

TITLE PAGE



UNIVERSITY OF NAIROBI

**ENERGY BASED INVOLUNTARY RESETTLEMENT, LAND ACQUISITION AND
STRATEGIES FOR LIVELIHOOD SUSTAINABILITY**

(Study of Bilateral Integration of Energy Transmission by Eastern Electricity Highway)

BY

MICHAEL OTIENO OKELLO

156/71277/2014

A Research Project Submitted for Examination in Partial Fulfillment of the Requirements for
Award of the Degree of Master of Science in Sustainable Urban Development (Renewable
Energy Option) of the University of Nairobi

2018

DECLARATION

I declare that this Research Project is my original work and has not been submitted elsewhere for examination, award of a degree or publication. Where other people's work or my own work has been used, this has properly been acknowledged and referenced in accordance with the University of Nairobi's requirements.

Signature..... Date.....

Michael Otieno Okello

I56/71277/2014

Department of Geography & Environmental studies

University of Nairobi

This Research Project is submitted for examination with our approval as Research Supervisors:-

Prof. David N. Mungai Signature..... Date.....

Wangari Mathai Institute of Peace and Environment Studies

University Of Nairobi

P.O Box 30197-00100

Nairobi, Kenya

Dr Alice O Odingo Signature..... Date.....

Department of Geography & Environmental Studies

University Of Nairobi

P.O Box 30197-00100

Nairobi, Kenya

DEDICATION

To my special love! God bless you! You inspire me to work enough to build our future.

ACKNOWLEDGEMENT

Glory is to God for bringing people to bless my life, both in and out of the University of Nairobi.

Professor Richard S. Odingo, Prof. Mungai and Dr. Samuel Owuor, for instilling the spirit of sustainability through invaluable lectures, brainstorming and open discussions to our pioneer class. MSc. Course in Sustainable Urban Development has opened my mind and enabled me gain confidence to foster sustainability and beneficial global climate change actions.

Dr. Boniface Wambua, for guiding me step by step through the course and seeing to it that I complied with all necessary requirements for completions. God reward you for your fatherly advice and support.

Dr. Alice Odingo, for giving all necessary support, teaching and inspiring me to take research seriously and do it; going through my work and giving valuable directions! God bless you!

Dr. Ayiemba, Dr. Ndolo, Dr. Mwaura, Dr. Stella Mbatha, Mr. Karingi, Jackie, for walking with us and seeing us through the journey.

Prof Syagga, for your interest in my research, support, and guidance on land based aspects of the similar government aided projects and guidelines. You will definitely be in my memory as one Professor of Land Economics who trained and mentored me to be the best Land Economist.

Thanks to all my classmates in the graduate class, Karia, Harrison, Grace, Nickson, Tiffany, Mwende and Mr. Fredrick Karema for the team work, warmth and passion we build to learn sustainability, research and fruitful discussions. Knowledge cafe was a great unifying tool.

Finally, thanks to Syagga and Associates Limited team (Owino, Sammy, Judy) and Valuer Charles Kariuki and Ole Pusi (KETRACO) and area Chiefs especially in Wamba, Sessia, Oldo Nyiro and Merille for your assistance in the fieldwork and support in office. Thanks to Timothy Muasia for support in Data Analysis. Surely, we need one another to succeed!

ABBREVIATIONS & ACRONYMS

EIA	Environmental Impact Assessment
EEPCO	Ethiopia Electricity Power Company
LRC	Local Resettlement Committee
LSLAs	Large Scale Land Acquisitions
MDG	Millennium Development Goals
NGO	Non-Governmental Organizations
MV	Market Value
PAP	Project Affected Person
PC&D	Public Consultation and Disclosure
PDPs	Project Displaced Person
RAP	Resettlement Action Plan
RoW	Right of Way
RPF	Resettlement Policy Framework
RPT	Resettlement Project Team
RWG	Resettlement Working Group
KETRACO	Kenya Electricity Transmission Company
KSHS	Kenya Shillings

ABSTRACT

Kenyan land laws provide for compulsory acquisition and compensation but without a uniform National Resettlement Policy Framework to guide involuntary resettlement. This implies that in order to implement resettlement action plan (RAP), government agencies usually rely on legislation and international guidelines to prepare case specific resettlement policy with measurable performance targets. The study examined the socio economic impacts of Eastern Electricity Highway Project and public perception. Literature reviews and case studies show implementation gaps with reference to performance indicators that seek social inclusion, sustainability of livelihood and achievement of overall return to the government in energy expansion. It was hypothesized that, there is no significant relationship between resettlement and socio-economic status and quality of life resulting from resettlement activities and that, there is no relationship between performance targets and the outcomes such as participation, grievance redress, perceived satisfaction and compensation from the view point of the project affected persons. The study systematically sampled Nakuru, Nyandarua, Laikipia, Isiolo, Samburu, and Marsabit Counties on crossed by the project line from which Samburu, Isiolo and Marsabit counties were selected randomly. Multistage sampling was used to select the sub-counties and wards crossed by the line. Three wards: Merille in Laisamis, Old-Onyiro in Longopito and Lodungokwe in Sessia were randomly selected from Marsabit, Isiolo and Samburu Counties respectively. The study targeted respondents (with key informants and Household heads) through open discussion meeting and interviews respectively. The target population in the three counties was 97 Household from which a sample size of 78 household heads was targeted. However, only 50 were reached. Data was collected through questionnaires, check lists, and participatory (active) observation. Descriptive statistics and Pearson's Chi Square Test were used in data analysis and Hypothesis Testing.

The study findings show unique challenges to both project implementers and the community. The socio-economic system of host communities was culturally embedded in nomadic pastoralism, trade, hunting, fishing, tourism and traditional artwork. The project resulted into; change of distance and access to social services; disruption of communal settlement patterns; physical displacement of people; loss of structures, disturbance of native medicinal plants and traditional ritual sites. The affected families were however compensated including those whose land had no proper value; resulting to enhancement of quality of life as evidenced by increased disposable income, purchase of livestock, payment of school fees, starting of new business, construction of new houses and spending surplus in domestic needs. There were gains from corporate social initiatives (schools, latrines, water pans) done on needs assessment and job opportunities to youths. There was increased reliability of the project with the hope of increase in electricity output to the national grid. However, the study elicited some performance gaps, namely; fair and full compensation, engagement and active participation of local community, grievance redress on compensation and valuation matters were not fully realized to locals' satisfaction. The project implementers had to grapple with slow disbursement of project funds by the National treasury, high demands for compensations and resistance by communities, increased costs due to land price appreciation, time-lapse between clearance of wayleaves and construction phases. The Company however addressed the issues by carrying out re-sensitization, negotiation for better prices and revaluation of assets based on 'prevailing values' with a proposal of reviewing Resentment Policy.

The study recommends that prior to resettlement, formation of working groups that prioritize grass root sensitization and engagement of host communities and relevant offices including Lands Directorates of the respective counties. There should be timely budgetary allocation and disbursement of project funds to ensure full and timely valuation, compensation and relocation of project affected persons. Moreover, there should be inclusive and reliable grievance redress and performance evaluation working groups. Valuers should be keen on sentimental aspects, special use, intangible value attached to traditional artifacts, unique cultural land uses besides cost and comparable market sales approaches to asset valuation. The current Resettlement Policy and related national statutes should be reviewed to schedule assets valuation, full compensation and livelihood support services immediately after wayleave clearance before construction phase to save on losses and huge costs (to both the project implementers and communities) associated with lapsing in time and appreciation in land values. The institutions for higher learning and research centres should carryout studies and recommend to relevant stakeholders best strategic policy practices.

TABLE OF CONTENTS

TITLE PAGE.....	I
DECLARATION	II
DEDICATION	III
ACKNOWLEDGEMENT	IV
ABBREVIATIONS & ACRONYMS.....	V
ABSTRACT	VI
TABLE OF CONTENTS.....	VII
LIST OF TABLES	XII
LIST OF FIGURES.....	XIII
CHAPTER 1	1
STUDY BACKGROUND	1
1.0 INTRODUCTION	1
1.2 STATEMENT OF THE PROBLEM.....	3
1.3 RESEARCH QUESTIONS	5
1.4 OBJECTIVES OF THE STUDY	6
1.4.1 <i>General objectives</i>	6
1.4.2 <i>Specific Objectives</i>	6
1.5 <i>Justification of the Study</i>	6
1.6 <i>Scope and Limitations of the study</i>	7
1.7 <i>Definition of concepts</i>	7
CHAPTER 2	8
LITERATURE REVIEW	8
2.1 INTRODUCTION	8
2.1 GLOBAL OVERVIEW OF DISPLACEMENT AND RESETTLEMENT.....	9
2.3 LEGAL FRAMEWORKS ON INVOLUNTARY RESETTLEMENT	10
2.3.1 <i>Kenyan Land Laws</i>	10
2.3.2 <i>Internationally Guidelines on Resettlement</i>	11
2.3.3 <i>Compulsory Acquisitions of Land</i>	12
2.4 CASES STUDIES ON INVOLUNTARY RESETTLEMENT.....	13
2.4.1 <i>The Albertine Graben Region in Uganda</i>	13
2.4.2 <i>The Ilisu Dam Project on River Tigris in Turkey</i>	14
2.4.3 <i>Kinangop Wind Park Project in Kenya</i>	15
2.4.4 <i>Resettlement for KenGen’s Olkaria IV project</i>	16
2.4.5 <i>Lessons from the Case Studies</i>	17
2.5 IMPACTS OF INVOLUNTARY RESETTLEMENT.....	17
2.5.1 <i>Tenure impacts</i>	18
2.5.2 <i>Livelihood and Poverty Impacts</i>	19
2.5.3 <i>Land Governance Impacts</i>	19
2.5.4 <i>Environmental impacts</i>	19
2.6 KENYA ELECTRICITY TRANSMISSION COMPANY’S RESETTLEMENT POLICY FRAMEWORK	19
2.6.1 <i>Compensation and PAP’s Satisfaction</i>	20
2.6.2 <i>Stakeholders’ Participation and Grievance Redress Mechanisms</i>	20

2.6.3 Livelihood Restoration Mechanisms	20
2.6.4 Monitoring and Evaluation Framework	20
2.7 RESEARCH STUDY GAPS	21
2.8 CONCEPTUAL MODEL FOR RESETTLEMENT AND LIVELIHOOD SUSTAINABILITY	21
CHAPTER 3	24
STUDY AREA	24
3.0 INTRODUCTION	24
3.1 LIVELIHOOD ASPECTS	25
3.2 DEMOGRAPHIC INFORMATION	26
3.3 ECONOMIC ACTIVITIES	27
3.4 CLIMATIC CONDITIONS	27
CHAPTER 4	28
RESEARCH METHODOLOGY	28
4.1 INTRODUCTION	28
4.2 SPECIFIC OBJECTIVES	28
4.3 STUDY METHODOLOGY	28
4.4 SAMPLING PROCEDURE	28
4.5 SAMPLE SIZE	29
4.5.1 Household Heads	29
4.5.2 Focus Group Discussions	30
4.5.3 In-depth Discussions with Key Informants	30
4.5.4 Primary and Secondary data	30
CHAPTER 5	33
RESULTS AND DISCUSSIONS	33
5.0 INTRODUCTION	33
5.1 Objective 1: Socio-Cultural system and Project implications	33
5.1.1 Classifying PAPs by Age and Gender	33
5.1.3 Impact of Resettlement on Access to Community Services	34
5.1.4 Land Ownership and Tenure	35
5.1.5 LIVELIHOOD OPPORTUNITIES	35
5.2 OBJECTIVE 2: EVALUATION OF LIVELIHOOD BENEFITS RESULTING FROM RESETTLEMENT	36
5.2.1 Level of Compensation	36
5.2.2 Quality of Living	37
5.2.3 Compensation Indicative of loss	38
5.2.4 Increase of livestock measured in terms of money	39
5.3 OBJECTIVE 3: EVALUATE THE PERFORMANCE OF RESETTLEMENT	40
5.3.1 PAPs Engagement and Consultation	40
5.3.2 Level of Satisfaction and Perceptions of Project Affected Persons	41
5.3.3 Grievances Redress Process	41
5.4 STATISTICAL HYPOTHESIS TESTING	43
5.5 OBJECTIVE 1: ESTABLISHING THE SOCIO-CULTURAL SYSTEM AND PROJECT IMPLICATIONS	43
5.6 OBJECTIVE NO 2: EVALUATION OF THE LIVELIHOOD BENEFITS RESULTING FROM RESETTLEMENT	44
5.7 OBJECTIVE NO 3: EVALUATE THE PERFORMANCE OF RESETTLEMENT	44
5.7.1 Engagement and information dissemination to PAPs	44
5.7.2 Grievance Redress Mechanisms	45
5.8 CHAPTER SUMMARY	46

CHAPTER 6	47
CONCLUSION AND RECOMMENDATIONS	47
6.0 INTRODUCTION	47
6.2 SUMMARY	47
6.3 RECOMMENDATIONS.....	48
6.3.1 <i>Recommendations to the Project implementers</i>	48
6.3.2 <i>Policy Makers</i>	48
6.3.3 <i>Government</i>	48
6.3.4 <i>Academic and Research Institutions</i>	48
REFERENCES	49
8.0 ANNEXES	53
<i>Annex 1: Interview Schedule to Key Informants-KETRACO</i>	53
<i>Annex 2: Interview Schedule to Key Informants-County/Community Leaders</i>	55
<i>Annex 3 Project Affected Household Questionnaire</i>	57
TITLE PAGE	I
DECLARATION	II
DEDICATION	III
ACKNOWLEDGEMENT	IV
ABBREVIATIONS & ACRONYMS	V
ABSTRACT	VI
TABLE OF CONTENTS	VII
LIST OF TABLES	XII
LIST OF FIGURES	XIII
CHAPTER 1	1
STUDY BACKGROUND	1
1.0 INTRODUCTION	1
1.2 STATEMENT OF THE PROBLEM.....	3
1.3 RESEARCH QUESTIONS	5
1.4 OBJECTIVES OF THE STUDY	6
1.4.1 <i>General objectives</i>	6
1.4.2 <i>Specific Objectives</i>	6
1.5 <i>Justification of the Study</i>	6
1.6 <i>Scope and Limitations of the study</i>	7
1.7 <i>Definition of concepts</i>	7
CHAPTER 2	8
LITERATURE REVIEW	8
2.1 INTRODUCTION	8
2.1 GLOBAL OVERVIEW OF DISPLACEMENT AND RESETTLEMENT.....	9
2.3 LEGAL FRAMEWORKS ON INVOLUNTARY RESETTLEMENT	10
2.3.1 <i>Kenyan Land Laws</i>	10
2.3.2 <i>Internationally Guidelines on Resettlement</i>	11

2.3.3 Compulsory Acquisitions of Land	12
2.4 CASES STUDIES ON INVOLUNTARY RESETTLEMENT.....	13
2.4.1 The Albertine Graben Region in Uganda.....	13
2.4.2 The Ilisu Dam Project on River Tigris in Turkey	14
2.4.3 Kinangop Wind Park Project in Kenya.....	15
2.4.4 Resettlement for KenGen’s Olkaria IV project.....	16
2.4.5 Lessons from the Case Studies	17
2.5 IMPACTS OF INVOLUNTARY RESETTLEMENT.....	17
2.5.1 Tenure impacts.....	18
2.5.2 Livelihood and Poverty Impacts	19
2.5.3 Land Governance Impacts.....	19
2.5.4 Environmental impacts	19
2.6 KENYA ELECTRICITY TRANSMISSION COMPANY’S RESETTLEMENT POLICY FRAMEWORK	19
2.6.1 Compensation and PAP’s Satisfaction.....	20
2.6.2 Stakeholders’ Participation and Grievance Redress Mechanisms.....	20
2.6.3 Livelihood Restoration Mechanisms	20
2.6.4 Monitoring and Evaluation Framework.....	20
2.7 RESEARCH STUDY GAPS	21
2.8 CONCEPTUAL MODEL FOR RESETTLEMENT AND LIVELIHOOD SUSTAINABILITY	21
CHAPTER 3	24
STUDY AREA	24
3.0 INTRODUCTION	24
3.1 LIVELIHOOD ASPECTS.....	25
3.2 DEMOGRAPHIC INFORMATION	26
3.3 ECONOMIC ACTIVITIES.....	27
3.4 CLIMATIC CONDITIONS.....	27
CHAPTER 4	28
RESEARCH METHODOLOGY	28
4.1 INTRODUCTION	28
4.2 SPECIFIC OBJECTIVES.....	28
4.3 STUDY METHODOLOGY.....	28
4.4 SAMPLING PROCEDURE.....	28
4.5 SAMPLE SIZE.....	29
4.5.1 Household Heads	29
4.5.2 Focus Group Discussions	30
4.5.3 In-depth Discussions with Key Informants	30
4.5.4 Primary and Secondary data.....	30
CHAPTER 5	33
RESULTS AND DISCUSSIONS.....	33
5.0 INTRODUCTION	33
5.1 Objective 1: Socio-Cultural system and Project implications	33
5.1.1 Classifying PAPs by Age and Gender.....	33
5.1.3 Impact of Resettlement on Access to Community Services.....	34
5.1.4 Land Ownership and Tenure	35
5.1.5 LIVELIHOOD OPPORTUNITIES	35
5.2 OBJECTIVE 2: EVALUATION OF LIVELIHOOD BENEFITS RESULTING FROM RESETTLEMENT.....	36

5.2.1 Level of Compensation	36
5.2.2 Quality of Living	37
5.2.3 Compensation Indicative of loss.....	38
5.2.4 Increase of livestock measured in terms of money	39
5.3 OBJECTIVE 3: EVALUATE THE PERFORMANCE OF RESETTLEMENT.....	40
5.3.1 PAPs Engagement and Consultation.....	40
5.3.2 Level of Satisfaction and Perceptions of Project Affected Persons.....	41
5.3.3 Grievances Redress Process	41
5.4 STATISTICAL HYPOTHESIS TESTING.....	43
5.5 OBJECTIVE 1: ESTABLISHING THE SOCIO-CULTURAL SYSTEM AND PROJECT IMPLICATIONS	43
5.6 OBJECTIVE NO 2: EVALUATION OF THE LIVELIHOOD BENEFITS RESULTING FROM RESETTLEMENT	44
5.7 OBJECTIVE NO 3: EVALUATE THE PERFORMANCE OF RESETTLEMENT	44
5.7.1 Engagement and information dissemination to PAPs.....	44
5.7.2 Grievance Redress Mechanisms.....	45
5.8 CHAPTER SUMMARY	46
CHAPTER 6	47
CONCLUSION AND RECOMMENDATIONS	47
6.0 INTRODUCTION	47
6.2 SUMMARY	47
6.3 RECOMMENDATIONS.....	48
6.3.1 Recommendations to the Project implementers.....	48
6.3.2 Policy Makers.....	48
6.3.3 Government	48
6.3.4 Academic and Research Institutions	48
REFERENCES.....	49
8.0 ANNEXES	53
Annex 1: Interview Schedule to Key Informants-KETRACO	53
Annex 2: Interview Schedule to Key Informants-County/Community Leaders.....	55
Annex 3 Project Affected Household Questionnaire	57

LIST OF TABLES

Table 1: Summary of Demographic information.....	26
Table 2: Economic activities, Resources and opportunities.....	27
Table 3: Annual Rainfall distribution	27
Table 4: Annual Temperature Range	27
Table 5: The sampled sub-counties and wards.	29
Table 6: summary of the attendance in Focus Group Discussion meetings	30
Table 7: Key Informants involved in-depth Discussions across the Counties	30
Table 8: PAPs affected by relocation from community services	43
Table 9: The Contingency Table for worked Chi Values	43
Table 10: Using a 3 x 5 contingency table:	44
Table 11: chi-square calculation at a significance level of 0.05.....	44
Table 12: 3 x 5 contingency table - access to information and participation.....	45
Table 13: Chi Square calculations.....	45
Table 14: The 3 x 2 contingency table of number of those compensated.....	45
Table 15: Chi-square calculation	46

