, X_3) are zero.

$\beta_1, \beta_2, \beta_3$ – Are constants regression coefficients that represent the condition of the independent variables to the dependent variables. X_1 = access to food; X_2 = access to health; X_3 = access to education, X_4 = Access to shelter and ε - (Extraneous) Error term that explains the result variability of other factors not accounted for.

CHAPTER FOUR:

DATA ANALYSIS PRESENTATION, INTERPRATATION AND DISCUSSIONS

4.1 Introduction

In this chapter, the study results are presented in line with the study objective using theme and sub-thematic areas which include: projects of real estate residential development and access to food, real estate residential development projects and access to education, real estate residential development projects and access to shelter and real estate residential development projects and access to health. It represents the findings of the study, influence of implementation of real estate residential development projects on community livelihood in Murang'a County, Kenya.

4.2 Questionnaire Return Rate

The study administered 58 questionnaires to respondents out of which 55 were returned and filled correctly making a response rate of 94%. The 94% response rate was considered adequate given that it was over and above 70% recommended by Mugenda and Mugenda (2003). The study was therefore allowed to continue. This is further presented in Table 4.1

Table 4.1 Questionnaire Return Rate

Location	Sample Size	Response Rate
Farmer's Households	54	52
Supervisor	4	3
Totals	58	55

4.3 Reliability of Instrument

The instrument's reliability was determined by use of Cronbach Alpha. According to Donald Kisilu & Delno (2003), a Cronbach alpha of at least 0.700 implies there is adequate internal

consistencyreliability of the test instrument. A Cronbach alpha test was carried out to check the validity of the responses from the pilot test. The pilot test results revealed that the data collection instrument was reliable and valid as only a few amendments were made after the pilot test and every response recorded a Cronbach alpha outcome greater than the minimum 0.700 hence the internal consistency of the data collection instrument was adequate.

The result of the reliability test is presented in table 4.2

Table 4.2 Reliability of Instrument

Construct	Cronbach (α)
Access to Food	0.899
Access to Education	0.761
Access to Shelter	0.849
Access to Health	0.864

4.4 General Information Of The Respondents

The study was interested in knowing the general information of the respondents in terms of gender, age, education level and house hold size.

Demographics influences property ownership. One of the best models that can be utilized in explaining of a house choice is the family. The family life cycle model shows various formation, expansion, contraction and dissolution of a nuclear family which lead to change in household size and composition and also their residential preferences and needs. Change into new stage within the cycle can lead to mismatch because housing features like bedroom

numbers, will not be the family requirements and preferences. The size and structure of the family change housing environment demand in various household life cycles.

The findings are presented in table 4.3.

Table 4.3: General Information of the respondents

General Information	Frequency	Percentage
About Respondent	(f)	(%)
Gender:		
Male	22	40
Female	33	60
Total	55	100
Age:		
18-24	2	4
25-30	7	12
31-35	20	37
Over 35	26	47
Total	55	100
Education Level:		
No Formal Education	5	9
Tertiary Education	8	15
Secondary Certificate	34	62
Diploma	8	14
Total	55	100

House Hold Size:		
Less than 3	4	8
3-5	3	5
3-5	36	66
Over 8	12	21
Total	55	100

On gender, out of 55 respondents who participated in the study 33 (60%) were female while 22 (40%) were male. Since the study was focusing on community livelihood, females are more likely to be found in the households than male and hence the higher number of female respondents.

On age, out of the 55 participants who responded, 2 (4%) fell in the age bracket of 18-24 years, 7 (12%) fell in the age bracket of 25-30 years, 20 (37%) fell in the age bracket of 31-35 years and 26 (47%) fell in the age bracket of over 35 years. This information revealed that 53% of the respondents are at their productive age thus they had spent most of their productive age in Thika greens farm.

As far as the educational level is concerned, the study revealed that 5 (9%) had no formal education while 8 (15%) had tertiary education, 34 (62%) of the respondents had acquired a Secondary education certificate while 8 (14%) had a diploma Certificate. This findings indicate that 52 (76%) have high education levels and therefore their participation in coffee farm production was expected to be high.

Respondents were asked to indicate their household size as part of the demographic characteristics that would help ascertain the number of people affected by the introduction of Thika greens. According to the findings of the study, 4 (8%) had less than 3 members in their households, 3 (5%) had 3-5 members in their households, 36 (66%) had 6-8 members in their households while 12 (21%) had over 8 members in their households. The study results indicate that most households have over 3 household members to feed and therefore removing them from the farm where they were earning their livelihood without any assured income generating activity could spell disaster to most of the household.

4.5 Real estate residential development projects and access to food

The first objective this study was out to achieve was to determine how the implementation of real estate residential development projects influences community's access to food. To achieve this objective, the study used a Likert scale of 1-5 which was presented to the respondents to select the items that represent their opinion where; strongly Agree = 5, Agree = 4, Uncertain = 3, Disagree = 2 and Strongly Disagree = 1. The study findings are presented in table 4.4

Table 4.4 Real Estate residential project and Access to food

Item	S. Agree		Agree		Uncertain		Disagree		S. Disagree		Mean	S.d
	N	%	N	%	N	%	N	%	N	%		
Quality of food	9	16%	37	68%	3	5%	6	11%	0	0%	4.2	0.8469
Availability of food	7	13%	37	68%	6	11%	4	8%	0	0%	3.9	0.9595
Your ability to produce your own food	3	5%	41	74%	9	16%	3	5%	0	0%	4.2	0.8052

In item one, Development of Thika Greens estate's effect on Quality of food, the majority of the respondents i.e. 46 which is 84% agreed that development of Thika Greens has affected quality of food. Only 6 which is 11% disagreed and 3 (15%) were neutral.

In item two, Thika Greens estate's effected on availability of food, the majority of respondents i.e. 44 which is 81% agreed that development of Thika Greens has affected availability of food. Only 4 which is 8% disagreed and 6 (11%) were neutral.

In item three, Development of Thika Greens estate's effected onesability to produce their own food, the majority of the respondents i.e. 44 which is 79% agreed that development of Thika Greens has affected ones ability to produce their own food. Only 3 which is 5% disagreed and 9 (16%) were neutral. This is in accordance with the study carried out by Copeland and Guertin (2013) who indicate that the right to own, control and access land is key to food security and gender equality.

The study findings revealed that the development of Thika greens has effected the majority's access to food for the former farmers of the coffee plantation who were replaced by the estate. The study reveals that this people may continue to suffer as a result of real estate development. All the parameters measured i.e. quality, availability and the ability to produce food scored high mean scores in the five point likert scale ranging from 3.9 lowest to 4.2 highest. The respondents ability to produce food was highly hampered since before they used to be apportioned some land to conduct farming to which the quality was determined by their practices. This was no longer the case as the respondents had to buy food from Kiosks thus compromising the quality and quantity.

This confirms the study conducted by KNBS (2014), which indicates that availability and access of food in Kenya is affected by the capability of people and households to produce their own food in adequate amount and generate income for purchase of food. This is also in line with the study conducted by The AWSC (2014a) Food Security Baseline Study which found that female headed households were more insecure about food than the male headed ones. They attribute this to various factors such as gender based discrimination.

4.6 Real estate residential development projects and Access to Education

The second objective this study was out to achieve was to determine how the implementation of real estate residential development projects influences community's access to education. To achieve this objective, the study used a Likert scale of 1-5 which was presented to the respondents to select the items that represent their opinion where; strongly Agree = 5, Agree = 4, Uncertain = 3, Disagree = 2 and Strongly Disagree = 1. The study findings are presented in table 4.5

Table 4.5: Real estate residential development projects and Access to Education

Item	S. Agree		Agree		Uncertain		Disagree		S. Disagree		Mean	S.d
	N	%	N	%	N	%	N	%	N	%		
Access to free primary education	10	19%	24	43%	0	0%	18	33%	3	5%	4.233	0.6789
Long distance travelled to school	8	14%	36	66%	6	10%	0	0%	6	10%	4.134	0.7279

Poor quality of education	25	45%	19	35%	8	15%	0	0%	3	5%	4.763	0.7112
Over congested classroom	13	24%	29	52%	3	5%	10	19%	0	0%	4.218	0.6789
Unfavorable learning environment	8	14%	16	29%	18	33%	0	0%	13	24%	4.321	0.7279
Assault incidents on children on their way to school	12	21%	36	66%	3	5%	4	8%	0	0%	4.233	0.6789

In item one, Development of Thika Greens estate's effect on access to free primary education, the majority of the respondents i.e. 34 which is 62% agreed that development of Thika Greens has affected access to free primary education. Only 21 which is 38% disagreed .

In item two, Development of Thika Greens estate's impact on long distance travelled to school, the majority of the respondents i.e. 44 which is 80% agreed that development of Thika Greens has impacted on the long distances travelled to school. Only 5 which is 10% disagreed and 6 which is 10% were neutral.

In item three, Development of Thika Greens estate's effect on poor quality of education, the majority of the respondents i.e. 44 which is 80% agreed that development of Thika Greens has influenced the poor quality of education offered while 3 which is 5% disagreed and 8 which is 15% were neutral.