LIST OF FIGURES

Figure 1: Map showing the proposed project line across the five counties in Kenya	2
Figure 2: Project transmission line across Isiolo, Marsabit and Samburu	3
Figure 3: Conceptual Model Involuntary Resettlement and livelihood Sustainability	22
Figure 4: Theoretical Framework for Energy Based Involuntary Resettlement	23
Figure 5: Map showing the three counties	24
Figure 6: Dam water source for livestock washing and domestic use	25
Figure 7: Typical residential structures within a Manyatta.....	26
Figure 8: Discussion with PAPs in Oldo Onyiro	32
Figure 9 : meeting with key informants in Wamba-Samburu.....	32
Figure 10: Classifying PAPs according to their Age Groups	33
Figure 11: Classification of PAPs by Gender	34
Figure 12: Relative distance to community facilities in Marsabit County.....	34
Figure 13: Land Tenure Regimes in Each County.....	35
Figure 14: Showing livelihood opportunities in the sampled study areas.....	35
Figure 15: Livelihood sources in the three counties combined.....	36
Figure 16: Proportion of PAPs who were compensated	36
Figure 17: Priority of Needs Which Influenced PAPs' Spending.....	38
Figure 18: General levels of Compensation Awards in Each County.....	38
Figure 19: Livestock Asset Values before and after Compensations.....	39
Figure 20: Livestock Asset Values before and after Compensations.....	39
Figure 21: Livestock Asset Values before and after Compensations.....	40
Figure 22: Engagement and Information Dissemination	40
Figure 23: Challenges of resettlement indicative of PAPs Negative Perception	41
Figure 24: Grievance redress committees expected to facilitate RAP processes	42
Figure 25: Proportion of PAPs who were compensated for losses	42

CHAPTER 1

STUDY BACKGROUND

1.0 Introduction

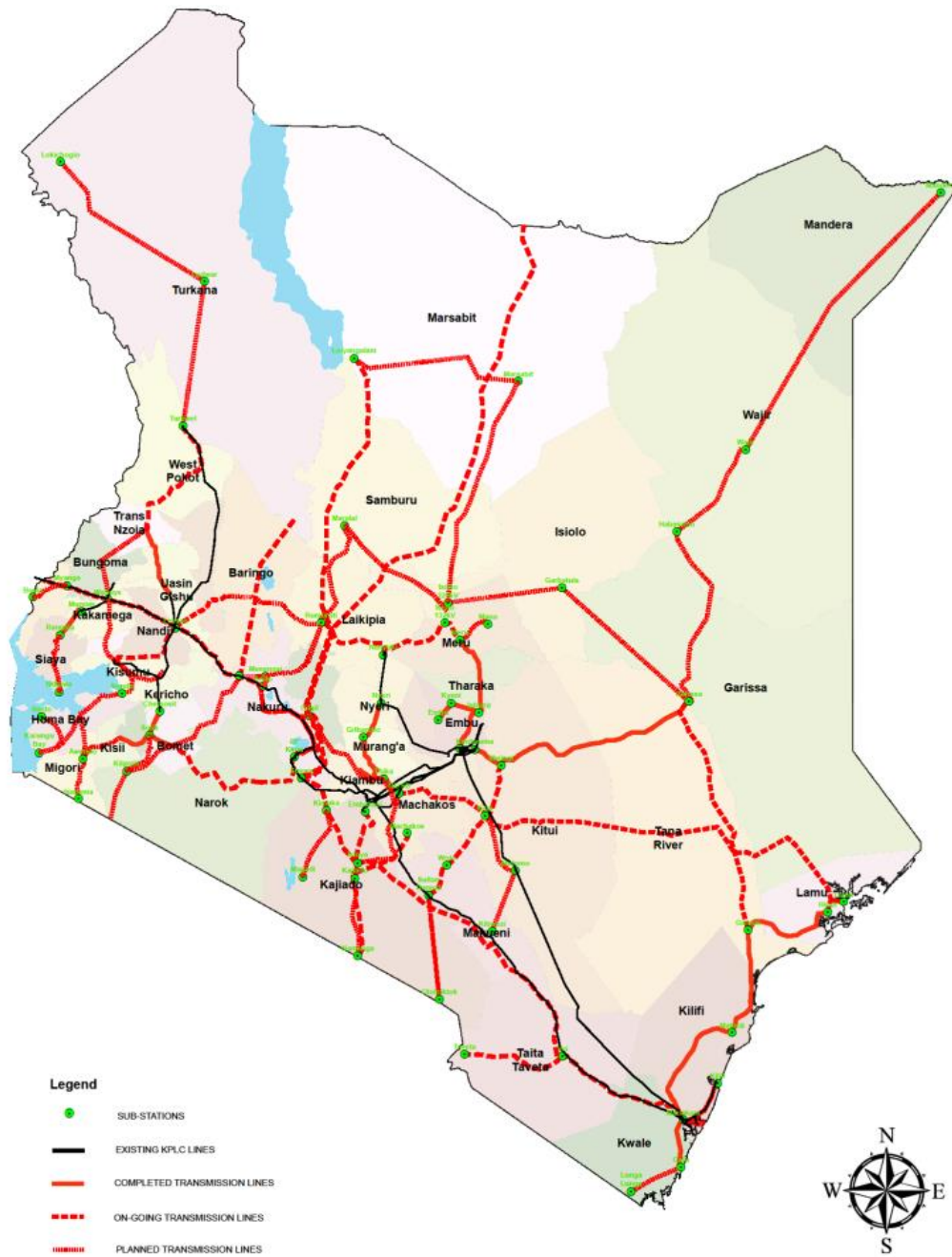
The international community has become keener on implementation of projects driven by Government and which in result induce displacement and resettlement. While energy demand and urbanization continue to increase, more production and transmission become inevitable. The government therefore avail land to enable exploitation of energy resources, generation, transmission and trade in energy service. While land acquisition becomes critical in the preliminary stages of this kind of project, an approach to resettlement of displaced persons should address socio economic issues and the potential livelihood impacts. This has generated debates and policy prescriptions from scholars who opine best aspects to consider while implementing resettlement action plans while at the same time sustaining the focus of achieving the national objectives of energy generation access which ensure cost reduction, availability, expansion and trade in surplus.

Kenyan Government is keen on power grid expansion and sustainable energy development. The hope for regional integration and power –sharing between Kenya and Ethiopia is one of the emerging ways by which the two countries seek to achieve increased power output, cost savings, environmental protection as well as creating market for surplus from other eastern African countries. Through support of World Bank and other foreign financiers. The eastern electricity highway project was approved in 2012 and is deemed to be complete by mid-2019. Kenya is expected to import power from Ethiopia through this line originating from large number of existing and future power plants. When needed, reverse transmission will be done through the same line. According to World Bank, the project was expected to be implemented with minimum impacts on affected communities, through the social and environmental safeguards.

The nearly complete EEHP project has recently raised concerns from local grassroots leaders about unresolved grievances. The project affected about 2,495 persons especially with regard to resettlement to create way for the wayleaves. The grievances sought resolution of concerns regarding compensation, land tenure and livelihood situation. The research study bearing this in mind identified the best performance indicators prescribed by the international community with a main objective of evaluation and thereafter give policy recommendations to address the gaps found in the resettlement component of the project. The study is premised on the fact that

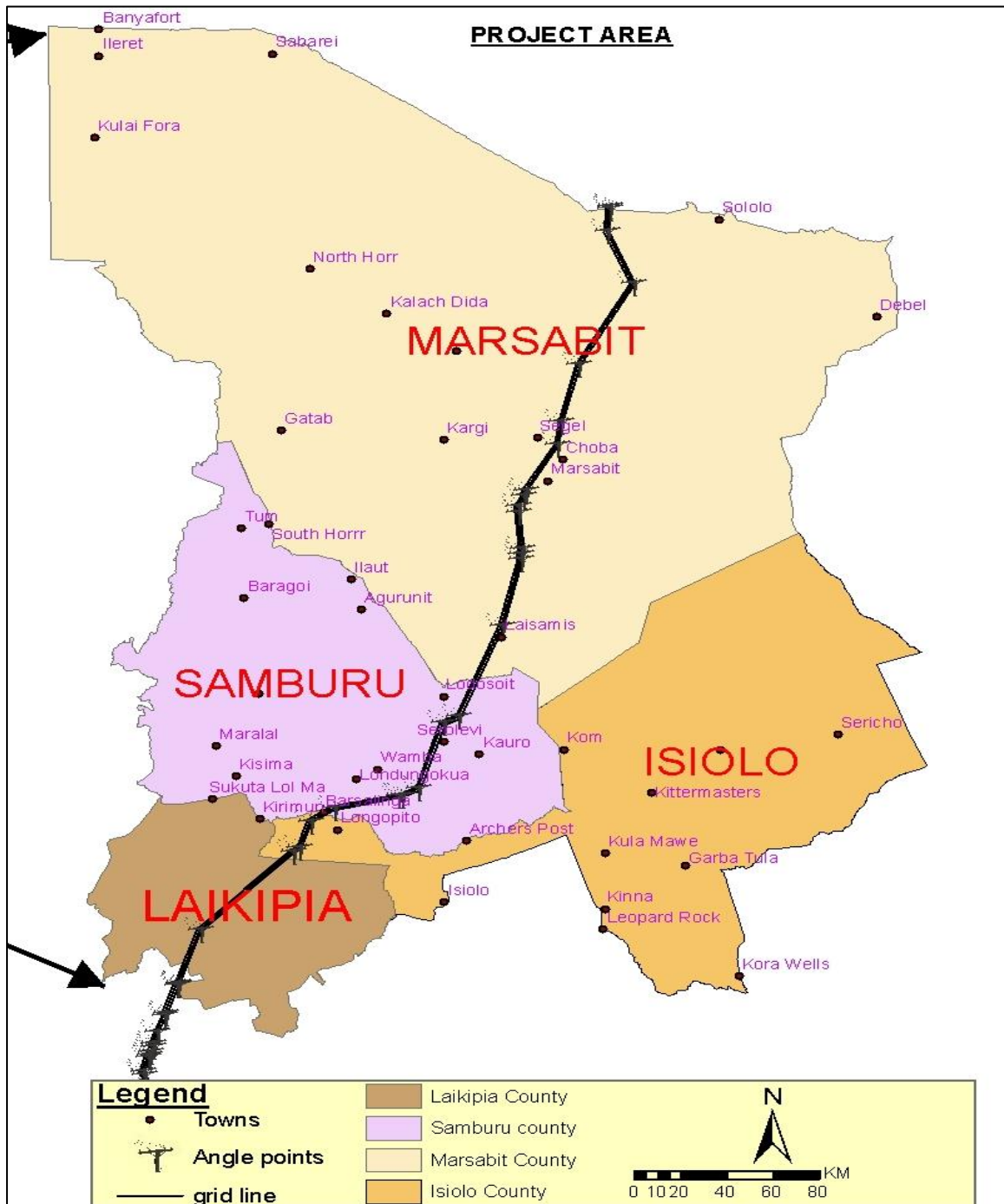
the power motif may not be well addressed and get requisite social license to operate and support where the livelihood and environmental facets are jeopardized.

Figure 1: Map showing the proposed project line across the five counties in Kenya



Source: Disclosure Report, KETRACO, 2018

Figure 2: Project transmission line across Isiolo, Marsabit and Samburu



Source: Disclosure Report, KETRACO, 2018

1.2 Statement of the Problem

Kenya Electricity Transmission Company has a comprehensive Resettlement Action Plan and Resettlement Policy for the eastern electricity highway project that covers 612 kilometers covering 60 to 100 meter width from Kenya-Ethiopia border to Suswa. However, questions

have been raised on the impacts of resettlement on livelihood of the affected persons. There seems a mismatch between public perception and livelihood situation and the performance targets of way-leave acquisition itself with gleaning gaps on the performance outcomes.

The impacts of unsuccessful implementation is two-pronged, namely it negatively affects the host communities when it results to homelessness, loss of land, unjust and unjust compensation, unmet expectations, failed promises, livelihood impoverishment and disruption of sociocultural systems. Secondly, implementation failures, have both immediate and long-term effects such as into delays, conflicts, legal suits and extended payback period. The government in the end can fail to achieve the national objective of power development and expansion which is a core driver of economy and thematic issue in integrated planning in cities and urban areas.

Kenyan land laws provide for compulsory acquisition and compensation (Syagga and Olima (1996). However, there is no uniform policy framework to guide involuntary resettlement. Each institution involved in displacement of people through involuntary resettlement prepares a resettlement action plan (RAP) based on its own resettlement policy framework or that of an external development partner such as the World Bank. The gaps in the laws are always addressed according to the whims and discretion of the implementing agency which is subject to err without checks and balances.

Erdiaw-Kwasie et al (2014) notes that lack of involvement of the affected population as an obstacle in resettlement. They hence recommend effectiveness of livelihood promoting interventions using case evidences in contexts of engagement prospects and challenges experienced in the past programmes. Berkes and Jolly (2001) suggested a sustainable approach and models that contribute to mitigation of any possible vulnerabilities to cultural lifeways that encourage bottom up approach. De Plessis (2012) in the same view demonstrates that ecological design and planning processes should adapt to changing conditions, employ decentralized approaches, develop thorough collaboration and contribution of simple entities by bottom up self-organization; linked to social and cultural components as most important factor for success.

There is little work done in Kenya on livelihood issues associated with resettlement emanating especially from large scale way-leave acquisition for high voltage transmission line in Kenya. Similarity in challenges can only be gleaned from the previous research findings on dam induced resettlement, mining induced resettlement, and disaster induced resettlement in china, japan, turkey, Ghana and several cases studies in Kenya.

The recent literature and finding are based on Dam induced resettlement in Kenya were done by Wanjiku (2016) identified benefits of Mwea Irrigation projects which resulted into improvement of quality of life without disrupting peaceful coexistence, social relations or culture. However, much has not been cited on the approach apart from recognizing significance of social and stakeholder components. She however recommends for further research on neighborhoods and downstream communities affected by the resettlement issues besides the directly affected persons. Sawka (2015) highlight loss in livelihood of project affected persons and negatively affected social networks, access to social amenities, occupation opportunities and education due to resettlement and relocation due to Thika Dam project. He identifies community perceptions, livelihood restoration, coping mechanisms and participation as key aspects to consider. He recommends full compensation based on restatement cost as well as involvement of the project affected persons and relevant stakeholders to adequately raise concerns. In his opinion, further studies should be carried out on research gaps in international and local guidelines and policy prescriptions for amendments and change in legislations touching on resettlement for during implementation of government infrastructure.

Kamakia (2015) identifies best practices used in resentment of Maasai in Olkaria IV Geothermal project by Kenya Electricity Generating Company where he notes adequate planning budgetary allocation before the project, community engagement with full compensation and housing of the project affected persons. There was a livelihood restoration strategy which guided setting up resettlement land, land for social amenities, employment opportunities and scholarships offered on merit criteria.

This case study sought to evaluate the implementation of the resettlement by performance targets against the outcomes, identify the challenges inherent to energy induced way leave acquisitions and resettlement and offer policy recommendation. The failure in resettlement has a gross repercussions to the local economics as well as the national agenda especially with regard to benefits of energy expansion towards achieving sustainable development goals.

1.3 Research Questions

The study evaluates the implementation of the Resettlement Action Plan in light of the Operational Policy and safety guidelines. The study had the following questions:-

1. What was the social economic profile of the project affected persons?
2. How did the project affect the quality of life of the affected persons?
3. Were the performance targets set for a successful resettlement achieved?

1.4 Objectives of the Study

1.4.1 General objectives

The general objective of the study is to evaluate the resettlement from the perspective of the affected community with reference to the implementer's performance targets. .

1.4.2 Specific Objectives

The study has the following specific objectives:-

1. To establish the social economic profile of the communities affected by project?
2. To find out the livelihood changes resulting from involuntary resettlement on the affected households?
3. To establish the relationships between the performance targets (expected outcomes) and the public perceptions.

The study formulated the following Null Hypotheses which were tested BY Chi Square:-

1. **(H₀):** There was no significant relationship between resettlement and access to community facilities
2. **(H₀):** There was no significant relationship between resettlement and Quality Of Life of Affected Persons
3. **(H₀):** There were no relationship between compensation and grievances redress process
4. **(H₀):** PAPs adequately engaged and informed during the resettlement process

1.5 Justification of the Study

It is evident from selected case studies that, despite feasible Resettlement Plans and policy frameworks, involuntary and forced resettlement has experienced similar implementation challenges in East Africa and elsewhere. However, certain challenges are specific to countries as well as to individual implementing agencies. The study cites the cases and related livelihood issues in light of the best practices with an aim to: minimize socio-economic and environment impacts, minimize involuntary resettlement, ensure human safety, fair and just compensation, entitlement rights to land ownership and land use as well as enhancing or restoration strategies of livelihoods.

The study formulates key principles in resettlement with which the evaluation of the RAP implementation has been conducted. It has described the associated activities before, during and after resettlement and the potential impacts on livelihoods which require sustainability concepts. Literature review and analysis of findings have shown that unlike similar previous

projects elsewhere, Kenyan cases have not been accompanied by clear, documented success factors and evaluation criteria for those factors. Therefore, the study has yielded findings and recommendations that informs how best to implement land acquisitions and resettlement while safeguarding the ecosystems and human livelihoods.

1.6 Scope and Limitations of the study

The study covers was carried out geographically within linear coverage cutting three counties of Marsabit, Samburu East and Isiolo North. It evaluates the nature of the RAP activities and its results: the positive and negative impacts to people, environment, national energy sector, economy and livelihoods of the host communities. The choice of the physical and context scope was due to the limitations of time and resources available which would only allow a small representative sample within each sampled county

1.7 Definition of concepts

Assets: Comprises land, improvements or crops/trees, unless otherwise defined. In terms of sustainable livelihood view point adopted in the study, assets include all capital, physical, financial, human, natural and social capital useful to influence structures, processes and strategies that yield sustainable livelihood outcomes.

Compensation: Payment in cash or in kind for land or space thereupon that is acquired or affected by a project at the time the same needs to be replaced.

Cut-off Date: Date of completion of the head counts of project affected persons and inventory of land, crops, improvements affected by the project.

Household: A person, or group of persons living together, in an individual house or compound, who share cooking and eating facilities, and form a basic socioeconomic and decision-making unit.

Involuntary Resettlement: Resettlement is involuntary when it occurs without the informed consent of the displaced persons or if they give their consent without having the power to refuse resettlement.

Project-Affected Persons (PAPs): Any person who, as a result of the involuntary resettlement, loses the right to own, use, or otherwise benefit from a his structure, land, crops, trees, or any other fixed or moveable asset, either in full or in part, permanently or temporarily.

Resettlement Action Plan: The document in which a project implementer or other responsible entity specifies the processes and the actions during land acquisition and resettlement period.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Distinguishing involuntary resettlement and voluntary resettlement helps enhancing the understanding of the essence of involuntary resettlement. Besides, depending on geographical context, there can be resettlement that is from urban to urban, from rural to rural, and from rural to urban. In addition, resettlement can take place in democratic societies and non-democracies, although a lot of the researchers are looking at resettlement in developing countries (Qian Liao, 2012). Anthropologists use 'push' and 'pull' factors to describe involuntary and voluntary migration. Voluntary resettlement refers to attracting people to new places, whereas involuntary resettlement means forcing people out of their traditional localities. The difference between involuntary and voluntary population movements is that the former are caused by 'push' factors only. 'Pull' factors, if any, are the exception rather than the rule (Asthana, 1996; Cernea, M. & Guggenheim, S. 1993).

Studies and debates in the early 20th century focused on resettlement for government funded that were aimed at public good. The studies which started roughly between 1940s and 1950s were based more on advanced scientific investigations especially associated to mining induced displacement and resettlement (MIDR). Then later in the 1970s and 1980s anthropologists, sociologists gave more attention to development induced displacement and resettlement (DIDR), co-operating with analytical structures of World Bank (Termenski, 2012). The World Bank group later developed first World Bank guidelines devoted to planning and implementing involuntary resettlement. This was a period of advanced rapid studies on DIDR such as putting people first: social variables in rural development (World Bank, 2004).