In item four, Development of Thika Greens estate's impact on over congested classrooms, the majority of the respondents i.e. 42 which is 80% agreed that development of Thika Greens

has had an influence on the over congestion in the classrooms while 10 which is 19% disagreed and 3 which is 5% were neutral.

In item five, Development of Thika Greens estate's effect on unfavourable learning environment, 24 of the respondents which is 43% agreed that development of Thika Greens has impacted on the unfavourable learning environment. 18 which is 33% were neutral while 13 which is 24% disagreed with this statement.

In item six, Development of Thika Greens estate's effect on assault incidents on children on their way to school, 48 of the respondents which is 87% agreed that development of Thika Greens has impacted assault incidents on children on their way to school. 4 which is 8% were neutral while 3 which is 5% disagreed with this statement.

The study revealed that Thika green estate had a great negative effect on education quality as the majority of the respondents thought that quality was compromised since this parameter had the highest mean score of 4.7. This confirms the study carried out by Johannes (2010) who indicates that very often; public schools have water that is polluted and dirty and latrines that are broken. In most cases, there is no water or sanitation at all thus affecting the quality of education received.

The respondents also indicated that the estate has led to an unfavorable learning environment for their children as the access to the free primary education was hampered with many reported cases of assault on children on their way to school. These parameters had mean scores of 4.3 high and 4.2 low. The respondents also indicated that their children were faced with the menace of over congestion and despite the children traveling long distances to school. The entire variable recorded high scores of 4.0 and above a clear indicator that the

access to education was affected by the introduction of Thika greens estate. This confirms the study conducted by Johannes (2010) .

4.7 Real estate residential development projects and access to Shelter

The third objective this study was out to achieve was to determine how the implementation of real estate residential development projects influences community's access to shelter. To achieve this objective, the study used a Likert scale of 1-5 which was presented to the respondents to select the items that represent their opinion where; strongly Agree = 5, Agree = 4, Uncertain = 3, Disagree = 2 and Strongly Disagree = 1. The study findings are presented in table 4.6

Table 4.6: Mean and standard deviations for access to Shelter

Item	S. Agree		Agree		Uncertain		Disagree		S. Disagree		Mean	S.d
	N	%	N	%	N	%	N	%	N	%		
Access to affordable houses	9	16%	37	68%	3	5%	6	11%	0	0%	3.793	1.0016
Access to good quality houses	7	13%	0	0%	7	12%	4	8%	37	67%	2.069	0.9498
Access to social amenities such as playgrounds for children	3	5%	0	0%	8	15%	41	74%	3	5%	2.897	0.8496
Access to facilities such as toilets and bathrooms	12	21%	0	0%	3	5%	36	66%	4	8%	3.069	1.0543
High crime rates in your new residence	3	5%	41	74%	9	16%	3	5%	0	0%	3.897	0.928
Mushrooming of informal settlements	9	16%	41	74%	3	5%	3	5%	0	0%	4.138	1.2311

In item one, Development of Thika Greens estate's impact on affordable houses, the majority of the respondents i.e. 46 which is 84% agreed that development of Thika Greens has impacted on affordable housing. Only 6 which is 11% disagreed and 3 (5%) were neutral.

In item two, Thika Greens estate's influence on access to good quality houses, the majority of respondents i.e. 31 which is 75% disagreed that development of Thika Greens has influenced the access to good quality houses. 7 of the respondents which is 13% agreed and 7 13% were neutral.

In item three, Development of Thika Greens estate's impact on access to social amenities such as playground for children, the majority of the respondents i.e. 44 which is 79% disagreed that development of Thika Greens has impacted on the access to social amenities such as playgrounds for children. Only 3 which is 5% disagreed and 8 which is 15% were neutral.

In item four, Development of Thika Greens estate's impact on access to facilities such as toilets and bathrooms, the majority of the respondents i.e. 40 which is 74% disagreed that development of Thika Greens has impacted on access to facilities such as toilets and bathrooms, 12 of the respondents which is 21% disagreed and 3 (5%) were neutral.

In item five, Development of Thika Greens estate's influence on high crime rates in the new residence, the majority of the respondents i.e. 44 which is 79% agreed that development of Thika Greens has influence high crime rates in the new residence. Only 2 which is 5% disagreed and 9 which is 16% were neutral.

In item six, Development of Thika Greens estate's impact on mushrooming of informal settlements, the majority of the respondents i.e.50 which is 90% agreed that development of Thika Greens has impacted on mushrooming of informal settlements. Only 2 which is 5% disagreed and 3 which is 15% were neutral.

Most of the respondents agreed that the development of Thika green estate led to the mushrooming of informal settlements as this parameter had a high mean score of 4.1 followed by the increase in crime rates in the area with a mean score of 3.89. On a rather positive note, the respondents felt that Thika greens had led to the access to affordable homes as this parameter scored a mean of 3.7. Despite having affordable homes, the respondents indicated that they were shortchanged with the housing facilities as the houses were of poor quality (M=2.0), lacked access to social amenities such as playgrounds for children (M=2.8) and did not have sanitary facilities such as toilets and bathrooms.

This confirms the sentiments of a study conducted by UN- Habitat, (2008) which established that the effect of real estate development on access to adequate housing in developing nations has manifested in sociological, economic and demographic terms. The study further states that there is always uncontrollable movement of people from land they once occupied that is harboring real estate projects to areas with resultant impact on housing thus shortage in housing, informal settlement growth, urban poverty and housing development.

4.8 Real estate residential development projects and Access to Health

The fourth objective this study was out to achieve was to determine how the implementation of real estate residential development projects influences community's access to health. To achieve this objective, the study used a Likert scale of 1-5 which was presented to the

respondents to select the items that represent their opinion where; very great = 5, great = 4, average = 3, little extent = 2 and no extent= 1. The study findings are presented in table 4.7

Table 4.7 Analyzing Access to Health

Item	V. Great		Great		Average		L. Extent		N. Extent		Mean	S.d
	N	%	N	%	N	%	N	%	N	%		
Access to hospitals and dispensaries within the vicinity	8	14%	29	52%	6	10%	10	19%	3	5%	3.833	0.7112
Access to affordable medical care	13	24%	31	57%	0	0%	10	19%	0	0%	4.233	0.6789
Access to reliable medical services with well-equipped and trained personnel	3	5%	8	14%	3	5%	24	43%	18	33%	4.134	0.7279
High rates of infant mortality	5	9%	10	19%	6	10%	24	43%	10	19%	3.763	0.7112
Shortage of infrastructure in accessible hospitals	13	24%	18	33%	0	0%	16	29%	8	14%	4.218	0.6789
Frequent out brakes within your residence	13	24%	29	52%	3	5%	10	19%	0	0%	4.321	0.7279

In item one, Extent to which Thika Greens estate had impacted on the access to hospitals and dispensaries within the vicinity, the majority of the respondents i.e. 37 which is 70% agreed that development of Thika Greens has impacted on access to hospitals and dispensaries within the vicinity. 12 of the respondents which is 24% disagreed and 6 which is 10% were neutral. This is accordance with a study conducted by Kumaraswamy & Chan (2009) who found that distance was the major influential aspect in the utilization of health care and thus it has a direct impact on the community livelihood.

In item two, Thika Greens estate's impact on access to affordable medical care, the majority of respondents i.e. 44 which is 81% agreed that development of Thika Greens has impacted on access to affordable medical care. 10 of the respondents which is 19% disagreed.

In item three, Development of Thika Greens estate's impact on access to reliable medical services with well equipped and trained personnel, the majority of the respondents i.e. 42 which is 76% indicated that it is to a little extent that development of Thika Greens estate's impact on access to reliable medical services with well equipped and trained personnel. 10 of the respondents which is 19% agreed that development of Thika Greens estate's impacts on access to reliable medical services with well equipped and trained personnel, and 3 which is 15% were neutral.

In item four, Extent to which Thika Greens estate has led to high rates of infant mortality, the majority of the respondents i.e. 34 which is 62% indicated that it is to a little extent, 19 of the respondents which is 28% agreed that development of Thika Greens estate's impacts on high rates of infant mortality, and 6 which is 10% were neutral.

In item five, Development of Thika Greens estate's impact on shortage of infrastructure in accessible hospitals, the majority of the respondents i.e. 34 which is 57% indicated that it is to a great extent that development of Thika Greens estate's impact on shortage of infrastructure in accessible hospitals. 24 of the respondents which is 43% indicated that it is to a little extent that development of Thika Greens estate's impacts on shortage of infrastructure in accessible hospitals.

In item six, Extent to which Thika Greens estate had led to Frequent out brakes within their residence, majority i.e. 42 of the respondents which is 76% indicated that it was great, while, 10 of the respondents which is 19% indicated that it was to a little extent and 3 of the respondents which is 5% were neutral.