Internally Displaced Monitoring Centre (DMC, 2012) identified mass of causes of internal displacement. Today, interest of scientific community is focused on all causes of forced displacements as reflected in the detailed classification of causes, namely: Such causes in scientific discourse include: dam induced displacement, mining induced displacement, conservation induced displacement, and climate change induced displacement and disaster induced displacement. Termenski (2013) notes that while disaster induced displacement consists of long-term and reversible evacuation, the problems of DIDR emerges perhaps as the world's largest statistical category that requires attention. Mortreux et al (2018) agrees with

this view, citing high social costs of exploitation associated with DIDR, and requires much attention and for whose research according to Termenski (2012) appear limited.

2.1 Global Overview of displacement and Resettlement

The factors for relocations and displacement of populations can be looked into in terms of impacts on livelihoods and wellbeing of people and communities as well as in the context of environmental changes says Erdiaw-Kwasie, et al (2014). According to Mortreux et al (2018), political economy also has influence on interventions by the government that while seeking legitimacy and power to control it, avoid perceived negative consequences and lack of accountability. This comes with uneven actions and inactions which result into uneven social-economic implications to localities. Jaeger et al (2013) agree that social interventions attempt to extend the government power and legitimacy which according to Scott, 1998) result to uneven incentives and disincentives.

Gutman (1994) notes that effects of DIDR may destroy temporary and permanently the lifestyle and living standards of poor people in local communities. International communities have since codified policies and guidelines on involuntary resettlement including the World Bank operation policy (World Bank, 2004), Asian Development Bank Operation Manual Section F2/BP Involuntary resettlement (ADB). Through this the Resettlement action plan emerged as a key instrument towards mitigation displacement impacts. Michael et al (2014) notes that lack of engagement has derailed resettlement outcomes which Mathur and Marsden, 1998 say have gone beyond economic and environmental impacts, and now create a pattern of gross violation of human rights and enormous trauma on countries such as India.

While largescale resettlement may appear to represent effective solutions in response to immediate or short-term needs, it is viewed from a long-term perspective to have potential to unleash major social, economic and environmental effects that may affect people and their surrounding as witnessed in Qinghai Province during Longyangxia Dam induced displacement in China.

Erdiaw-Kwasie, et al (2014) also notes that lack of involvement of the affected population as an obstacle in resettlement from MIDR perspective. They hence recommend effectiveness of livelihood promoting interventions using case evidences in contexts of engagement prospect s and challenges experienced in the programme. The recommend a territorial governance that proposes multiplicity of relations that characterize interactions amongst actors and different but non conflictual interests as proposed by Le Gales (2002). Four conditions need to be met,

namely vertical coordination, horizontal coordination, participation and involvement of civil society organized interests and territorial actions whose importance vary (EPSON, 2006). Davoudi et al (2008) reiterated the need for involvement stakeholders and interests (public/private partnerships) whose participation is necessary for design of implementation and participation of citizens as private actors who include joiners and non-joiners. In their views, involvement should include consultations, information sharing listening, learning and joint assessment. Where participation involves shared decision making, collaboration and empowerment. This should come with training of resettlement facilitators, effective and more localized monitoring and evaluation, good governance and strict policies.

Towards mitigation, Berkes and Jolly (2001) suggested a sustainable approach and models that contribute to mitigation of any possible vulnerabilities to cultural lifeways that encourage bottom up approach. De Plessis (2012) in the same view demonstrates that ecological design and planning processes should have four characteristics that are responsive to local conditions. Adapt to changing conditions, employ decentralized approaches and develop through collaboration and contribution of simple entities by bottom up self-organization; linked to social and cultural components as most important factor for success.

The approaches should provide resilience by leveraging on cultural capital and culture change to reduce stresses on health, wellbeing and security. This Oliver and de Sherbinin (2014) notes that governments and multinationals tend to dismantle resettlement, focusing primarily on economic aspects. This should not be the case since the resettlement processes involve dynamics and reorganizations within the system that always elude the possibility of restoring livelihoods to a similar state of pre-resettlement. According to their review and feedback on World Bank Guidance Notes, the International Network on Displacement and Resettlement (INDR) the implementation of displacement and resettlement processes international scope need to be reconsidered and relevant guidance operationalized (INDR, 2018).

The debates above show need for a comprehensive approach that considers the possible impacts, human rights, livelihood and wellbeing, economic and environmental need for involvement and participation.

2.3 Legal Frameworks on Involuntary Resettlement

2.3.1 Kenyan Land Laws

The present land related legislations (Kenya Constitution 2010 and Land (Amendment) Act of 2016 only provide for compensation of losses without a clear framework for relocation or

resettlement and related support mechanisms. There is also no uniform Resettlement Policy Framework that sets guiding principles for managing the impacts of resettlements while recognizing the livelihoods of the PAPs. In particular, the Kenyan Constitution of 2010 requires “prompt payment in full, of just compensation” to the affected person. The Land Act 2012 provides that “just compensation shall be paid promptly in full” to affected persons while Land Registration Act 2012 registers transactions/interests in land. These legislations also provide for acquisition or purchase of private land for a public purpose or in public interest. However, they do not provide for resettlement of displaced persons as a result of such compulsory acquisition beyond monetary compensation. This is notwithstanding the fact that affected persons may incur much more than they are paid in compensation in order to restore their livelihoods to the previous status.

2.3.2 Internationally Guidelines on Resettlement

In line with World Bank guidelines (OP 4.12), many international agencies recognize that involuntary resettlement is associated with impacts that require avoidance or minimization. The guidelines require that an entity whose work involves involuntary resettlement should in the first instance prepare a resettlement policy framework (RPF) to guide its activities, and secondly prepare a resettlement action plan (RAP) for each project undertaken. It is on these instruments and principles that the implementation can be audited and reviewed against minimum safeguards. An examination of various international agencies (World Bank, African Development Bank, Asian Development Bank, Inter-American Development Bank, JAICA (Japan) and Commission on Dams) yield common principles that are internationally recognized to undertake projects involving involuntary resettlement:-

1. Need for preparation of the Resettlement Policy Framework (RPF) as well as Resettlement Action Plans (RAPs).
2. Identification of legal and institutional framework within which the compensation and rehabilitation measures have to be implemented.
3. Avoidance of involuntary resettlement wherever feasible, and minimizing of resettlement where population displacement is unavoidable by exploring all viable project options.
4. Compensation at equivalent cost required to replace the asset in its existing condition.
5. Assistance to the affected people to relocate and improve their living standards, capacity for income generation, and production levels, or at least to restore to their former levels.

6. Participation and stakeholder consultations of affected persons at every stage
7. Grievance redresses mechanisms for project affected persons.

In practice, however, implementation vary from one country to another, depending on national legislation on involuntary resettlement. For instance, while the Asian Development Bank (ADB) Involuntary Resettlement (IR) Policy stipulated that compensation of PAPs would be at the replacement value of the asset lost, the laws of India, under the Land Acquisition Act 1984, allowed compensation at market value based on asset registration value and not cost. In some instances in the case of China, there was a difference between the compensation standards stipulated in the RAP and the actual compensation provided to PAPs, where the actual compensation was evaluated as being too generous.

2.3.3 Compulsory Acquisitions of Land

The state cannot rely on the land market alone to ensure land is acquired for public benefit in its various sectors such as energy, transport, infrastructure development, social housing among others. Moreover, it should not fail in its sector plans due to land shortage, in which case the public purposes should take precedence over private ownership interests. Compulsory acquisition is an important option by which the state can acquire land from private entities who may be unwilling to release land for development in public interest (FAO, 2010).

When land is compulsorily acquired, the project affected persons have to relocate or be resettled elsewhere on alternative land due to physical displacement. Involuntary resettlement arises from the power of the government to acquire such rights in land sometimes without willing consent of its owner or occupant. This power is also referred to as Eminent Domain, compulsory purchase (in the United Kingdom, New Zealand and Ireland), resumption in land (Hong Kong), expropriation of land (in South Africa and Canada) and compulsory acquisition (in Kenya, Uganda and Tanzania).

Ideally, the acquisitions or concessions should be within policy pointers (guidelines) that include governance, environment, rule of law and human rights, economic and social-cultural wellbeing. (ILC, Tirana Declaration, 2011). Involuntary has severally occurred without the informed consent of the displaced persons or if they give their consent without having the power to refuse resettlement. Nevertheless, engaging all stakeholders in large scale land deals need much attention in order to protect the livelihoods of local primary land owners (users) from faults in procedures and processes any resultant impacts. It is notable, however that each state carries out land acquisitions differently based on their laws and way of practice in terms

of timing of budgeting, basis of valuation of losses and how compensation and support to affected persons is done.

In Africa, land acquisitions are motivated by various multisector projects such as power generation, expansion of infrastructure such as roads and railway, social housing strategies, agribusiness and green grabbing for wildlife conservation or ecosystem protection. International development professionals, while acknowledging significant risks on local livelihoods and the environment, have identified large economic opportunities land based investments for countries involved and the rural poor, says Scheidel and Sorman (2012). According to FAO (2010) responsible Agricultural Investment (RAI) principles have been put forward in order to turn challenges into benefits. However, this principle is questionable from the stand point of the pro-poor effects from a human rights and employment perspective.

The energy sector in Kenya operates in tandem the Post 2015-Sustainable Development Goals, Vision 2030 and several multilateral and regional aspirations. The Kenyan government has opened avenues for Public Private Partnerships to various agencies (Kenya Electricity Generating Company, Kenya Electricity Transmission Company, Kenya Power and Lighting Company, Rural Electrification Authority, Geothermal Development Company and other Independent Power Producers (IPPs) to meet her energy demands. The country has further put more emphasis on the expansion of power generation especially through hydro-power, geothermal.

The development of generation, connection and transmission infrastructure and assets has resulted to large scale land acquisitions. Energy is thus becoming a major driver of land acquisition in Kenya as seen in Turkana oil rich basin, Kerio Valley exploration blocks, geothermal steam fields, Kinangop Hills for proposed wind power, Loyangalani wind farm and transboundary transmission lines linking Kenya and Ethiopia among others. The government is empowered by laws to compulsorily acquire land either permanently or temporarily for public good and service provision, such as provision of energy and related services.

2.4 Cases Studies on Involuntary Resettlement

2.4.1 The Albertine Graben Region in Uganda

RAP was prepared to lay down a framework for managing the loss of economic activities and livelihoods from resettlement which impacted over 7,000 affected persons in about 1200 households in Kabaale, Hoima district. However, the local communities raised issues over the impacts of the resettlement activities, such as livelihood issues, land grabs and violations that

related to land rights, tenure, ownership transfers and access (Edwards, 2010; ULA, 2011). According to African Institute for Energy Governance (AFIEGO) the following significant issues arose from the resettlement implementation and the establishment of the refinery:-

Information: The English-written documents without knowledge about the process. The resettlement budget was summarized in English without translation while the details were kept confidential. The affected people presumably made uninformed decisions because they had no access this information

Compensation: Project affected persons got unfair compensation and faced intimidation from Implementers. The choices of cash compensation were already made by the implementers without negotiations.

Participation: Their right to effective participation in decision-making processes was a violated people's.

Grievances redress: land tribunals were not set up as per the Constitution hence the right of court redresses was denied. Litigation and petitions were made to government, parliament and other stake holders to push for action.

Negative Public Perception: The consequence was a misconception that the Government is 'stealing people's land'.

2.4.2 The Ilisu Dam Project on River Tigris in Turkey

The Ilisu project is a multipurpose project with a capacity of 11 billion cubic meters of water. According to a report, drawn up in 2008 by international experts acting on behalf of European export-credit agencies, it had a potential to displace 199 settlements, affecting 55,000 people.

The project has been highly criticized for its far reaching impacts on man's activities and cultural heritage sites around it, in Turkey and beyond. The concerns about its environmental, cultural and social impact forced companies and financial backers from Germany, Austria and Switzerland to pull out of the project under pressure from public campaigns in 2009.

According to Report by the Ilisu Dam Campaign and Corner House (2000); Ministry of Foreign Affairs, Republic of Turkey, and the project had the following gaps.

1. Participation

There were no consultations with the host communities. The governors, mayors and project team were directly involved without direct voice of the natives

2. Right to Information

Details on the budgets and sensitization of all host PAPs was not adequate. Local stakeholders waited for over 20 years since after the approved before they were officially informed directly about it.

There was no transparent data on socio economic analysis of the actual situation that captured the impacts, the accurate PAPS census and livelihoods. The implementers relied on national economic reports which were irrelevant.

3. Legal frameworks

Turkish government had not modernized the national policy and regulatory frameworks in resettlement to address Violation of rights of women, security rights of users of land

4. Grievance redress

Forced evictions and absentee rural families. Pastoralists were denied access to land without compensation. Lack of proofs of land ownership No redress on the issues raised

5. Compensation/ restoration of livelihoods

Institutional Reforms- Land tenure and land titles problems complicated compensations. Pastoralists were denied access to land without compensation

2.4.3 Kinangop Wind Park Project in Kenya

The wind park would add thirty-eight 1.6-MW wind turbines to generate electricity for sale to Kenya Power & Lighting Co. (KPLC) under a long-term power-purchase agreement. The project was expected to increase wind power generation capacity from the 6 Megawatt national output.

There implementation challenges associated with participation, grievance redress, and compensation and consideration terms as well as standards ad legally enforced rights that were violated, evidenced by opposition, implementation delays and unrecovered capital Costs. The project therefore stalled, denying Kenya a change of increasing national grid distribution and savings in carbon emissions associated with other sources. The project could no longer be completed by the shareholders due to the following challenges as reported in *March 28, 2016*, by Shem Oirere, Engineering News-Record, *Kenyan Court Halts \$150-Million Wind Farm Project* :-

1. The land dispute emerged despite the project developer's documented consultations with community groups in November 2010

2. Dispute over land ownership at the proposed site and concerns over the effect of installing wind turbines in the area were not resolved. This created an unsafe environment for the team to implement the project
3. A group of farmers and land owners in rejected an offer for their land to develop the planned Kinangop Wind Park
4. Standards on requisite minimum of 1km off the site .Only 38 plots of 40 m x 40 m each was acquired. This meant that thousands of families of Kinangop Plateau will be within prohibited proximity to the detriment of their rights under Article 42 of the Kenyan Constitution.

2.4.4 Resettlement for KenGen's Olkaria IV project

KenGen implemented involuntary resettlement of the native Maasai community for the Olkaria IV through inclusive participation, international guidelines, capacity building and exchange programmes. In addition, certain agreements such as memorandum of understanding and mediation were enforceable to ensure that livelihood issues and needs of the project affected persons were taken into strict consideration. According to Kamakia A.M (2015) implementation was characterized by the following best practices:-

1. **Participation:** There were consultations with the host community's through Resettlement Action Plan implementation committee that were inclusive.
2. **Access to Information:** They are viable approaches avenues of information dissemination and consultation; -Barazas constituted by elders of communities with all stakeholders held from time to time; stakeholders' meetings was a source of information all participants; formal methods such as letters and calls and posters.
3. **Grievance redress:** Grievances were resolved within reasonable time on the issues regarding: tenure of leasehold interest purchased for resettlement, permission to grace on project land and risks involved, compensation of families left out during compensation.
4. **Compensation** was done in both monetary and cash forms
5. **Livelihood restoration strategies** were implemented through feasibility studies on business frameworks, transfer of land purchased to resettle community being processed, stakeholder participation, adherence to international standards and rule of law was ensured.

2.4.5 Lessons from the Case Studies

In the case studies (Turkey, Uganda, and Kinangop Wind Park and KenGen Geothermal Olkaria IV), the following lessons and research gaps among others:-

1. Lack of prior information unreliable information captures on census of households, entitled beneficiaries, ascertained ownership claims and engagement of the PAPs and community.
2. Failure to implement RAP within the various principles of transparency, integrity, access and right to information, grievance redress and just compensations.
3. Ignoring to incorporate certain guidelines and safeguards as a control mechanism may result in to long term socio economic challenges to host communities.
4. Grievances on land tenure problems, compensation and agreement need to be addressed through consultation.
5. Inclusion of players and proactive partnerships at earlier stages of the projects is needful for social license to operate and project success.
6. Negative local opposition is an indicator of failed process tenure problem associated with resettlement and compensation for restoration.
7. There is a need for reforms in the governance and legal frameworks to ensure successful development of land based energy project without compromising livelihoods of land owners.
8. The risks and impacts of resettlement should be carried out in light of tenure rights, environment, cultural and economic aspects.

2.5 Impacts of Involuntary Resettlement

According to World Bank (2004) and International Finance Corporation (2002), involuntary resettlement should avoid or minimize involuntary resettlement. Where this cannot be avoided, the project team should have a monitoring and evaluation plan to restore and better livelihoods of the affected persons. RAP Report specifies the procedures that project team follow and the actions to be taken to mitigate adverse effects, compensate losses, and provide PAPs with opportunities to restore or improve their living standards and income earning capacity.

The project under study is in Category A usually associated with adverse impacts on livelihoods and ecosystems by the World Bank classification with regard to impact analysis. The socio-economic and environmental impacts of the project were, assessed (besides the RAP) through Environment and Social Impact Assessment (ESIA) studies under Environmental Management and Co-ordination Act (EMCA, 1999) and related legislations.

The ESIA and RAP Reports both detailed how various resultant activities would affect human land-based livelihood and the diverse biodiversity, due to general impacts of resettlement program. The executive summary in the Disclosure Report on Resettlement Action Plan on the Eastern Africa Interconnector identified the following impacts:-

1. Impacts on land; temporary and permanent loss of land
2. Impacts on structures: both residential and non-residential
3. Loss of trees and crops; farm crops and fruit trees.
4. Impact on businesses; limited liabilities companies and business centers (shops), horticulture farms.
5. Impact on public facilities (some of which would need relocation and compensation), graves and squatter settlements.

The analysis of impacts of LSLAs elsewhere by Richards (2013) uses Poverty Analytical Framework (OECD, 2007) and Land Governance Classification system of International Land Coalition (ILC). According to ILC (2012), the impacts of LSLAs are directly experienced by the poor (smallholder farmers, pastoralists, indigenous people and vulnerable groups). The highest incidents of poverty in Africa exist among citizens living in customary tenure regimes and that the poorest and landless are most dependent on the 'commons'.

This study adopted a hybrid approach from the two frameworks to classify the impacts of LSLAs. Although these frameworks were based in Agri-based LSLAs, they relate broadly to land based power transmission line projects in Kenya. The similar impacts have also been witnessed in oil based LSLAs in Uganda, Nigeria, Ecuador and Northern Kenya where in each case:-

1. Customary Land tenure was involved,
2. The land in question was agricultural (crop or pastoral) land, and
3. The land acquisitions were energy and hence competing with other land uses of food, water and other livelihood sources, and environmental conservation.
4. The hybrid framework classifies the impacts into four major categories: Tenure, land governance, livelihood and poverty, and environmental impacts having far reaching impacts at the macro- level.

2.5.1 Tenure impacts

These impacts relate to ownership, title and access to native land as a result of compulsory acquisitions and resettlements. The situation is complex, where land is either not

registered/titled or held communally where individual users may not have their personal issues addressed. Most disadvantaged categories are immigrants, widowed women, (orphaned) children and the less informed natives.

2.5.2 Livelihood and Poverty Impacts

The large scale land acquisitions always livelihood impacts on the project affected communities that would always require risk evaluation and restoration plans. According to Chambers and Conway (2000), livelihood impacts relate to economic capabilities (which influence how people adapt to coping strategies, including potential mitigation effects of compensation or lack of it; Human and social capabilities (including displacements, resettlements) effects on health, education, culture, community cohesion and other forms of social capital; provision of social services and public goods by projects and potential land based conflicts; political and governance capabilities beyond land governance (equity, participation and community consent)

2.5.3 Land Governance Impacts

These impacts influence the rights, political capabilities and conflicts associated with land governance process as a result of energy based land acquisitions. Communities always regard government activities as being non-transparent, unfair and non-participatory in regard to the related processes: compensation, resource distribution, employment agreements, Infrastructure, conflict resolution, sensitization, allocation and award of oil exploration blocks, local governance, rates and rent payments as well as corporate social responsibility. Borrowing from Ugandan and Turkey's experience, project affected communities always regard government activities as being non-transparent, unfair and non-participatory.