Most of the respondents indicated that the introduction of Thika greens has led to frequent out brakes within their residence as this parameter scored a high mean of 4.3. A further inquiry revealed that the outbreaks included dysentery and Typhoid a clear indication of livelihood deprivation. The respondents however indicated that the development of the estate led to the development of a slum that they live in which eventually attracted donors who have put up medical facilities thus making accessibility to affordable medical care possible (M=4.2). Despite the accessibility of affordable medical care, the respondents indicated that the medical facilities lack basic modern infrastructure which has in turn led to high rates of infant mortality as the parameter recorded a mean score of 3.7 in a five point likert scale.

4.9 Concept of real estate residential development project

The study was out to determine the concept of Real estate residential development project. To achieve this objective, the study used a Likert scale of 1-5 which was presented to the

respondents to select the items that represent their opinion where; strongly agree = 5, agree = 4, uncertain = 3, disagree = 2 and strongly disagree= 1. The study findings are presented in table 4.8

Table 4.8: Mean and standard of Real estate development

Item	S. Agree		Agree		Uncertain		Disagree		S. Disagree		Mean	S.d
	N	%	N	%	N	%	N	%	N	%		
Real estate industry is the corner stone and bedrock of rapid economic growth of any nation	19	34%	32	58%	4	8%	0	0%	0	0%	3.793	0.7585
Real estate industry is a major area of development activity hence needs a lot of resource allocation	20	37%	33	60%	0	0%	0	0%	2	3%	3.069	0.9498
The homes springing up are affordable to low income earners	34	61%	0	0%	12	21%	10	18%	0	0%	2.597	0.8496
The development of Thika green has had a positive effect on your economic status	9	16%	37	68%	3	5%	6	11%	0	0%	3.069	0.0543
Thika Green has impacted positively on your social welfare and your family life	7	13%	37	68%	6	11%	4	8%	0	0%	3.085	0.928
Thika Greens had improved on security in the area	3	5%	41	74%	9	16%	3	5%	0	0%	3.969	0.0543
Infrastructural development has been witnessed as a result of Thika Greens	3	5%	41	74%	9	16%	3	5%	0	0%	3.967	0.9643

In item one, Respondents view on whether real estate industry is the corner stone and stronghold of rapid growth of the economy of any country, 51 i.e. 92% of the respondents agreed while, 4 of the respondents which is 8% were uncertain.

In item two, Respondents view on whether real estate industry is a major area of development activity hence needs a lot of resource allocation 53 of the respondents wich is 97% agreed while 2 of the respondents i.e. 3% disagreed.

In item three, Respondents were asked if the homes springing up are affordable to low income earnersmajority i.e. 46 of the respondents which is 82% indicated that it was great, while, 10 of the respondents which is 18% were neutral.

In item four, Respondentsview on whether the development of Thika Greens has had a positive impact on the respondents economic status, the majority of the respondents which is 47 i.e. 84% agreed to this while 6 of the respondents which is 11% were negative while 5 of the respondents which is 5% were uncertain.This is in accordance with a study carried out by UNCHS and ILO (1995) which states that housing production and consumption of housing services has multiplier effect on the macro-economy. The study further indicates that a flourishing housing sector can input to growth of the economy via employment opportunities creation in building materials' and construction sector.

In item five, Respondentsview on whether the development of Thika Greens has had a positive impact on the respondents social welfare and family life, the majority of the respondents which is 45 i.e. 81% agreed to this while 4 of the respondents which is 8% disagreed. 6 of the respondents which is 11% were uncertain.

In item six, Respondents view on whether the development of Thika Greens had led to improvement of security in the area, the majority of the respondents which is 44 i.e. 79% agreed to this while 3 of the respondents which is 5% disagreed. 9 of the respondents which is 16% were uncertain.

In item seven, Respondents were asked to give their opinion on whether infrastructure development has been experienced as a result of Thika Greens Residential Development project. The majority of the respondents which is 44 i.e. 79% agreed to this while 3 of the respondents which is 5% disagreed. 9 of the respondents which is 16% were uncertain.

Responses obtained from the study revealed that Thika greens estate has had a positive impact to both Security and infrastructural development as these variables scored the highest mean of 3.966 and 3.969 respectively. The study also established that most of the respondents appreciated the fact that real estate industry is the corner stone and bedrock of rapid economic growth of any nation as the parameter scored 3.7. As far as resources are concern, the respondents thought that real estate industry is a major area of development activity hence needs a lot of resource to be allocated justifying why they had to move from their farms to pave way for the development of the housing project.