2.5.4 Environmental impacts

The environmental impacts show up in LSLAs and resultant activities on the biodiversity, environmental aesthetics, and natural habitats due to general land degradation as a result, land clearances and use of vibration, wells drilling, spillage and loss of vegetation cover and wildlife species.

2.6 Kenya Electricity Transmission Company's Resettlement Policy Framework

The power transmitting company prepared a Resettlement Policy Framework (RPF) that sets out guiding principles and procedures to adopt whenever involuntary relocation or resettlement is required for its individual projects. Further, the company prepares a RAP to manage implementation of such resettlement activities. While the RPF and RAP propose plausible

initiatives that are largely based on World Bank guidelines, the legal framework is makes no reference to involuntary resettlement and support mechanisms beyond compulsory acquisition and compensation. The guidelines in the implementation of resettlement action plan for the Eastern Africa interconnector project included the following key principles:-

2.6.1 Compensation and PAP's Satisfaction.

The RPF for KETRACO offered to award compensation to PAP's satisfaction in phases, namely:-

1. 70% of structures is paid up front;
2. 30% of structures is paid once structure is removed;
3. Land is paid for when land is vacated
4. Trees and crops paid for as destroyed by contractors.

The World Bank guideline (OP 4.12) goes beyond the existing practice in Kenya by recommending post-compensation support services and livelihood restoration strategies.

2.6.2 Stakeholders' Participation and Grievance Redress Mechanisms

The RAP identifies possible issues associated with resettlement and prescribed formation of various working groups for sensitization and consultations. In addition, there was need for inclusive Grievance Redress Committees to which PAPs would make their concerns or grievances known for early redress.

2.6.3 Livelihood Restoration Mechanisms

The transmission line project under study falls under Category A in the World Bank classification of project for which adverse impacts are usually anticipated. The Disclosure Report on Resettlement Action Plan on the Eastern Africa Interconnector detailed possible impacts including: total or partial loss of land, loss of structures, loss of trees and crops (farm crops and fruit trees), loss of businesses/ premises (shops, horticulture farms), impacts on public facilities, graves and squatter settlements.

2.6.4 Monitoring and Evaluation Framework

The company formulated monitoring and evaluation framework based on key measurable performance indicators, to guide internal and external monitoring and evaluation of RAP performance.

Monitoring and evaluation is a strategic tool would enable the project team to continuously look in to the project implementation and ensure efficiency, effectiveness and livelihood restoration steps. While monitoring traces and compares performance with merely what was

planned (whether good practice or otherwise) in order to get back to the trail, evaluation uses benchmarks or best practice as a basis for comparison and conclusions.

2.7 Research Study Gaps

Kenyan land laws provide for compulsory acquisition and compensation (Syagga P, and Olima, W (1996). However, there is no uniform policy framework to guide involuntary resettlement. Each institution involved in displacement of people through involuntary resettlement prepares a resettlement action plan (RAP) based on its own resettlement policy framework or that of an external development partner such as the World Bank. The gaps in the laws are always addressed according to the whims and discretion of the implementing agency which is subject to err without checks and balances.

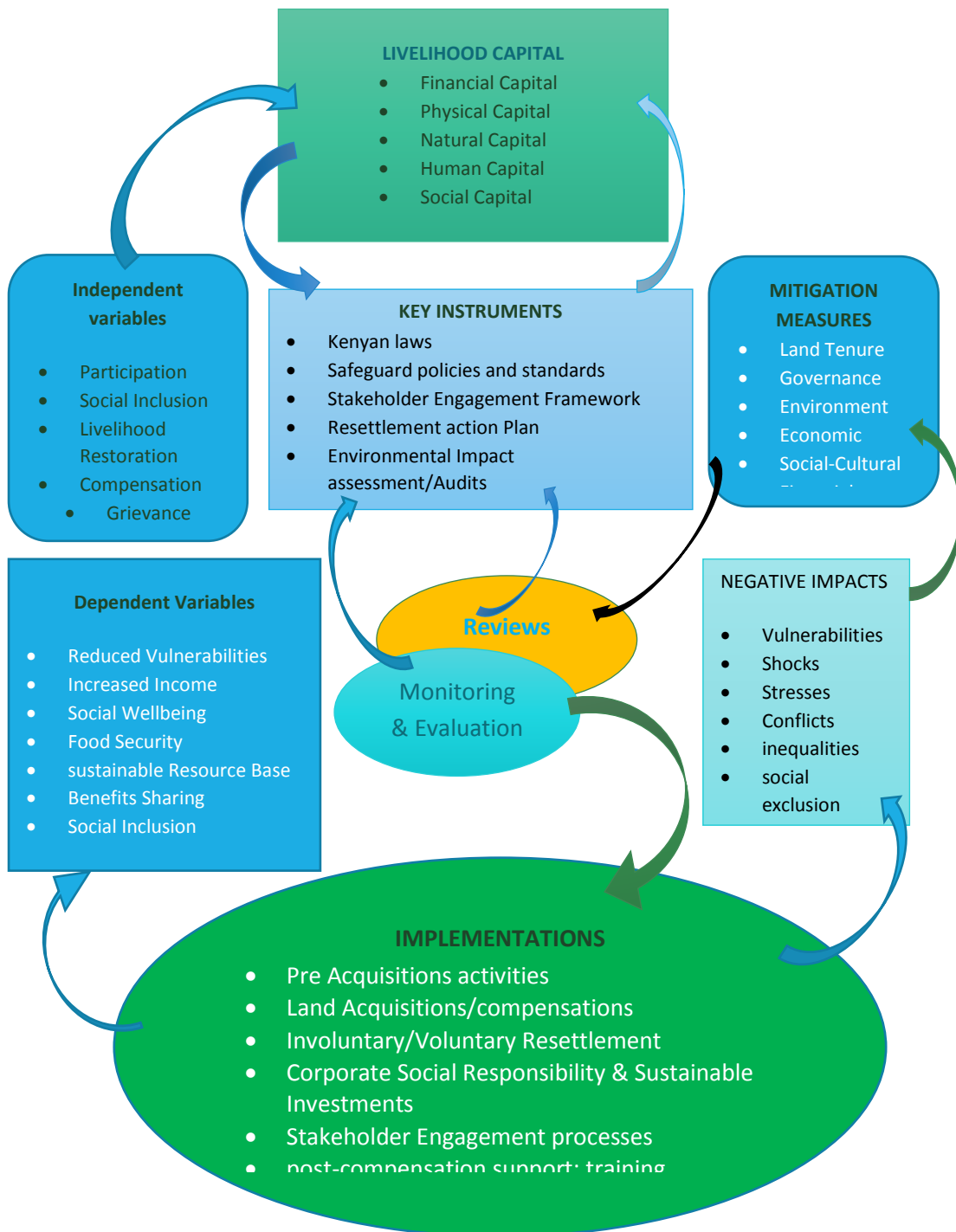
Erdiaw-Kwasie et al (2014) recommend effectiveness of livelihood promoting interventions using case evidences in contexts of engagement prospects and challenges experienced in the past programmes. Berkes and Jolly (2001) suggested a sustainable approach and models that contribute to mitigation of any possible vulnerabilities to cultural lifeways that encourage bottom up approach. The recent literature and finding are based on Dam induced resettlement in Kenya were done by Wanjiku (20016) identified benefits of Mwea Irrigation projects which resulted into improvement of quality of life without disrupting peaceful coexistence, social relations or culture. However, much has not been cited on the approach apart from recognizing significance of social and stakeholder components. She recommends further research on neighborhoods and downstream communities affected by the resettlement issues besides the directly affected persons.

Sawka (2015) highlight loss in livelihood of project affected persons and negatively affected social networks, access to social amenities, occupation opportunities and education due to resettlement and relocation due to Thika Dam project. He identifies community perceptions, livelihood restoration, coping mechanisms and participation as key aspects to consider. In his opinion, further studies should be carried out on research gaps in international and local guidelines, policy prescriptions for amendments and change in legislations touching on resettlement during implementation of government infrastructure.

2.8 Conceptual Model for Resettlement and livelihood Sustainability

There is a set of concepts borrowed from theories and views of various sources within the scope and context of this study. The hybrid concepts and key principles that affect or influence the resettlement and livelihood opportunities were analyzed in a flow chart Figure 3.

Figure 3: Conceptual Model Involuntary Resettlement and livelihood Sustainability

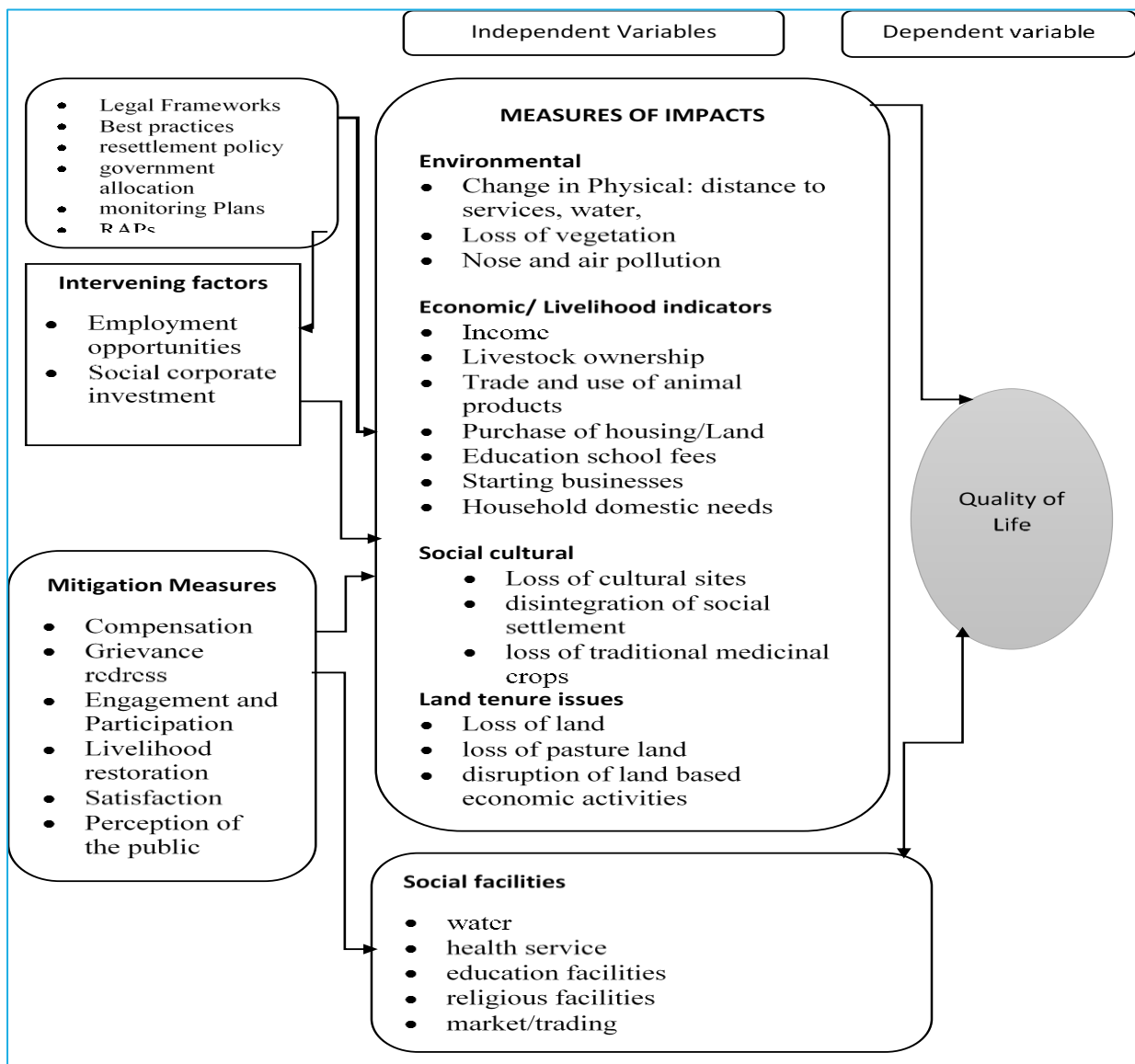


Source: Adapted from Chambers, R. and G. Conway (1992) *Sustainable livelihoods: Practical concepts for 21st century*. IDS discussion Paper 296. Brighton: IDS, Sustainable Livelihood Approach of DFID (2000)

2.8 Theoretical Framework for Energy Based Involuntary Resettlement

In theory, to ensure a sustainable livelihood restoration of persons affected by involuntary resettlement. Factors that were adopted to measure quality of life were: livelihood source, Good education for children in High school, secondary and post-secondary institutions, ability to cater for domestic needs, food, clothing, shelter or good housings, security of tenure (in land ownership). The study adopts factors for measuring performance of targets were livelihood restoration, grievance redress, community engagement and participation, satisfaction and perceptions of the public, process of compensation and the amounts awarded vis a viz the losses.

Figure 4: Theoretical Framework for Energy Based Involuntary Resettlement



Adapted from Chambers, R. and G. Conway (1992) Sustainable livelihoods: Practical concepts for 21st century. IDS discussion Paper 296. Brighton: IDS, Sustainable Livelihood Approach of DFID (2000)

CHAPTER 3

STUDY AREA

3.0 Introduction

The study area covers about 612 kilometers of the total extend of the transmission line that runs over 1045 Kilometers linking Suswa to Solo in Kenya and Ethiopia respectively. The line is divided into three almost equal lots in the Kenyan section, namely Lot 6, Lot 5 and Lot 4. The study was limited to lot 5 which stretches from Oldonyiro to Log Logo. This covers three counties: mainly Marsabit and parts of Samburu and Isiolo counties respectively.

Figure 5: Map showing the three counties



Source: Source: Author's extract using Arch GIS/Map source

3.1 Livelihood aspects

The study was carried out in predominantly arid and semi-arid lands where locals rely mainly on pastoralism as main source of livelihood. The livelihood system in the study area was associated with cultural land use systems, robust environmental protection for sustainable use of land, water and vegetation, and socio cultural activities. Difficulty of access to services and amenities like water, health, security, energy and education is one to the major aspects witnessed in this study.

Main water resources include River Ewaso Ngiro, Lake Turkana, bore holes, dams and seasonal rivers. Main settlements consist of *Manyattas* and foras whose locations vary seasonally and also with the nature of social and traditional beliefs. The communities in the three areas of study predominantly include Samburu, Rendiles, Boranas, and Turkanas.

Figure 6: Dam water source for livestock washing and domestic use



3.2 Demographic Information

The level of poverty is generally high across the all counties. The need and challenge for provision of health, energy, employment and sustainability of main livelihood source is necessary to ensure that the RAP activities positively improve on the life expectancy, socio-economic wellbeing and health of all categories including the aged, women and people with special needs.

Figure 7: Typical residential structures within a Manyatta



Source: Author's field photos

Table 1: Summary of Demographic information

County	Population	Male	Female	Youths	Poverty rate
Isiolo	143,294	73,694	69,600	50,439	72.6%
Marsabit	291,166	164,105	152,101	59,810	82.3%
Samburu	223,947	111,977	111,970	21,597	73%

Source: KNBS, KPHC, 2009; Kenya: County Fact Sheets

3.3 Economic Activities

The study areas have various resources that may drive productive economic activities as shown in the Table 4.

Table 2: Economic activities, Resources and opportunities

County	Economic Activities	Resources	Opportunities
Isiolo	live stocking, small scale crop farming, tourism, fishing	Blue sapphire, limestone, biro mix, gas, sand, rubies, wildlife, springs, hides and skin, livestock products, Ewaso Ngiro rivers and dams	Mining, tourism industry, agriculture
Marsabit	Live stocking, sand harvesting, stone mining (sand, gemstone, salt), small scale trading	mica, open cast quarries, gold, salt, chromites, sand, petroleum deposits, miraa, livestock, animal products (skin), lake Turkana, wildlife	Mining, crop, livestock, fisheries a, tourism and industry, boat manufacturing and repair
Samburu	Live stocking, conservancy, tourism, bee keeping,	Wildlife, Lake Turkana, Ewaso Ngiro, dams, vegetation	Mining, crop, livestock, fisheries a, tourism industry, boat manufacturing and repair

Source: County Government Isiolo, Marsabit, Samburu.

3.4 Climatic conditions

These three areas fall in an adverse region that experiences long periods of drought and adverse effects of rain and flooding. The residents are thus vulnerable to drought, famine, flooding and illnesses associated with lack of adequate water, food, and energy and transport. Temperatures are generally high and there is not any feasible use of crop farming and animal husbandry initiatives. Live stocking is mainly traditional. The communities however enforce their traditional methods of land use, patterns of settlement, grazing and preservation of vegetation and use of water sources amongst various clans/households.

Table 3: Annual Rainfall distribution

County	Maximum (mm)	Minimum (mm)	Average (mm)
Isiolo	500	300	580.0
Marsabit	1000	200	700
Samburu	250	200	230

Table 4: Annual Temperature Range

County	Maximum in °C	Minimum in °C	Average in °C
Isiolo	28	12	21
Marsabit	30.2	10.7	20.1
Samburu	35	25	20

Source: Author's extract using Arch GIS/Mapsource

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

The study evaluated the implementation of RAP for the Eastern Electricity Highway Project. The outcome of the study was to appraise against the expected outcomes how the performance of resettlement based on the following key aspects:-

1. The socio economic profile of the affected community
2. Livelihood changes resulting from involuntary resettlement on the affected households
3. The perception of PAPs' level satisfaction with the process.
4. The performance targets in terms of participation of the stakeholders, effectiveness, grievance Redress mechanisms, restoration of living standards of the PAPs

4.2 Specific Objectives

The study had the following specific objectives:-

1. To establish the social economic profile of the communities and how they were impacted by the project.
2. To establish if there was change in quality of life as a result of involuntary resettlement on the affected households?
3. To establish performance targets in terms of participation of the stakeholders, effectiveness, and grievance Redress mechanisms, restoration of living standards of the PAPs.

4.3 Study Methodology

The study involved pre-visits, literature reviews, and sample size determination of units of analysis and population sample proportion, sampling procedure. The study incorporated both qualitative and quantitative elements in collecting the views, suggestions and opinions of the PAPs and key informants. According to Creswell & Plano Clark (2007) and Castro, F. G., et al. (2010), this kind of mixed method of research is an inquiry based approach that combines or associates both qualitative and quantitative forms.

4.4 Sampling Procedure

Sampling was by multistage sampling which according to Crawford, I. M. (1990) includes random, stratified and cluster sampling. Firstly, location of the project line was identified in Kenyan map. Then regions crossed by the transmission line were stratified according to

counties (Marsabit, Isiolo, Samburu, Laikipia, Nyandarua, and Nakuru. Then three (3) Counties (Isiolo, Samburu and Marsabit) were selected, by random probability sampling technique from the list of seven counties crossed by the transmission line. The selection was by lottery technique where Samburu, Marsabit and Isiolo were picked. These counties comprise a portion of the line stretching from Oldo Nyiro to Log Logo (**Lots 5**) and from Log Logo to Kenyan Ethiopian Border (**Lot 6**). In this study, **Lot 5** was picked by purposive sampling due to ease of access and availability of PAPs.

The three Counties were stratified by sub-counties within the **Lot 5**: and one Sub County was chosen from a list of sub counties in all the three counties. Therefore, Wamba was selected in Samburu; Merille was selected in Marsabit, and Oldonyiro was selected in Isiolo. PAPs were selected randomly as they were found along the transmission line.

Table 5: The sampled sub-counties and wards.