There were some mixed reactions when the respondents were asked to indicated whether the development of Thika green has had a positive effect on their economic status. Some of the respondents thought that the movement from the farms made them more independent and economically stable as they had time to vend for more jobs other than wait for the allocated salaries. The same mixed reactions were witnessed on the parameter that sought to establish whether Thika Green had impacted positively the respondent's social welfare and family life

as these two parameters attracted a mean score of 3.0. Majority of the respondents thought that the homes springing up are not affordable to low income earners as this parameter had the lowest mean score of 2.5.

4.10 Regression analysis

The measures utilized in assessment of the primary constructs in the model are quantitative scales. Therefore, regression analysis can be utilized in achieving this outcome. Regression analyses are a collection that can help us in assessing the capability of an independent variable in predicting the dependent variables.

R is the multiple correlation coefficient between all projectors and the supervisory role of central bank. Its value varies between 0 and 1 and R of 0.848 indicated that the projectors in the model were highly related to the dependent variable. Hence, the specification of the elements involved in the model was suitable. R square is a measure of the much that the variability is dependent variable the predictors account for. The R² in this model was discovered to be 0.841, which means that the four livelihood predictors can be explained by about 84% of the variation in real estate residential development projects.

R² values that are above 40% are very high, this model thus can hence explain most of the variation in the dependent variable. That is to say that the study predicted a great extent degree real estate residential development projects on community livelihood in Murang'a County by utilization of independent variables. The rest of the unexplained variation can be associated partially to other elements that are not specified in the model and partially to the error term in the regression equation. Adjusted R square gives information on how a model can be generalized properly in the populace. If the model was driven from the populace

instead of the sample, it would have catered for about 81% of the variance in the dependent variable which is around 0.3% less than what the model explains. The standard error of the estimate, also referred to as the standard deviation of Y about the regression line, was 0.04. because it had a small value, it means that the Y-values observed in the study did not differ majorly from the regression line values.

Table 4.9: Model Summary Representing the Linear Relationship between community livelihood Variables and real estate residential development projects

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error
1	.848	.841	.815	.048837

The ANOVA table above, is also known as overall regression F test. It was utilized in testing various equivalent null hypotheses: that there is no linear correlation in the populace between the dependent variable and the independent variables, that all of the populace partly regression coefficients are 0, and that the populace value for multiple R2 is 0. This study discovered a significant regression equation, ($F_{4, 51} = 7.237, p < 0.05$) that are similar values to the change statistics shown in Table 4.9 above.

Table 4.10 An ANOVA Representing the Linear Relationship Between community livelihood Variables and real estate residential development projects

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	4	.000	7.237	.002 ^a

Residual	.000	51	.000
Total	.001	55	

- a. Predictors: (Constant), Access to food, Access to shelter, Access to education and Access to health
- b. Dependent Variable: Implementation of real estate residential development projects

The partial regression coefficient (B coefficient) shows that the personal input of a predictor to model. The partial coefficient for variable indicates that independent variable raises by one while other independent variables change when the value remain constant. A positive coefficient indicates that the value predicted of the dependent variables is increased with increase in the value of independent variable. Since the partial regression coefficients for all the four predictors in the model are negative, this indicated that real estate residential development projects had a negative impact on community livelihood in Murang'a County whenever there is an increase in any independent variable.

It can be observed that every time real estate development projects increased by 1 unit, access to food decreased by 0.238 when all other variables are held constant. When real estate development projects increased by 1 unit, access to health decreased by 0.514 when all other variables are held constant. When real estate development projects increased by 1 unit, access to education decreased by 0.247 when all other variables are held constant and when real estate development projects increased by 1 unit, access to shelter decreased by 0.603 when all other variables are held constant

Hence, using the constant and the B coefficients of Access to food (X₁), Access to health (X₂), Access to education (X₃) and Access to shelter (X₄), an estimated prediction (regression) equation for this model can be written as follows:

$$= -.264 - 0.238X_1 - 0.514X_2 - 0.247X_3 - 0.603X_4$$

Table 4.11 Coefficients Representing the Linear Relationship Between community livelihood Variables and real estate residential development projects

	Co-efficient	t-values	Significance
Constant	-.264	-1.651	0.103
Access to food	-0.238	-0.171	0.035
Access to health	-0.514	-0.468	0.000
Access to education	-0.247	-0.177	0.012
Access to shelter	-0.603	-0.517	0.000

Source: Derived from research data compilation (2017)

CHAPTER FIVE:

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the summary of the findings in chapter four will be provided, giving the the study's conclusions and recommendations on the basis of the study'd objectives. The overall objective of this study was to examine the influence of execution of Real estate residential development projects on community livelihood in Murang'a County in Kenya

5.2 Summary of the Findings

5.2.1 Real estate residential development projects and access to food

The parameters used to measure access to food included; the respondent's ability to produce their own food, the quality of the food produced, and its availability. Both the quality and the respondent's ability to produce their own food had a mean score of 4.2 with the availability of food having a mean score of 3.9. All the parameters were measured in a five-point Likert scale.