Counties	Sub-Counties	Sub-Counties	Wards	Sampled wards
Isiolo	Isiolo North, Isiolo South	Isiolo North	Oldo-Nyiro,	Oldo-Nyiro
Marsabit	Laisamis, North Horr, Moyale , Saku	Laisamis, Saku	Merille, Laisamis, Log logo,	Merille
Samburu	Samburu East, Samburu West, Samburu North	Samburu East	Lodungokwe, Sere-Olipi, Wamba	Lodungokwe

4.5 Sample Size

4.5.1 Household Heads

According to the latest RAP report by Gamma Survey, a total of 97 households would be impacted in one way or the other. Sample size, was calculated using the formulae:-

$$SS = (Z\text{-score})^2 * p * (1-p) / \text{margin of error}$$

The Z score at confidence level of 95% is 1.96 with margin error of 5%, and assumed proportion of population at 0.5

$$\text{Adjusted } SS = (1.96)^2 * 0.5 * (1-0.5) / (0.05^2) = 384.16$$

Sample size was adjusted for the total population

$$SS \text{ Adj} = (384.16)^2 / [1 + (384.16 - 1)] / 97 = 78$$

The targeted sample of 78 was not attained since some of the targeted PAPs were herders and it was not convenient to reach them due to inaccessibility and cost constraints associated with

the terrains. Therefore only 50 PAPs which is about 51% of the targeted population were reached. According to Mugenda and Mugenda, (2003) a sample size of between 20 and 30 per centum of the population is adequately representative of the population. Therefore, responses from 50 PAPs was adopted.

4.5.2 Focus Group Discussions

There were a total of 275 attendants who actively participated in the focus group meetings. These included the PAPs, leaders and other community members around the project areas.

Table 6: summary of the attendance in Focus Group Discussion meetings

County	Sub-County	Venue	Attendance
Marsabit	Laisamis	Merille	120
Isiolo	Isiolo North	Oldonyiro	80
Samburu	Samburu east	Londungokwe	75
			275

4.5.3 In-depth Discussions with Key Informants

Besides the focus group meetings, there were special meetings held with leaders from the three counties for in-depth discussions on the impacts and their various views regarding the impacts of the projects and the emerging issues that needed to be considered.

Table 7: Key Informants involved in-depth Discussions across the Counties

	Isiolo	Samburu	Marsabit
Venue of meetings	Longopito	Wamba	Merille
Chiefs	1	1	1
Assistant Chiefs	1	1	2
County Reps	0	2	1
Research Team	3	3	3
KETRACo Team	1	1	1
Civil Society	0	0	2
Totals	6	8	10

4.5.4 Primary and Secondary data

The primary data sources included interviews, observations, active participation, and photography.

Secondary data sources in the study included: Economic Survey, Kenya Housing and Population Census data, World Bank Reports, Disclosure Report on Eastern Africa Interconnection Transmission Line Project by KETRACO, Report on the Review of boundaries of the constituencies and wards in Kenya released by IEBC in 201 international policy on safeguards and Kenyan Legislations.

4.6 Data Analysis

The analysis of data was done by the use of descriptive and inferential statistics. Chi Square (χ^2) test was used to estimate how closely an observed distribution matches an expected distribution and to estimate whether the random variables in both cases were independent.

Chi-Square test was used because the following conditions were met:-

1. The Sampling method was random
2. The variables under study were categorical

The limitation of the Chi Square Test

The Non-Parametric Test was not useful for purposively sampled qualitative data. In this study the **Chi Square Test** was appropriate where:-

1. There were no rigid assumptions with regard to the study population (it is non-parametric) test
2. The data collected were categorized using contingency tables with classes of variables.
3. The hypotheses were not based on estimations.
4. The test was based on frequencies of variables

Chi-Square test has been used in similar research work that tests relationship between expected and observed outcomes on a research analyzing impacts of resettlement due to dam induced resettlement by Sakwa (2016) and Wanjiku (2012).

The researchers investigated result of resettlement to socioeconomic by examining level of PAPs participation by the committees were constituted, and examine peoples' perception. In this study, chi square is used to test

1. Social economic impacts resulting to relocation and compensation by assessing effects on access to social services.
2. Level of satisfaction and Quality of life by analyzing the way PAPs were compensated and how they spent the awards.
3. Level of grievance redress, satisfaction and PAPs perceptions by determining ways through which the information was received and addressed
4. Level of participation based on the approach through which information was disseminated or received by PAPs

4.4 Chapter Summary

The study was objectively conducted to capture the views of PAPs, community members and their leaders at various categories: the youth, women, elders, civil society groups and county government.

The views were captured by use of figures, statements of views and opinions. Data was analyzed through descriptions by use of descriptive statistics

Figure 8: Discussion with PAPs in Oldo Onyiro



Figure 9 : meeting with key informants in Wamba-Samburu



CHAPTER 5 RESULTS AND DISCUSSIONS

5.0 Introduction

During the fieldwork study, a total of 78 PAPs (households) in the three sampled counties were targeted. The region is a mostly arid land with almost no crop farming activities. Some of the 18 household heads (2 in *Isiolo*, 16 in *Marsabit*) had gone for grazing far away from the Manyattas and could not be reached because of connectivity and access challenges, adequate information was not gathered. Therefore, study relied on 50 respondents who were physically contacted.

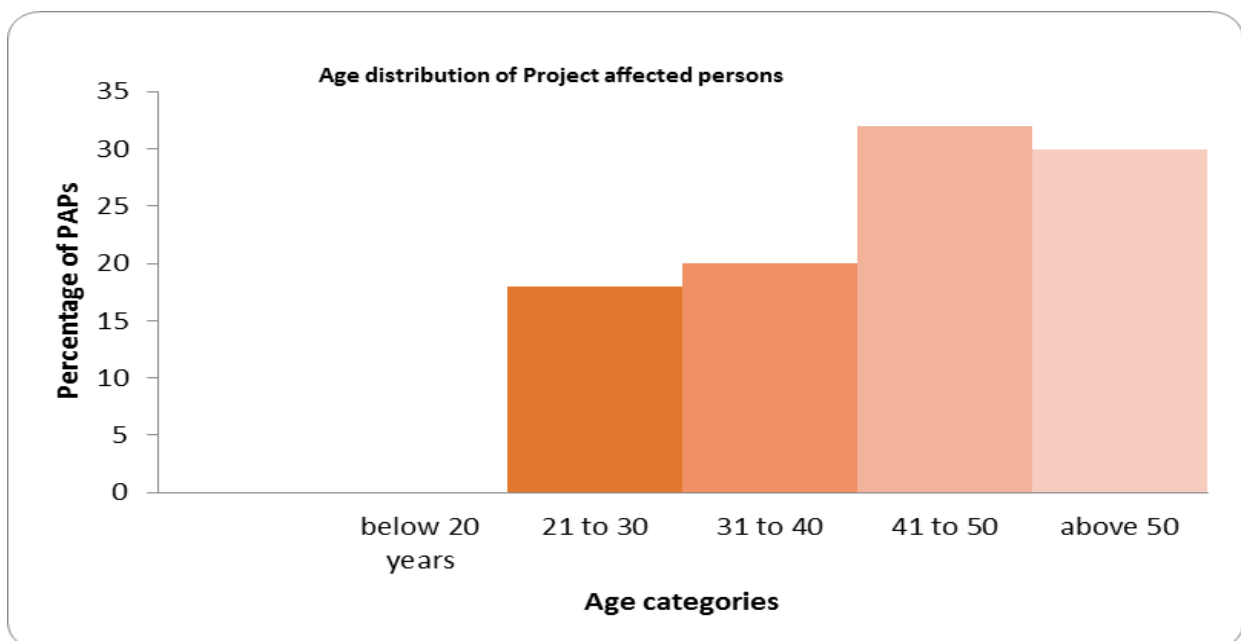
5.1 Objective 1: Socio-Cultural system and Project implications

The study analyzed the demographics of population statistic PAPs and their livelihood systems, land tenure, access to community services, and religious affiliations and how these aspects were affected by the project activities.

5.1.1 Classifying PAPs by Age and Gender

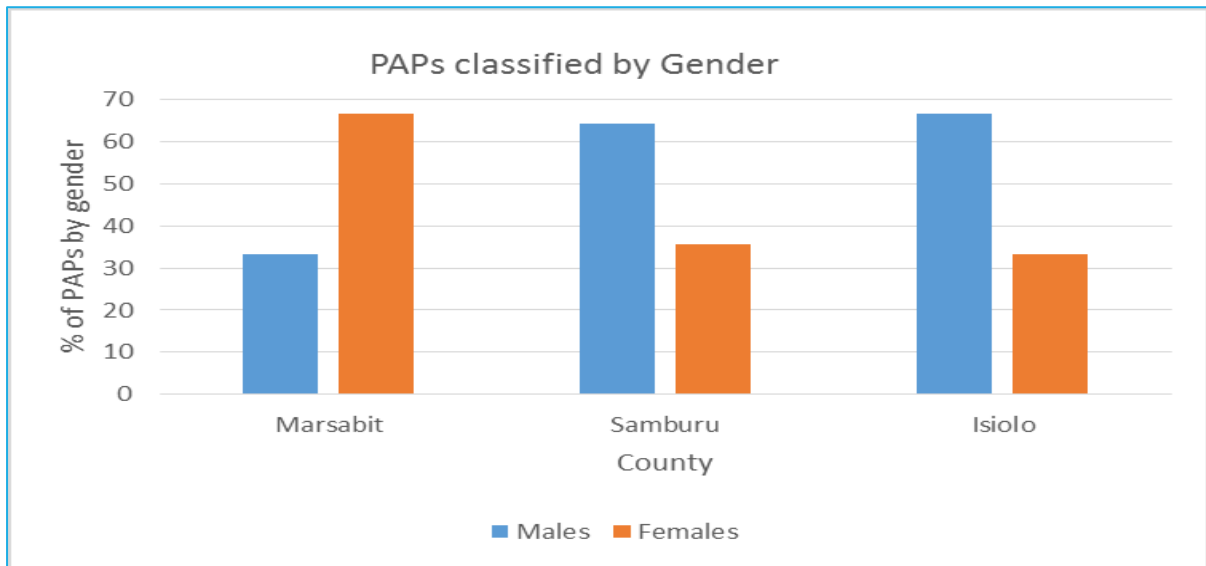
Study classified PAPs according to their age groups where 62% of PAPs were above 40 years old. 30 % of the interviewed PAPs are aged above 50 years showing a huge number of prospective dependents in the near future.

Figure 10: Classifying PAPs according to their Age Groups



Majority of the PAPs interviewed were males, apart from Marsabit where male household heads went for grazing away from the *Manyattas* called (usually known as *fora* for Transhumance typical with nomadic pastoralists.

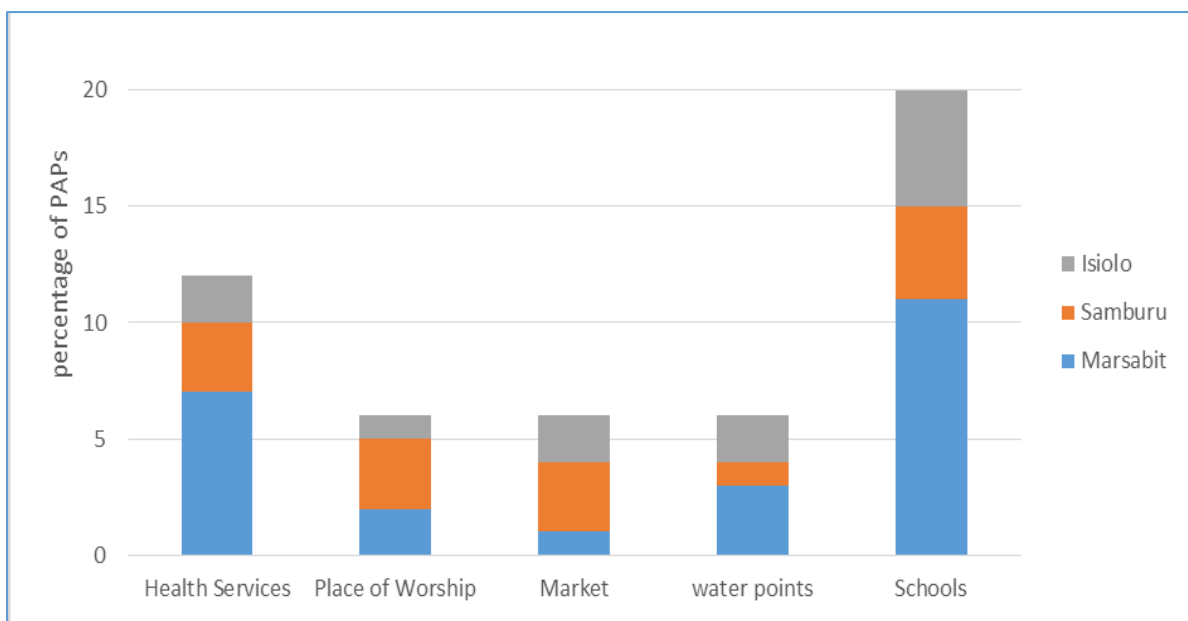
Figure 11: Classification of PAPs by Gender



5.1.3 Impact of Resettlement on Access to Community Services

The study shows that most PAPs are now living far from secondary schools and health services in the three counties as a result of relocation by about 3 Kilometres more than the former distance. However, there was little number faced the same change in access relative to market, places of worship, primary schools, and dispensary.

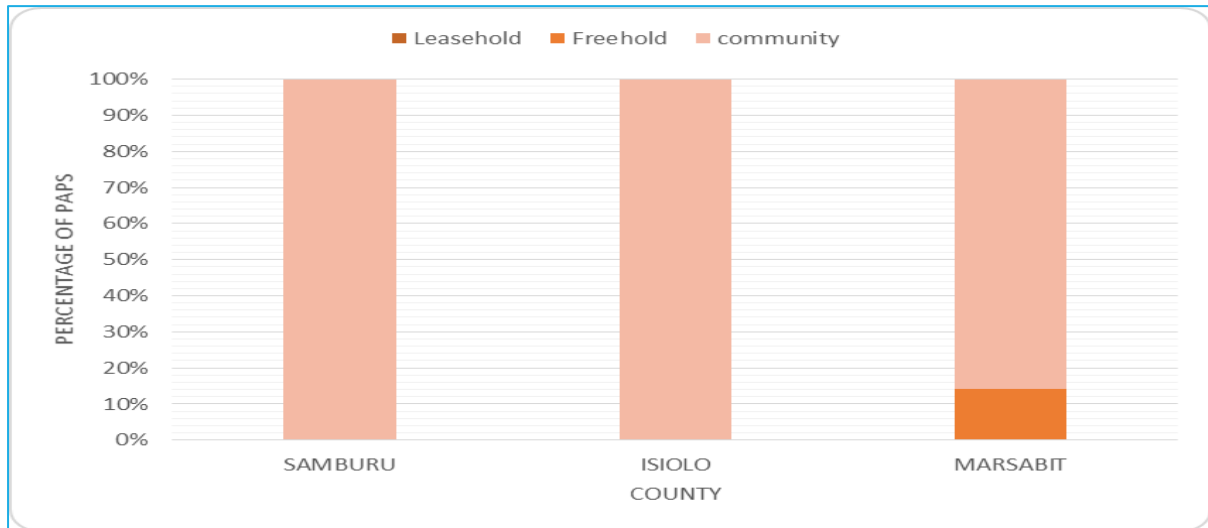
Figure 12: Relative distance to community facilities in Marsabit County



5.1.4 Land Ownership and Tenure

The land holding tenure in Samburu, Isiolo and Marsabit is predominantly customary tenure. A section of PAPS own private at Merille in Marsabit (this are portions of land within the precincts of Merille Township).

Figure 13: Land Tenure Regimes in Each County



5.1.5 Livelihood opportunities

Livestock keeping is the main economic activity, followed by fishing and retail business sand harvesting and selling, mining, hunting and gathering, fishing, bee-keeping. Tourism is predominant in Samburu and Isiolo.

Figure 14: Showing livelihood opportunities in the sampled study areas

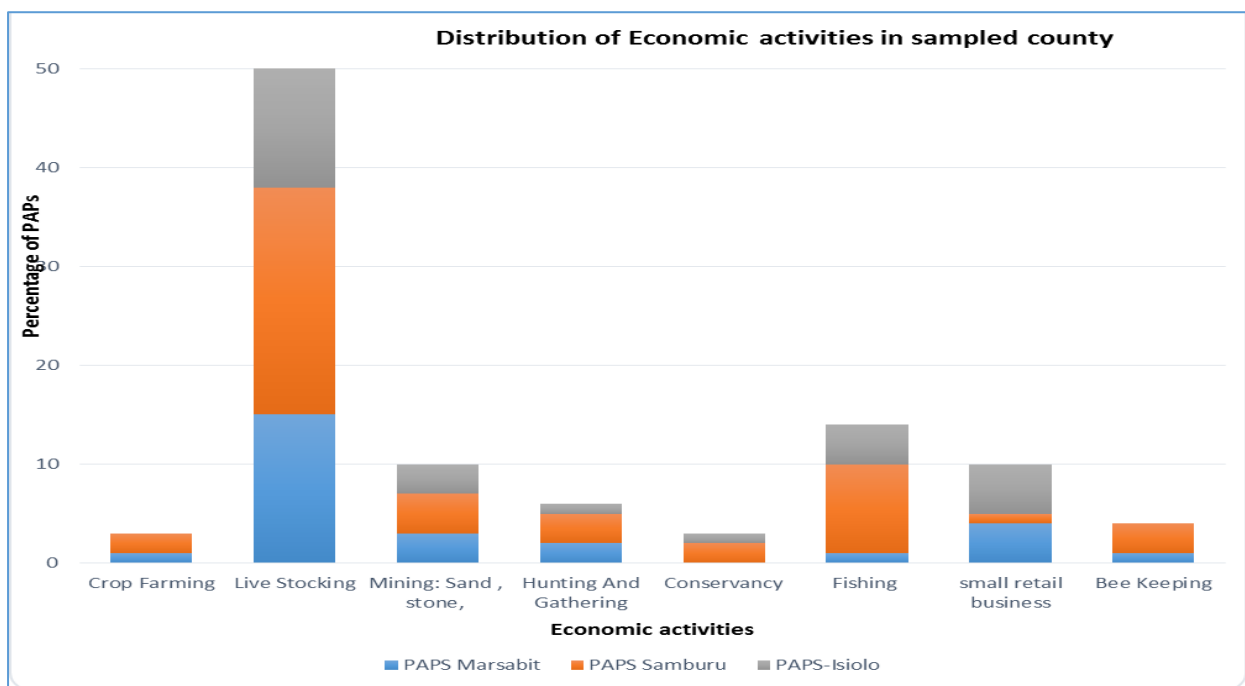
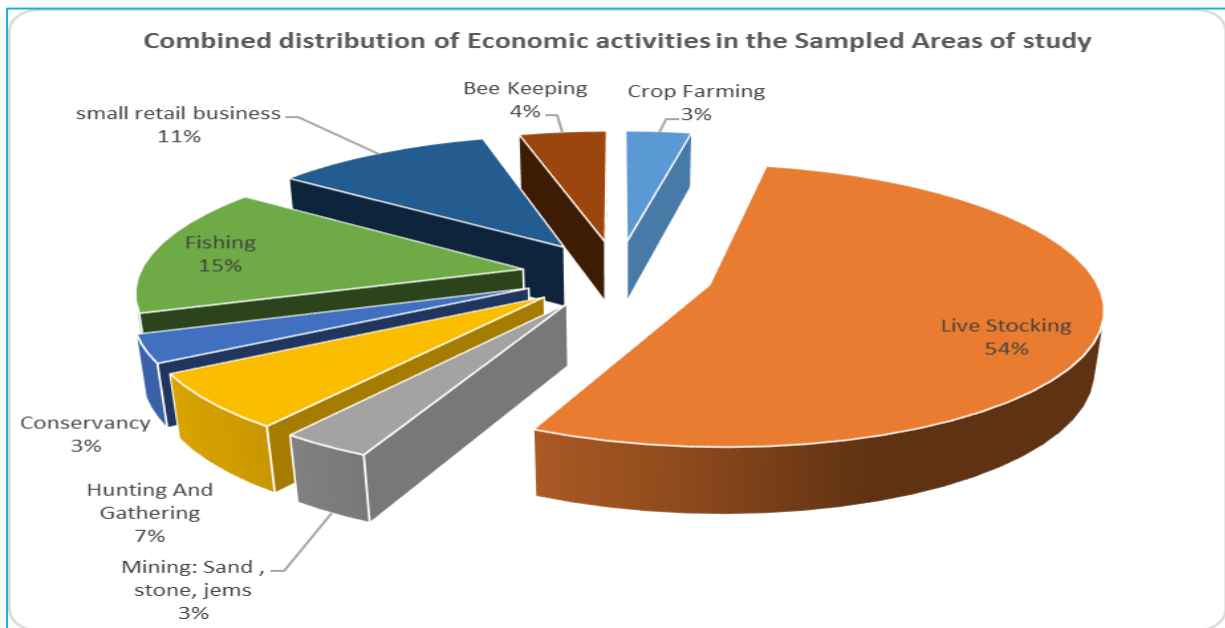


Figure 15: Livelihood sources in the three counties combined

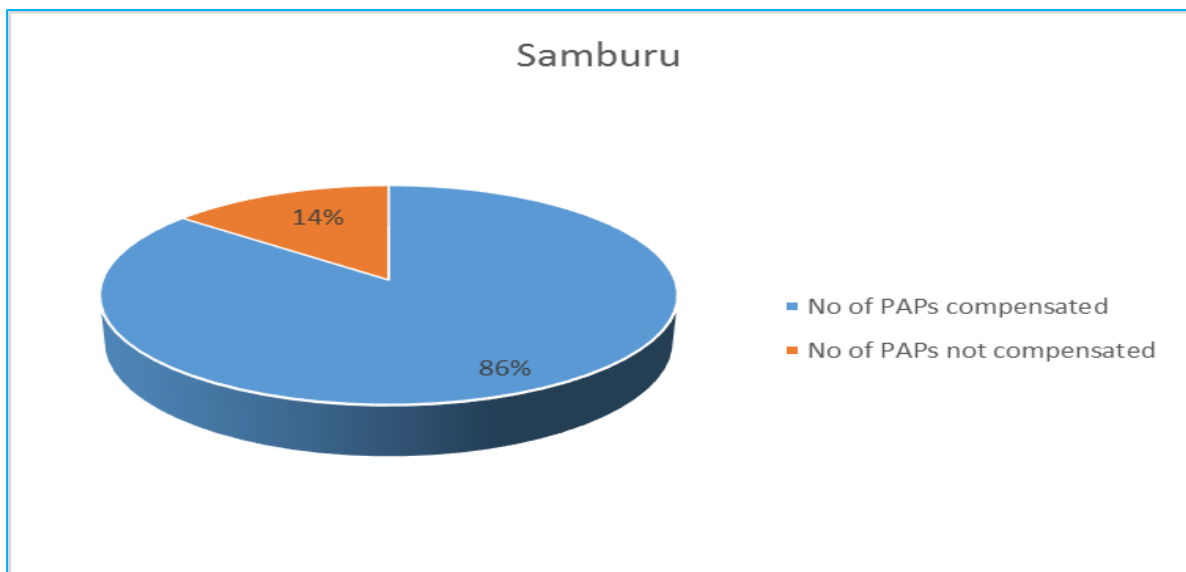


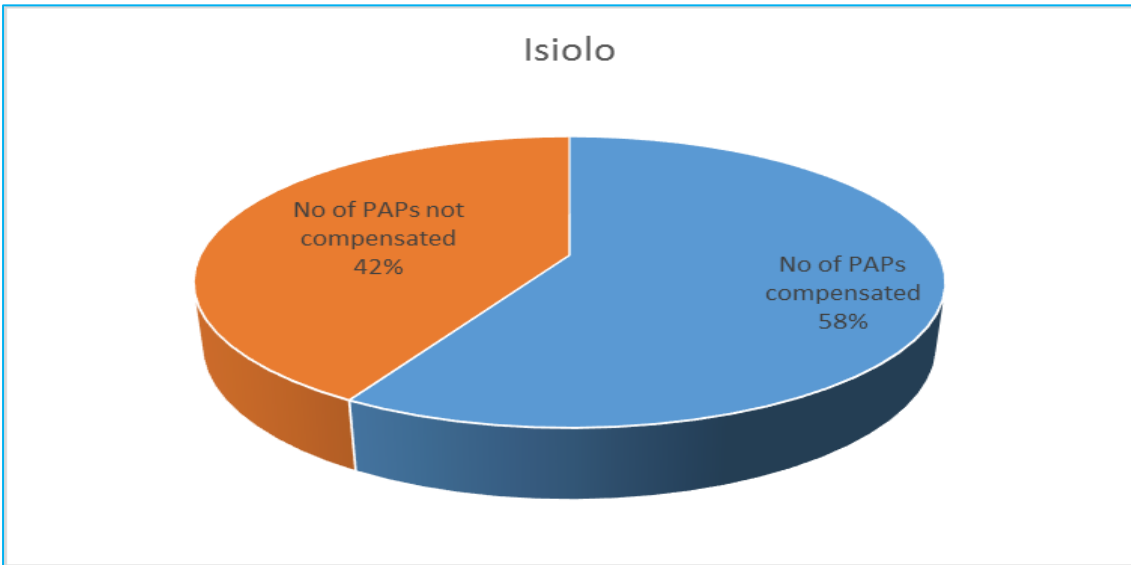
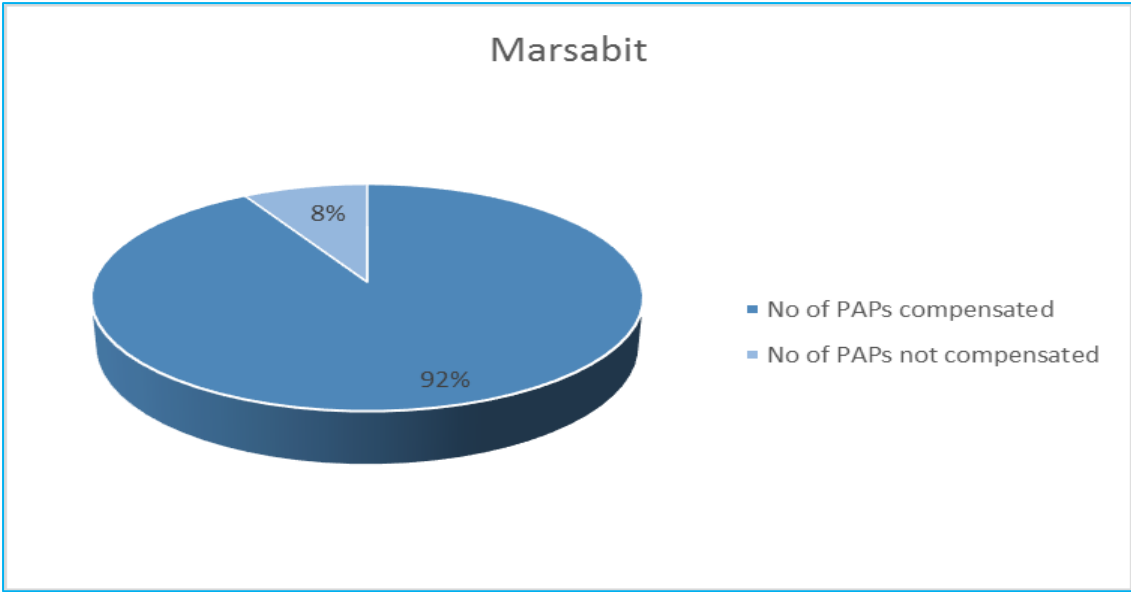
5.2 Objective 2: Evaluation of Livelihood Benefits Resulting from Resettlement

5.2.1 Level of Compensation.

The findings show that not all PAPs were compensated as they initially anticipated. Almost all PAPs were compensated in Samburu and Marsabit. Cases of delayed compensation and claims of missing names in compensation disclosure were reported in Isiolo by 58% of the PAPs.

Figure 16: Proportion of PAPs who were compensated





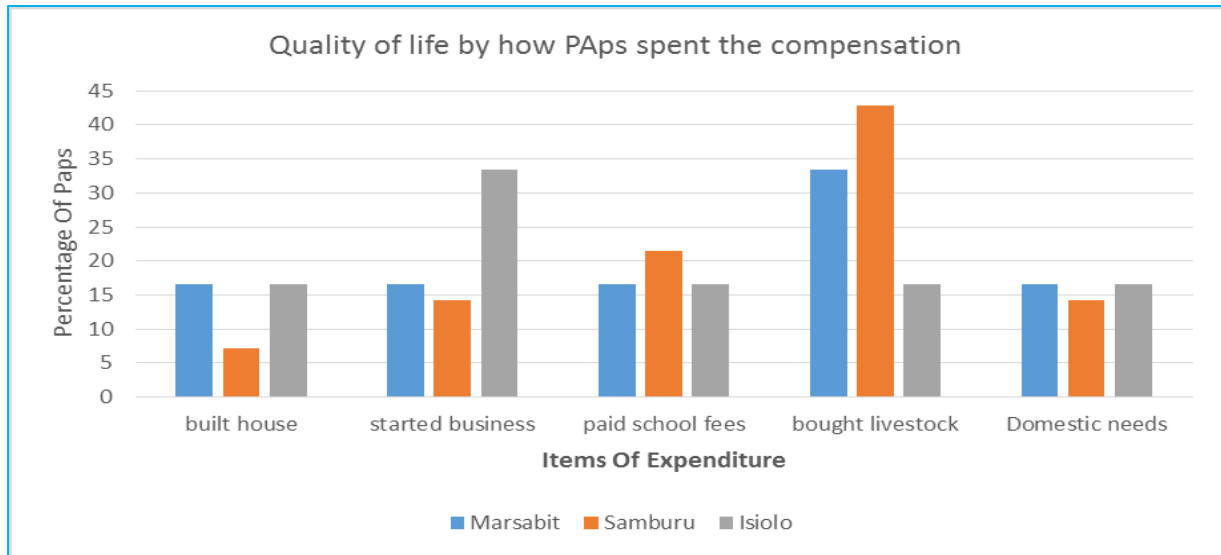
5.2.2 Quality of Living

The study analyzed the effect of compensation and relocation to quality of life of the PAPs. In order to measure the change in quality of life from the community’s perspective, the study used: *accommodation, business ventures, education, asset appreciation and ease to meet household domestic needs as independent variables*. The variables were tested based on households’ priority of needs which influenced their spending decision.

Highest expenditure in the three counties was allocated to livestock, and surplus directed to paying school fees especially for secondary school going children. The reminder was then spent in domestic expenses and starting business. PAPs built new houses especially in Isiolo and Marsabit.

The highest number of PAPs started business in Marsabit, while Samburu reported the highest proportion of PAPs who purchased livestock.

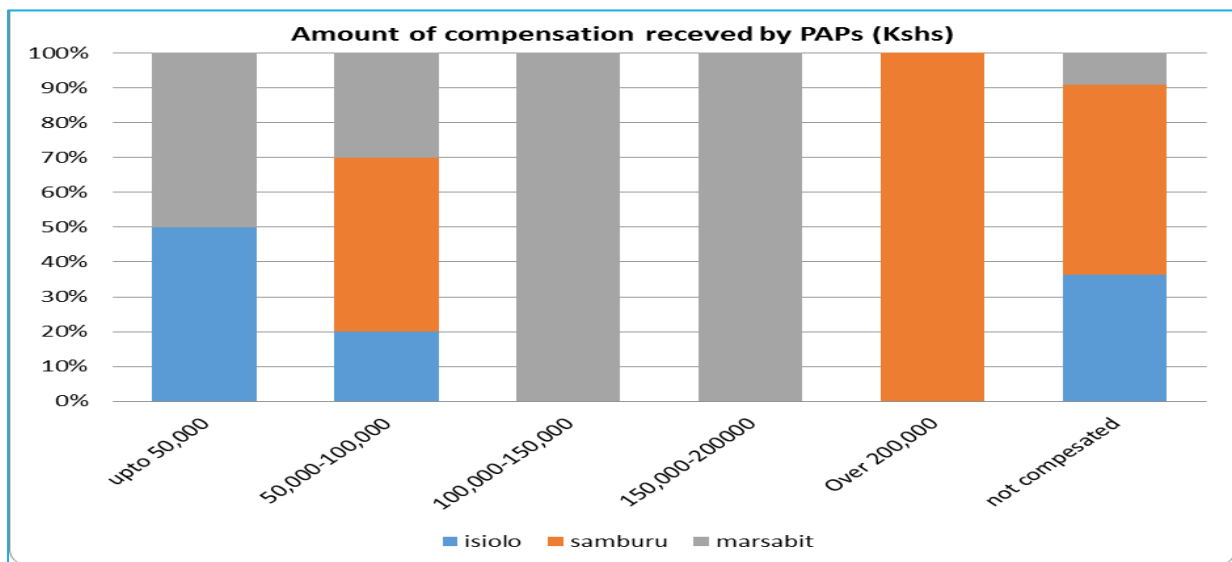
Figure 17: Priority of Needs Which Influenced PAPs’ Spending



5.2.3 Compensation Indicative of loss

The compensation awards varied from household to household, based on quality, size and number of the structures that were either lost or destroyed, along the right of way. Generally, majority of PAPs in Marsabit were paid amounts between 50,000.00 to 200,000.00.

Figure 18: General levels of Compensation Awards in Each County



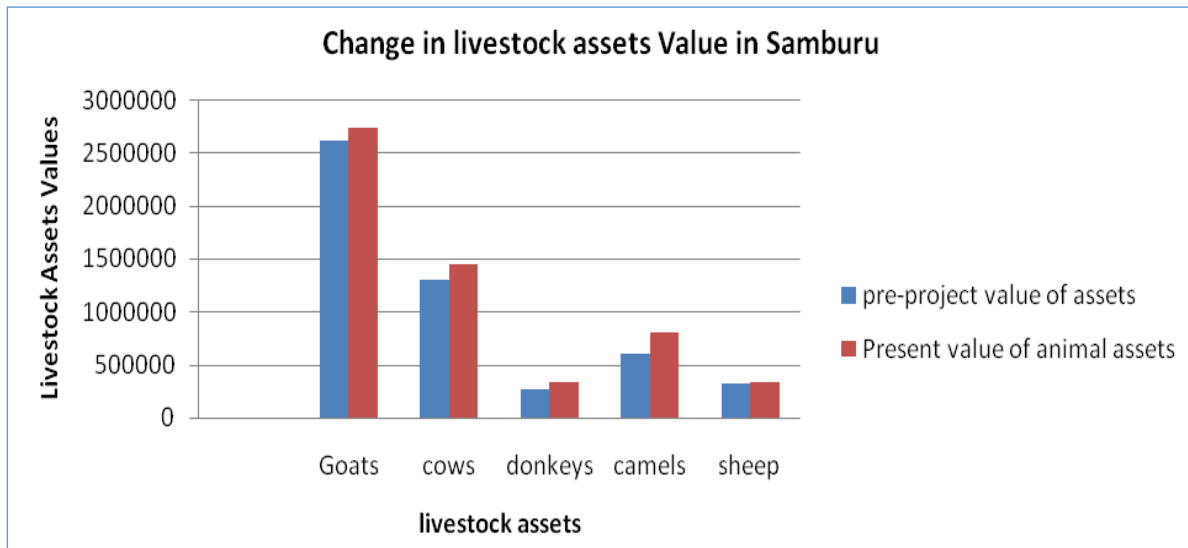
Highest compensations of above 200,000.00 were recorded in Samburu. Isiolo County recorded the lowest payment mostly falling below 100,000.00 for each household. Most PAPs in Samburu and Isiolo and a few in Marsabit had not been compensated at the time of the study

5.2.4 Increase of livestock measured in terms of money

a) Samburu

The highest overall change was recorded in value (number) of animal goats the n cows and camels cows respectively in Samburu County. The lowest increase was reported for Donkeys and Sheep.

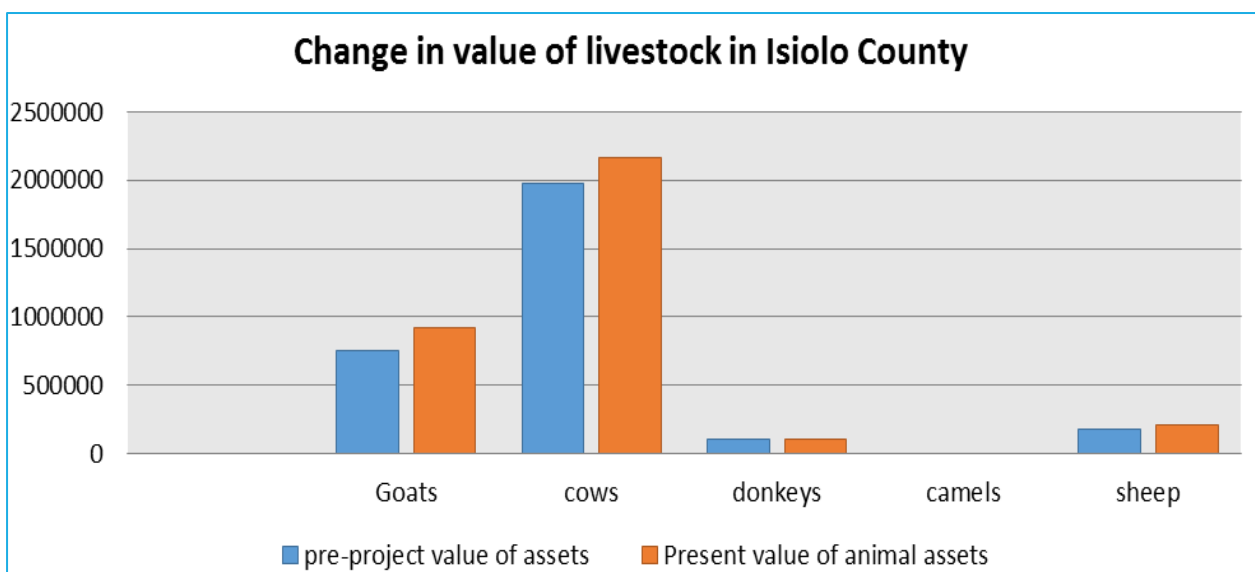
Figure 19: Livestock Asset Values before and after Compensations



b) Isiolo County

The highest overall increase was recorded in value (number) of cows, followed by goats and sheep respectively with minimal increase in number of donkeys and camels. Cows and goats are most reared while camels were rear amongst PAPs.

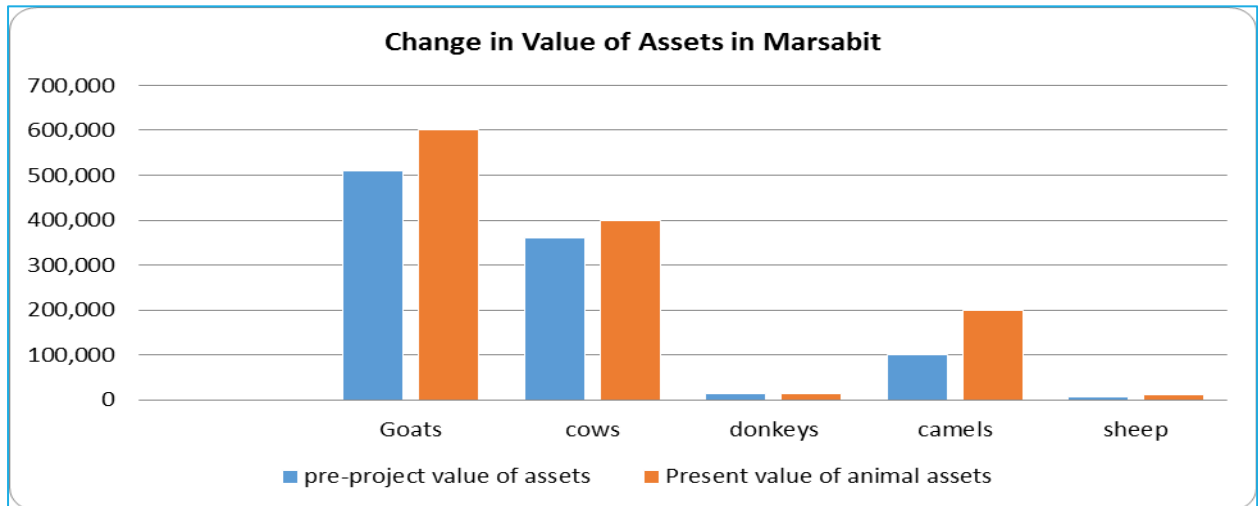
Figure 20: Livestock Asset Values before and after Compensations



c) Marsabit County

The highest overall change was recorded in number of goats, followed by the value in cows, camels and sheep respectively. Donkeys and Sheep were the least increased.