5.2.2 Real estate residential development projects and Access to Education

The parameters used to measure the access to education included; Access to free primary education, Long distance travelled to school, Inferior quality of education, over congested classroom, Unfavorable learning environment and Assault incidents on children on their way to school. The parameter with the highest impact was the quality concerns as this parameter had the highest mean score of 4.7, access, congestion and the learning environment also eluded a lot of concern as this parameter had a mean score of 4.2. The respondents however

were not so concern about the distance travelled as this parameter had the lowest mean score of 4.1 which is relatively low compared to other parameters used to measure the variable.

5.2.3 Real estate residential development projects and access to Shelter

The parameters used to measure this variable included; Access to affordable houses, Access to excellent quality houses, Access to social amenities such as playgrounds for children, Access to facilities such as toilets and bathrooms High crime rates in your new residence and Mushrooming of informal settlements. The parameter with the highest mean score was the mushrooming of informal settlement which saw the development of Guthuru slum among others. This has also led to the decrease in affordable houses and an increase in crime rates in the area. The access to social amenities such as playgrounds and toilets also decreased due to overcrowding as the access to quality houses also decreased as this parameter had the lowest mean score of 2.0.

5.2.4 Real estate residential development projects and Access to Health

Access to health was measured with parameters such as; Access to hospitals and dispensaries within the vicinity, Access to affordable medical care, Access to reliable medical services with well-equipped and trained personnel, High rates of infant mortality, Shortage of infrastructure in accessible hospitals and Frequent out brakes within the respondent's residence. From the study it was clear that frequent outbreaks of diseases such as Typhoid were common hence straining the already overstretched medical resources. The study also confirmed that the available hospitals were ill equipped and thus lacked the necessary personnel. The alternative medical resources were not affordable bearing the economic situations of the respondents.

5.3 Conclusions

The study concluded that food availability the access to food by the members displaced by real estate development project has been negatively affected as the individuals do not have the ability to produce their own food as they used to before the real estates were developed. The study also concludes that female led households are food insecure as compared to the male led once. The study also concludes that real estate development has deprived the underprivileged residents of Muranga Thika the access to agricultural land hence negatively affecting their access to food.

The study concludes that real estate development has affected the quality of education the children receive. The study also concludes that the development of real estate development projects has forced most parents to transfer their children from private schools to local public primary schools. This has in turn affected the children's access to education.

From the study it can be concluded that the introduction of Thika greens rendered most households homeless forcing them to come up with an informal settlement thus hampering their access to shelter.

The study further concludes that the development of Thika greens has affected the economic status of the former residents of the land it stands as they were forced to leave their working place to pave way for the development of the housing project.

Another aspect of community livelihood that has been affected by the development of Thika greens estate is the access to health. The study can emphatically conclude that Thika green

estate led to the closure of the in-house dispensary within the camp thus affecting the access to health by the residents. Since the closure of the dispensary, the households are forced to travel long distances in search for the medical facility.

5.4 Recommendation

1. The study recommends the reduction of the cost of health services in private hospitals and the upgrading of the infrastructure in the public hospitals to cater for the increased population of underprivileged residents.
2. The study recommends the implementation of legislation to the set aside of arable land and lease it out to households to ensure that there is food security and that underprivileged household can produce their own food.
3. The study recommends the development of affordable community run primary schools in all residential areas to cater for the displaced pupils as a result of their development. The study also recommends the inclusion of all the residential estate to engage in social responsibilities such as the supply of books, desks and any other materials that can be of use to the local primary schools where the displaced children transfer to.
4. In order to cater for the shelter needs of the displaced persons and subsequent mushrooming of informal settlements, the study recommends the inclusion of a secluded area where it will put up prefabricated houses to be rented to the displaced persons at a cheaper price. This will not only ensure that access to shelter to the displaced is catered for but will also ensure that security level in the area is not compromised.
5. The real estate developers should consider the development of an affordable dispensary in an exclusive area in the outskirts of the estate to cater for the displaced

persons. This will not only promote peaceful coexistence but also improve the access to health by the residents.

5.5 Recommendation for further research

Further research should be carried to establish the policy reforms needed to ensure that there is set aside arable land to promote food security.