Figure 21: Livestock Asset Values before and after Compensations

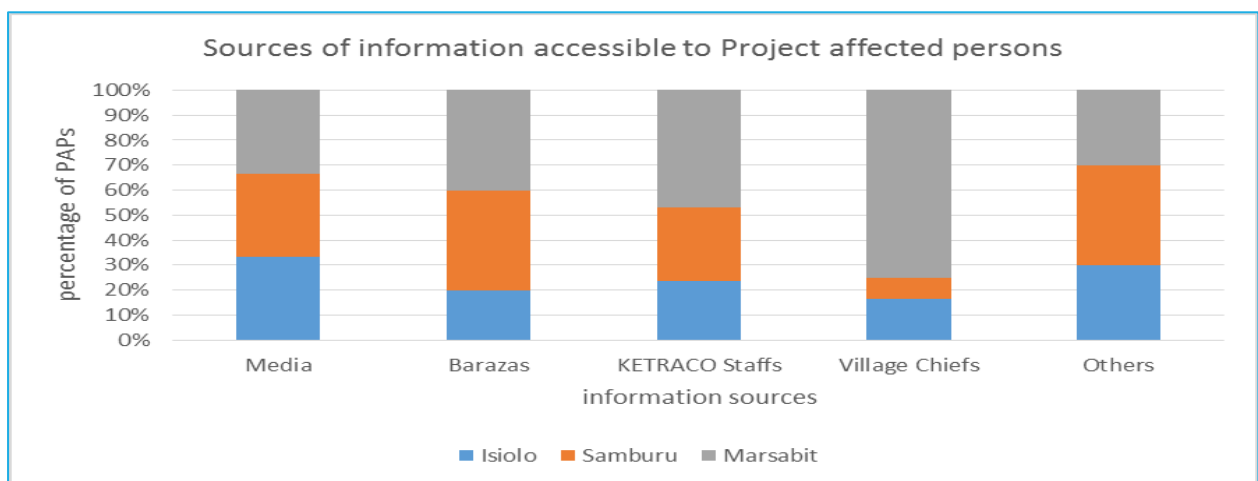


5.3 Objective 3: Evaluate the Performance of Resettlement

5.3.1 PAPs Engagement and Consultation

The project affected persons and the general informants in focus group discussions were asked to state the engagement process and means by which they were sensitized and informed. Study revealed that there were no clear process for engagement the project issues. Firsthand information about the project was received through individual members, the village chiefs, elders, group ranch leader and rumors within the villages especially for purposes of signing of agreements for compensation.

Figure 22: Engagement and Information Dissemination

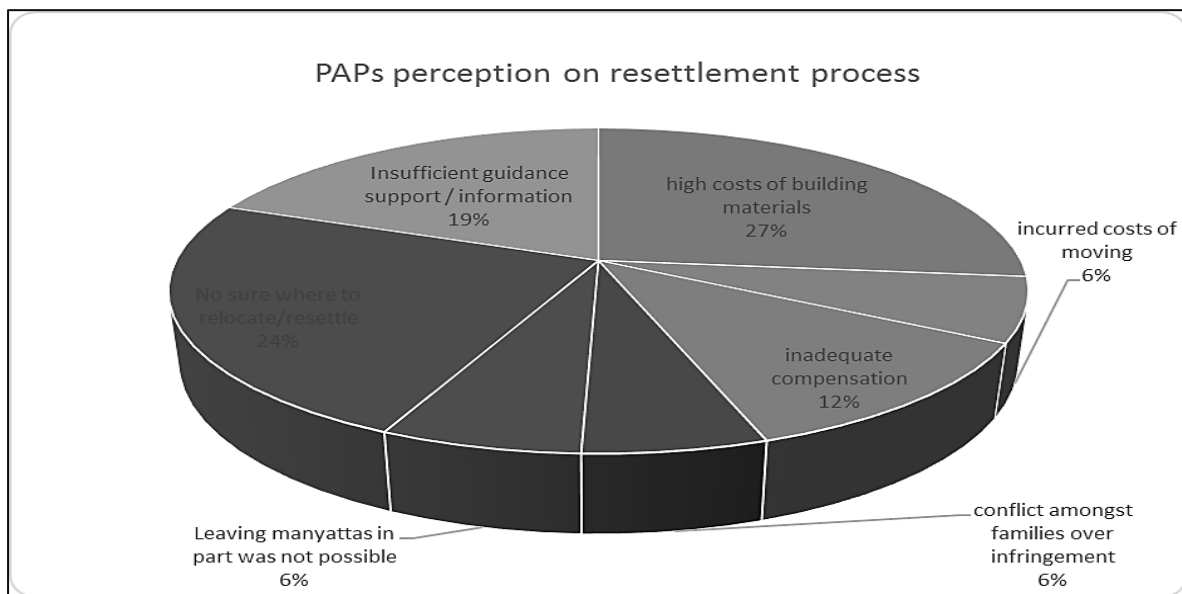


5.3.2 Level of Satisfaction and Perceptions of Project Affected Persons

From the focus group discussions, it was evident that all the PAPs and the community were not satisfied with the resettlement process. The following issues were raised in open forum and in-depth discussions held with leaders across the three counties.

1. 6% household totally relocated their homes/Manyattas as by culture required them to move as an entire family despite the fact that only few structures were affected by the line. This implied partial compensation that did not match cost of reconstruction and total loss.
2. While 19% lacked access to valuable and sufficient information and support on the project, 24% had not succeeded to secure alternative land for resettlement.
3. 6% of PAPs incurred additional costs when moving which was not recovered from the compensation awarded.

Figure 23: Challenges of resettlement indicative of PAPs Negative Perception



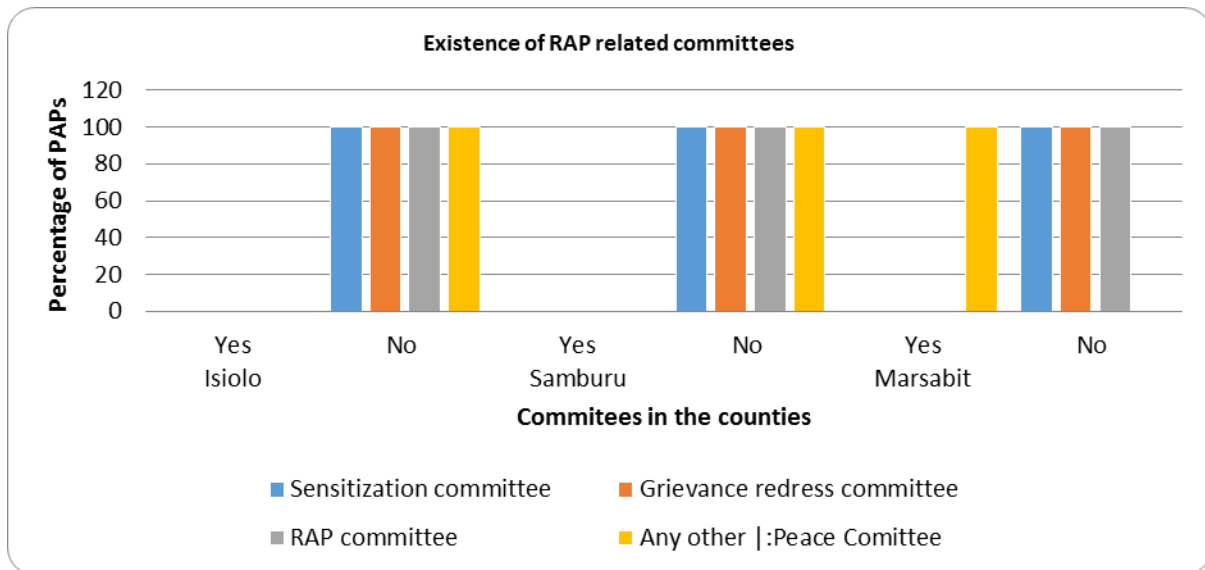
5.3.3 Grievances Redress Process

a) Strategy for Grievance Redress

The strategy for grievance redress according to KETRACO would involve formation of grievance redress committees to work alongside, sensitization and resettlement committees.

The study showed grievance redress committees were not put into place to offer redress for any address any emerging issues and grievances and disputes. The PAPs opted for interventions of chiefs or field officers on person to person basis.

Figure 24: Grievance redress committees expected to facilitate RAP processes

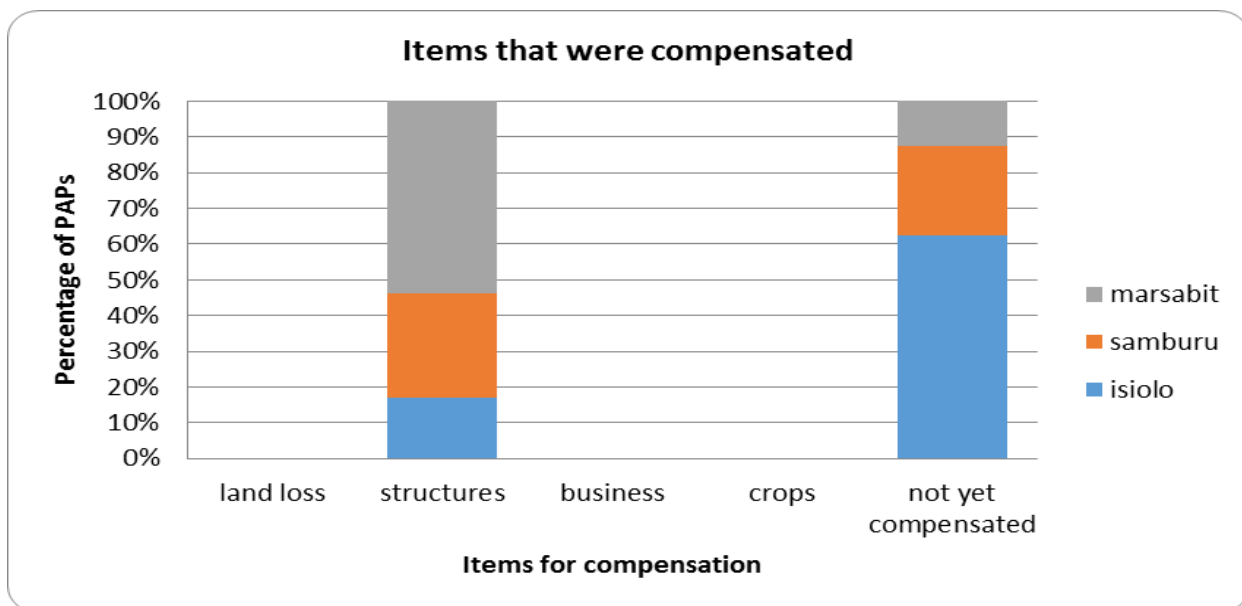


b) Grievance over Compensation

KETRACO policy prescribed payment of (70%) of total award for their structures. The balance was to be paid after relocation or displacement. Because of this policy, many PAPs did not relocate for lack of adequate money to buy land, restart business and restoration for lost crops and businesses.

Compensation was not fully done as especially in Isiolo and Samburu where some PAPs reported that their compensations delayed. Where compensation was done, it was only to pay for structures with majority paid in Marsabit, Samburu and the fewest paid in Isiolo.

Figure 25: Proportion of PAPs who were compensated for losses



5.4 Statistical Hypothesis testing.

The test was done by Chi Square (χ^2) to compare the relationship between observed and expected values of the variables to determine the goodness of best fit. The Chi Value was calculated by the formula:-

$$\text{Chi Square value (X}^2\text{)} = \sum_{n^0} [(O-E)^2/E]$$

Where O-are observed frequencies of sample statistics

E – Represents the calculated expected frequencies,

Degree of Frequency = $(\sum \text{row totals} \times \sum \text{column totals}) / \text{Grand total}$.

The alpha in the study is set at 0.05 as the cutoff for significance. If the p-value is less than 0.05, we reject the null hypothesis that there's no difference between the means and conclude that a significant difference does exist.

5.5 Objective 1: Establishing the Socio-Cultural system and Project implications

Null Hypothesis: There was no relationship between resettlement and access to community facilities

The independent variables used as indicators of basic/social amenities were: education facilities, health facilities, market, and place of worship. The study measured impact to access at a standard distance increase of distance by at least 3 kilometers from the services due to relocation.

Table 8: PAPs affected by relocation from community services

	Health Services	Place of Worship	Market Centre	water points	Schools	Row Totals
Marsabit	7	2	1	3	11	24
Samburu	3	3	3	1	4	14
Isiolo	2	1	2	2	5	12
Totals	12	6	6	6	20	50

Table 9: The Contingency Table for worked Chi Values

	Health Services	Place of Worship	Market	water points	Schools	Row
Marsabit	7 (5.76) [0.27]	2 (2.88) [0.27]	1 (2.88) [1.23]	3 (2.88) [0.01]	11 (9.60) [0.20]	24
Samburu	3 (3.36) [0.04]	3 (1.68) [1.04]	3 (1.68) [1.04]	1 (1.68) [0.28]	4 (5.60) [0.46]	14
Isiolo	2 (2.88) [0.27]	1 (1.44) [0.13]	2 (1.44) [0.22]	2 (1.44) [0.22]	5 (4.80) [0.01]	12
Column	12	6	6	6	20	50

The chi-square statistic is 5.6647. The p-value is .684734. The result is not significant at $p < 0.05$. The Chi Value from the tables at degree of frequency of 10 is 18.31 at Significance Level of 0.05

There is no adequate evidence to reject the null hypothesis. The project actually did not have a significant negative effect on access to basic services.

5.6 Objective No 2: Evaluation of the livelihood benefits resulting from resettlement

Null Hypothesis: *There is no relationship between compensation and Quality Of Life*

The **Change** in Quality of Living was tested by asking PAPs how they spent the compensation awarded to them.

Table 10: Using a 3 x 5 contingency table:

	built house	started business	paid school fees	bought livestock	Domestic needs	Row
Marsabit	4	4	4	8	4	24
Samburu	1	2	3	6	2	14
Isiolo	2	4	2	2	2	12
Column	7	10	9	16	8	50

The Independent variables measuring quality of life here are *accommodation, business ventures, education, asset appreciation, household domestic needs* which are dependent on the amount of compensation awarded.

Table 11: chi-square calculation at a significance level of 0.05

	Built House	Started Business	Paid Fees School	Bought Livestock	Domestic Needs	Row totals
Marsabit	4 (3.36) [0.12]	4 (4.80) [0.13]	4 (4.32) [0.02]	8 (7.68) [0.01]	4 (3.84) [0.01]	24
Samburu	1 (1.96) [0.47]	2 (2.80) [0.23]	3 (2.52) [0.09]	6 (4.48) [0.52]	2 (2.24) [0.03]	14
Isiolo	2 (1.68) [0.06]	4 (2.40) [1.07]	2 (2.16) [0.01]	2 (3.84) [0.88]	2 (1.92) [0.00]	12
Column	7	10	9	16	8	50

The chi-square statistic is 3.655. The p-value is .886829. The result is not significant at $p < .05$ the calculated value is lower than the Chi Square at degree of frequency of 6

There is no significant evidence to reject the null hypothesis. It is evident that there was a positive change in quality of lifestyle after compensation to those who were compensated.

5.7 Objective No 3: Evaluate the Performance of Resettlement

5.7.1 Engagement and information dissemination to PAPs

Null Hypothesis: *PAPs were not engaged or informed during the resettlement process*

Test for access to information and participation by testing method through which information and concerns were sort. The recommended Resettlement committees were evidently missing.

Table 12: 3 x 5 contingency table - access to information and participation

	Media	Barazas	KETRACO Staffs	Village Chiefs	Others	Row Totals
Isiolo	2	1	4	2	3	12
Samburu	2	2	5	1	4	14
Marsabit	2	2	8	9	3	24
Column	6	5	17	12	10	50

The chi-square statistic, p-value and statement of significance show the independent variables such as modes of access that influences how participation, consultation and information would be disseminated to members.

Table 13: Chi Square calculations

	Media	Barazas	KETRACo Staffs	Village Chiefs	Others	Row Totals
Isiolo	2 (1.44) [0.22]	1 (1.20) [0.03]	4 (4.08) [0.00]	2 (2.88) [0.27]	3 (2.40) [0.15]	12
Samburu	2 (1.68) [0.06]	2 (1.40) [0.26]	5 (4.76) [0.01]	1 (3.36) [1.66]	4 (2.80) [0.51]	14
Marsabit	2 (2.88) [0.27]	2 (2.40) [0.07]	8 (8.16) [0.00]	9 (5.76) [1.82]	3 (4.80) [0.68]	24
Totals	6	5	17	12	10	50

The chi-square statistic is 6.0099. The p-value is .646127. The result is not significant at $p < .05$.

There was no enough evidence to reject the null hypothesis. It is evident that PAPs were not fully engaged or informed about the resettlement process.

5.7.2 Grievance Redress Mechanisms

Null Hypothesis: There were no relationship between compensation and redress of complaints raised for delayed cases.

The study used the number of the people compensated to test the perception about the process on the unresolved cases that let do delay in compensating PAP. It was assumed that where the issues were resolved, the PAPs would be compensate to relocate and settle like the rest who had been compensated.

Table 14: The 3 x 2 contingency table of number of those compensated

	PAPs compensated	PAPs not compensated	Row
Samburu	12	2	14
Marsabit	22	2	24
Isiolo	7	5	12
Column Totals	41	9	50

Table 15: Chi-square calculation

	No of PAPs compensated	No of PAPs not compensated	Row Totals
Samburu	12 (11.48) [0.02]	2 (2.52) [0.11]	14
Marsabit	22 (19.68) [0.27]	2 (4.32) [1.25]	24
Isiolo	7 (9.84) [0.82]	5 (2.16) [3.73]	12
Totals	41	9	50

The chi-square statistic is 6.204. The p-value is .044959 and a Chi Value from the tables is 3.841 (at 1 degree of freedom and an alpha level of 0.05). The result is significant at $p < .05$.

There is enough evidence to reject the null hypothesis. There was no relationship between the compensation process and delay in redress. However, there was almost a close relationship between redress of outstanding grievances and satisfaction of the PAPs that their issues were being addressed.

5.8 Chapter Summary

The study shows the following operation gaps and significant outcomes especially in the early stages:-

1. There were no proper channels for information or engagement of the community and PAPs.
2. There were not any RAP committees and inclusive working groups that would engage and enable the participation of stakeholders in the processes.
3. There were no express redress committees to address and resolve any grievances or disputes especially regarding amount timing and process of compensation
4. There close relationship between the impacts of the RAP activities and the number of PAPs who were either displaced or not (relocate)to the project implementation
5. There were significant livelihood benefits accrued from the resettlement process

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

In the light of the study problem statement, review of literature and best practices, the study objectives listed below were achieved. These included, evaluation of socioeconomic systems of the communities affected by the project, the result of resettlement on social livelihoods and quality of life as well as evaluation of performance based on the best practices that call for community engagement, participation, livelihood restoration, support and compensations, Grievance redress and satisfaction of project affected persons .