Further research should also be carried to establish the sustainability of community initiated educational and health institutions and their impact in improving the community livelihood

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APPENDICES

Appendix I: QUESTIONNAIRE

SECTION A: – GENERAL INFORMATION (Please fill and tick as appropriate)						
<p>1. Gender (Please select your appropriate gender); Male (<input type="checkbox"/>) Female (<input type="checkbox"/>)</p> <p>2. Age; 18-24 Years (<input type="checkbox"/>) 25-30 years (<input type="checkbox"/>) 31-35 Years (<input type="checkbox"/>) Over 35 Years (<input type="checkbox"/>)</p> <p>3. Education Level (tick your highest level of education); Primary Education (<input type="checkbox"/>) Secondary Education (<input type="checkbox"/>) Diploma (<input type="checkbox"/>) Degree (<input type="checkbox"/>) Master’s Degree (<input type="checkbox"/>) PhD (<input type="checkbox"/>) Other (<input type="checkbox"/>) If other, State _____</p> <p>4. Select your Household size; Less than 3 (<input type="checkbox"/>) 3-5 (<input type="checkbox"/>) 6-8 (<input type="checkbox"/>) Over 8 (<input type="checkbox"/>)</p>						
<p>Real estate residential development projects and access to food</p> <p>In this section, you are required to select the options based on No extenet (5), Little Extent (4), Average Extent (3), Great Extent (2), and Very Great Extent (1).</p>						
7.	The development of Thika Greens estate has affected the following food aspects	No Extent	Little Extent	Average Extent	Great Extent	Very Great Extent
	Quality of food					
	Availability of food					
	Your ability to produce your own food					
<p>Real estate residential development projects and access to Education</p> <p>In this section, you are required to select the options based on No extenet (5), Little Extent (4), Average Extent (3), Great Extent (2), and Very Great Extent (1).</p>						
8.	The development of Thika Greens estate has affected the following education aspects	No Extent	Little Extent	Average Extent	Great Extent	Very Great Extent
	Access to free primary education					
	Long distance travelled to school					

	Poor quality of education					
	Over congested classroom					
	Unfavorable learning environment					
	Assault incidents on children on their way to school					

Real estate residential development projects and access to Shelter

In this section, you are required to select the options based on No extent (5), Little Extent (4), Average Extent (3), Great Extent (2), and Very Great Extent (1).

9.	The development of Thika Greens estate has affected the following shelter aspects	No Extent	Little Extent	Average Extent	Great Extent	Very Great Extent
	Access to affordable houses					
	Access to good quality houses					
	Access to social amenities such as playgrounds for children					
	Access to facilities such as toilets and bathrooms					
	High crime rates in your new residence					
	Mushrooming of informal settlements					

Real estate residential development projects and access to Health

In this section, you are required to select the options based on No extent (5), Little Extent (4), Average Extent (3), Great Extent (2), and Very Great Extent (1).

10.	The development of Thika Greens estate has affected the following health aspects	No Extent	Little Extent	Average Extent	Great Extent	Very Great Extent
	Access to hospitals and dispensaries within the vicinity					
	Access to affordable medical care					
	Access to reliable medical services with well-equipped and trained personnel					

	High rates of infant mortality					
	Shortage of infrastructure in accessible hospitals					
	Frequent out brakes within your residence					

Real estate residential development project

In this section, you are required to select the options based on No extenet (5), Little Extent (4), Average Extent (3), Great Extent (2), and Very Great Extent (1).

10.	To what extent do you agree with the following statements	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
	Real estate industry is the corner stone and bedrock of rapid economic growth of any nation					
	Real estate industry is a major area of development activity hence needs a lot of resource allocation					
	The homes springing up are affordable to low income earners					
	The development of Thika green has had a positive effect on your economic status					
	Thika Green has impacted positively on your social welfare and your family life					
	Thika Greens had improved on security in the area					
	Infrastructural development has been witnessed as a result of Thika Greens					

11. Are there any other factors that real estate development has affected?

a) _____

b) _____

c) _____

-End-

Thank you for taking time to complete the questionnaire

Appendix II: Budget for the Project

Item description	Quantity/cost per item (Kshs)	TotalCost Ksh
1. Stationery	100 rims of foolscap @ 500 each	50,000
	2 biro packets @ 200 each	1,000
	5 printer cartridges @ 4000 each	20,000
	10 notebooks @ 200 each	2,000
2. Proposal writing and research	Internet research	10,000
	Fare	20,000
	Binding and photocopies 600 pages @ 4 per page. 10 Copies.	24,000
3. The project	Data analysis consultancy	50 ,000
	Fare for distribution & collection of Questionnaires	20,000
	Binding and photocopies	10,000
4. Miscellaneous	Phones, meals, etc	10,000
	Total	217,000