6.2 Summary

Relocation resulted to change in access to basic community and social services such as health facilities, market, schools, water points and places of worship. The effect was not very significant though key consideration is usually needed especially for the aged and the vulnerable groups and expectant mothers who may require additional support of creation of new facilities where these effects may result to risks and shocks to the project affected persons. The study has shown that the resettlement and compensation generally had significant benefits to in the livelihood of the people including those whose land had no proper value. This was evidenced by increase in livestock ownership, paying for household expenses, including children school fees, construction of new houses.

The above notwithstanding, it seems the performance of the project did not meet the expectations of the community and especially the project affected persons (PAPs). PAPs were dissatisfied by the low amount awarded, delay in compensation. The valuers failed to consider intrinsic and hidden costs in their approach to cost based valuation of structures.

The communities have a communal based settlement that even when few structure are affected, families would not be partly displaced. While the affected *Manyattas* moved wholly, only the structures in the line were compensated despite relocation of the entire *Manyattas* (*usually made of many households*). This implied that many losses were not accounted for hence PAPs had to bear all additional costs for Labour, building materials and disturbance which were not recovered from the project agency.

Resettlement targets as per the policy prepared by KETRACo prescribed Engagement and participation of PAPs, structures for Grievance redress, policy to ensure timely prompt and fair compensation, PAPs satisfaction as well and livelihood restoration. Where these principles were not achieved, it was deemed that the process failed to address socio cultural issues.

6.3 Recommendations

Based on the study analysis, findings and results the following recommendations are made to inform the ongoing RAP and future similar projects.

6.3.1 Recommendations to the Project implementers

Better resettlement strategy should be framed to ensure sufficient awards, consultations, full and timely compensation and render the supportive services that will aid relocation, resettlement and reinstatement of PAPs livelihoods.

Inclusive, participatory, accountable and gender sensitive working groups and committees should be immediately constituted in Isiolo, Samburu and Marsabit. This will help to sensitize, educate, inform and mobilize stakeholders as well as handle and offer redresses on grievances, and issues on valuation, compensation, and movement support of the PAPs. Corporate Social Responsibility initiative should be rendered to the communities other than individual compensation to PAPs. The initiatives should be arrived through consultative and inclusive decision making criteria that involves youths, village elders, Community Land/Group Ranch Leaders, County Government and Resettlement Project Team. Priority services include: secondary and primary boarding schools for boys and girls, health facilities and services, water resources (drilling of more bore holes, piped water infrastructure) veterinary facilities.

6.3.2 Policy Makers

Policy makers should review legislations and realign them to viable policies that enforce right to information, fair, timely and just compensation. Frameworks and certifications should be enforced and made legally binding with uniform criterion for measurement of performance by both internal and external entries. Where this has been made, then evidence of failures or successes should be communicated to the implementing agencies and be addressed.

6.3.3 Government

The state should timely and fully support strategic actions towards budgetary allocation to aid implementation, research on resettlement, to ensure best practices that offer knowledge to all stakeholders.

6.3.4 Academic and Research Institutions

The institutions for higher learning and research centres should harmonize studies on resettlement and seek goodwill for funding and support from relevant stakeholders.

REFERENCES

- ADB, 2003. *Operations Manual bank policies – Involuntary resettlement*, s.l.: Asian Development Bank .
- Anon., 1992. *Chambers, R. and G. Conway Sustainable livelihoods: Practical concepts for 21st century*. .. Brighton, IDS.
- Babbie, E. R., 1990. *Survey Research Methods (Second Ed.)*, Belmont, USA: Wadsworth Publishing Company.
- Berkes, Fikret, and Dyanna Jolly, 2001. *Adapting to Climate Change: Social-Ecological Resilience in a Canadian Western Arctic Community.*” , s.l.: Conservation Ecology.
- Castro, F. G., Kellison, J. G., Boyd, S. J., & Kopak, A, 2010. A Methodology for Conducting Integrative Mixed Methods Research and Data Analyses.. *Journal of Mixed Methods Research*, p. 342–360.
- Cernea, M. & Guggenheim, S., 1993. *Anthropological Approaches to Resettlement: Policy, Practice, Theory*. .: s.l.:Westview Press.
- Creswell, J. W., & Clark, V. L., 2011. *Designing and Conducting Mixed Methods Research* (Second Ed.) ed. California: SAGE Publications Inc..
- Davoudi S&Petts, J , 2000.. “*How to include the public in waste planning*”, *proceedings of the Fifth National Conference in Strategic and Local Planning for Waste, MEL Research.*, Birmingham: s.n.
- Davoudi, S, Evans, N, Governa, F, Santangelo, M, 2008,. “*Territorial Governance in the Making. Approaches, Methodologies, Practices*”,. s.l.:Boletín de la A.G.E.,
- Edwards, J., 2010.. Oil discovery sparks land grabs in Uganda.. 9 October .
- Erdiaw-Kwasie, M. O. A. E. D. A. M. &. A. S. O., 2014. Theoretical and practical motives for participation obstacles in resettlement programs: Review from the mining perspective. ., *Journal of Economics and Sustainable Development*, p. 5(14).
- ESPON , 2006. “*Governance of territorial and urban policies from the EU to the local level*”, Manila: Asian Development Bank.
- FAO, 2011. *Voluntary Guidelines on Land and Natural Resources. The Global Campaign for Agrarian Reform.* , s.l.: s.n.
- GRAIN., 2008. *SEIZED! The land grab for Food and Financial Security.*. s.l.:s.n.
- Greiner, C. B. M. &. M. J. T., 2011. Notes on Land-based Conflicts in Kenya's Arid Areas. January.pp. 77-81..
- Gutman, PS 1994, “Involuntary resettlement in hydropower projects”, *Annual Reviews Inc.*, 19, 189-210. Hare, M& Pahl-Wostl, C 2002,“Stakeholder categorization in participatory integrated assessment processes”, *Integrated Assessment* 3, 50–62. 64
- Hammonds, R., & Ooms, G. (2014). The emergence of a global right to health norm – the unresolved case of universal access to quality emergency obstetric care. *BMC International Health and Human Rights*, 14, 4. <http://doi.org/10.1186/1472-698X-14-4>

IAIA. (2003). International Principles for Social Impact Assessment. *Impact Assessment and Project Appraisal*, 21, pages 5-11.

IDMC, (2012) Global Overview Report Internally Displaced Monitoring Centre (IDMC)

IEBC. (2012). Preliminary Report on the First Review relating to the delimitation of boundaries of constituencies and wards. Nairobi: Government Printers.

IFC. (2002). Handbook for Preparing Resettlement Action Plans. (D. Styles, Ed.) 2121 Pennsylvania Avenue, NW Washington, DC, 20433 USA, USA: The International Finance Corporation (IFC).

ILC. (2011). Tirana Declaration. Tirana-Albania: International Land Coalition.

ILC. (2012). Monitoring Secure Access to Land: Progress and Prospects.

INDR, 2018. *Comments on World Bank Guidance Notes for ESS 5*, s.l.: The International Network on Displacement and Resettlement.

Institute of Medicine. 1997. Improving Health in the Community: A Role for Performance Monitoring. Washington, DC: The National Academies Press. <https://doi.org/10.17226/5298>.

International Network on Displacement and Resettlement (2018), Review and feedback on World Bank Guidance Notes.

Jaeger et al (2013) Risk, Uncertainty and Rational Action (Earthscan Risk in Society)

Kamakia, A. M. (2015). Best Practices for Resettlement Management in Kenya: Case Study of Olkaria IV Geo-Thermal Project. Retrieved from <http://dx.doi.org/10.2139/ssrn.2659822>

Kenya, R. O. (2009). Sessional Paper No. 3 on National Land Policy. Nairobi: Government Printers.

Kenya, R. o., 2007. *Vision 2030*, Nairobi: Government Printers. 50

Kenya, R. o., 2009. *National Land Policy: Sessional Paper No. 3 of 2009*. Nairobi: Government Printers.

Kenya, R. o., 2010. *Constitution of 2010*. Nairobi: Government Printers.

Kenya, R. o., 2012. *Land Act*. Nairobi: Government Printers.

Kenya, R. o., 2017. *Special Issue Vol CXIX - No. 75, the Kenya Gazette*. Nairobi: Government Printers.

KETRACO. (2011). Resettlement Action Plan Report for Eastern Interconnector Transmission Project Lot 5. Nairobi: KETRACO.

KETRACO. (2014). Disclosure Report on Eastern Interconnector Project (Kenya-Ethiopia). Nairobi: KETRACO.

LICODHO. (2009). Land Grabbing and Poverty in Cambodia: the myth of Development. Phnom Penh: LICADHO.

Mathur, HM& Marsden, D1998, "Development projects and impoverishment risks", Delhi: Oxford University 52

Mortreux, C., de Campos, R.S., Adger, W.N., Ghosh, T., Das, S., Adams, H. and Hazra, S., 2018. Political economy of planned relocation: A model of action and inaction in government responses. *Global Environmental Change*, 50, pp.123-132.

Neumann, L. W. (2000). *Social research methods: Qualitative and quantitative approaches* (Fourth Ed.). Boston: Allyn and Bacon

OECD. (2007). *Promoting Pro-Poor Growth. Policy Guidance for Donors.* . Paris: OECD.

Oliver-Smith A2010, “Defying Displacement-Grassroots Resistance and the Critique of Development”, University of Texas Press, Houston 65

Oliver-Smith, Anthony, and Alex de Sherbinin. 2014. “Something Old and Something New: Resettlement in the Twenty-

Pearce, F. (2013). *The Land Grabbers: The New Fight over Who Owns the Earth.* Eden Project Books.

Plessis, Chrisna Du. 2012. “Towards a Regenerative Paradigm for the Built Environment.” *Building Research & Information* 40 (1): 7–22. doi:10.1080/09613218.2012.628548.Press.

Qian Liao (2012) *Involuntary Resettlement in Hydroelectric Projects: A Comparison of Chinese and Canadian case studies and implications for best practice MPA Research Report Submitted to The Local Government Program Department of Political Science The University of Western Ontario.*

R., A., 1996. *Involuntary Resettlement: Survey of International Experience.* , s.l.: Economic and Political Weekly.

RANDELL, H. (2016). The short-term impacts of development-induced displacement on wealth and subjective well-being in the Brazilian Amazon. *World Development*, 87, 385–400. <http://doi.org/10.1016/j.worlddev.2016.07.005>.

Report by the Ilisu Dam Campaign and Corner House (2000); Ministry of Foreign Affairs, Republic of Turkey (website: <http://www.mfa.gov.tr/ilisu-dam.en.mfa>)

Richards, M. (2013). *Social and Environmental Impacts of Agricultural Large-Scale Land Acquisitions in Africa—With a Focus on West and Central Africa.* Washington D.C: Rights and Resources Initiative.

Sakwa G. L (2015) *social and Economic Impacts of Involuntary Resettlement during Large Scale Water Infrastructure Development: the case of Thika dam*

Scheidel, A., & Sorman, H. A. (2012). *Energy Transitions and Global land rash: ultimate drivers and persistent consequences.* Elsevier, 588-595.

Scott, James C. 1998. *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed.* New Haven: Yale University Press Taylor. Hoboken: Taylor & Francis

Shihata, I. F. I., 2000. “*Involuntary Resettlement,*” *The World Bank in a Changing World,* Dordrecht/Boston/London: Martinus Nijhoff Publishers.

Susan F. Martin, S. S. W. a. A. ed., 2014. *First Century.*” *In Humanitarian Crises and Migration, Causes, Consequenses and Responses.* New York: Routledge.

Syagga, P. M. & Olima, W. A., 1996. The Impact of Compulsory ,and Acquisition on Displaced Households: The Case of the Third Nairobi Water Supply Project. .. *Habitat International*, Volume 20, Issue 1, 1996, Pages 61-75, 20(1), pp. 61-67.

- Syagga, P. M., 2006. Land Ownership and Uses in Kenya: Policy Prescriptions from an Inequality Perspective. . In: *Readings on inequality in Kenya: Sectoral Dynamics and Inequalities*. Nairobi: s.n., pp. 291-330..
- Terminski, B., 2012. Mining-Induced Displacement and Resettlement: Social Problem and Human Rights Issue (A global. In: Geneva: s.n.
- Terminski, B., 2013. *Development-Induced Displacement and Resettlement: Theoretical Frameworks and Current Challenges*, Geneva: s.n.
- Uganda Land Alliance, 2011. *Land Grabbing and its effects onthe Communities in Oil Rich Albertine Region of Uganda*, Kampala: IS Academy.
- Wanjiku, I. M., 2016. *Effect of Involuntary Resettlement on the Quality Of Life of Project Affected Persons: A Case Study of Mwea Irrigation Project, Kirinyaga County, Kenya*, Nairobi: Unpublished.
- WFP, 1996. “*A People Dammed: The impact of the World Bank Chixoy Hydroelectric Project in Guatemala*”, Washington, D.C: Witness for Peace (WFP)
- World Bank, 2004. *Involuntary Resettlement Sourcebook: Planning and implementation in Development Projects*, Washington, DC: World Bank.
- World Commission on Dams, 2000. *Dams and Development: A New Framework for Decision-making.*, s.l.: London: EarthscanWorld-Bank..
- Zoomers, E. B., 2010. Globalisation and the foreignisation of space: Seven processes driving the current global land grab. *Journal of Peasants Studies*, January, 37(2), pp. 429 - 447. 51

8.0 Annexes

Annex 1: Interview Schedule to Key Informants-KETRACO

SCHEDULE FOR KEY INFORMANTS - KETRACO
--

The Eastern Electricity Highway (interconnector) is an ongoing project spearheaded by KETRACO, from Sodo (Ethiopia) to Suswa (Kenya). I am carrying out research on “*Energy Based Involuntary Resettlement, Land Acquisition and Strategies for Livelihood Sustainability (Case Study of Bilateral Integration of Energy Transmission by Eastern Electricity Highway)*”

The research is for Academic Purpose only, geared towards policy suggestions that will safeguard livelihoods of affected communities and engender renewable energy development in Kenya. Any information given will be guarded with high level of confidence required.

	Research questions	Review	Responses/feedback by the respondents	
1.	What is the official name of the project that links Sodo and Suswa?			
2.	What is the extent of the project in terms of:-		a. Commencement date	
			b. Distancekm	
			c. Area coverageacres (.....Ha)	
			Counties affected (kindly list)	
			a.	e.
			b.	f.
			c.	g.
			d.	h.
			d.	Total Number of PAPs
			e.	Projected Voltage
			f.	Projected wattage
g.	Projected cost			
h.	Completion date			
i.	Payback period			
3.	Please mention the key stakeholders in the project and their key roles?		Stakeholders	
			Roles	
			a.	
			b.	
			c.	
d.				
4.	What National and International Legal/Policy Frameworks were		Policy/statutes/frameworks	
			a.	

	considered for the draft of resettlement action plan processes	b.																
		c.																
		d.																
		e.																
5.	How do you rate in terms of percentage of completion the following activities	<table border="1"> <thead> <tr> <th>Activity</th> <th>% of completion</th> </tr> </thead> <tbody> <tr> <td>a. Sensitization and awareness</td> <td></td> </tr> <tr> <td>b. Inventory of PAPs/</td> <td></td> </tr> <tr> <td>c. Inventory/valuation of assets</td> <td></td> </tr> <tr> <td>d. Compensation for land</td> <td></td> </tr> <tr> <td>e. Compensation for crops</td> <td></td> </tr> <tr> <td>f. Compensation for businesses</td> <td></td> </tr> <tr> <td>g. Others?</td> <td></td> </tr> </tbody> </table>	Activity	% of completion	a. Sensitization and awareness		b. Inventory of PAPs/		c. Inventory/valuation of assets		d. Compensation for land		e. Compensation for crops		f. Compensation for businesses		g. Others?	
Activity	% of completion																	
a. Sensitization and awareness																		
b. Inventory of PAPs/																		
c. Inventory/valuation of assets																		
d. Compensation for land																		
e. Compensation for crops																		
f. Compensation for businesses																		
g. Others?																		
6.	What challenges did you face and how did you address them?	<table border="1"> <thead> <tr> <th>Challenges</th> <th>Solutions</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>	Challenges	Solutions														
Challenges	Solutions																	

Annex 2: Interview Schedule to Key Informants-County/Community Leaders

SCHEDULE FOR KEY INFORMANTS – COUNTY /COMMUNITY LEADERS

The Eastern Electricity Highway (interconnector) is an ongoing project spearheaded by KETRACO, from Sodo (Ethiopia) to Suswa (Kenya). I am carrying out research on “*Energy Based Involuntary Resettlement, Land Acquisition and Strategies for Livelihood Sustainability (Case Study of Bilateral Integration of Energy Transmission by Eastern Electricity Highway)*”

The research is for Academic Purpose only, geared towards policy suggestions that will safeguard livelihoods of affected communities and engender renewable energy development in Kenya. Any information given will be guarded with high level of confidence required.

	Research Review questions	Responses/feedback by the respondents	
7.	Public awareness and participation		
	How did you first hear about the ongoing project?	j. Commencement date k. Distancekm l. Area coverageacres (.....Ha)	
		Which areas in your Counties were affected	
		a. b. c.	e. f. g.
	Were the public sensitized / about the project?	Yes { }	No { }
	If Yes, Through which methods did the information dissemination take place?	Methods of information Dissemination	
8.	Valuation & Compensation		
	How do you rate in terms of percentage of satisfaction how the following activities were done by KETRACO where applicable?	Activity	% of satisfaction
		h. Sensitization	
		i. Inventory of PAPs	
		j. valuation of assets	
		k. Compensation for land	
		l. Compensation for crops	
	m. Any other eg. businesses		
9.	Livelihood Restoration	Impacts of the project to people under your jurisdiction	

	How did the project affect the community/ stakeholders under your jurisdiction?	a.	
		b.	
		c.	
		d.	
	What relevant support services were offered for mitigation?	Support services by KETRACO, e.g. compensations etc	
		a.	b.
		c.	d.
		e.	f.
		g.	h.
		i.	j.
		k.	
10. SATISFACTION	l.		
Were the needs of the affected people above fully addressed?	Yes { }	No { }	
If Yes, please state in what ways?	a.	b.	
	c.	d.	
	e.	f.	
	g.	h.	
11. GRIEVANCE REDRESS			
Were there any reported grievances during the processes?	Yes { }	No { }	
How were they raised?	a.	c.	
	b.	d.	
	c.	e.	
Were the issues resolved? (Yes { }	No { }	
If yes, how were they resolved?	a.		
	b.		
	c.		
	d.		
	e.		

Annex 3 Project Affected Household Questionnaire

Introduction and Respondent Consent

Good Morning/Good afternoon. My name is Michael Otieno Okello and I'm a Student in the University of Nairobi pursuing Master of Science in Sustainable Urban Development (Renewable Energy Option). I am presently carrying out research on 'Energy, resettlement and the livelihood impacts associated Eastern African interconnector' following ROW acquisition for this highway project by KETRACO. We would kindly request for your consent and participation in the interviews using this questionnaire. The information gathered will be used for academic purposes only.

Instruction: This Questionnaire will be filled by all households within Eastern Highway Electricity Project Area. For purposes of this Survey, all dwelling units qualify as households. Each head of household whether male, female or child headed shall be interviewed to represent views of all its members.

PAPS/PDPS Survey Administrator Information

No.	Questions	Response/Filters
1.	Date of Interview	
2.	Name of Interviewer	
3.	Signature of Interviewer:	
4.	Time Started	Time Ended
5.	Lot/County	

Part 1: Participation and Grievance Redress

1. How did you first know about the project? (Please tick)
 - a. Chiefs
 - b. KETRACO
 - c. Baraza
 - d. Media; radio, newspapers, TV
 - e. Others; specify.....

2. Was sensitization and awareness done on the project? (Y/N).....

a) If yes, how useful was it to you/ the community?

.....

If not, what issues were not addressed?

.....

3. Did you welcome the idea of the energy project? Y/N....

b) Why?

.....

4. a) Which of the following committees were involved in the project within your village?

- i. Grievance Redress committee
- ii. Resettlement committee
- iii. RAP committee
- iv. Any other:-.....

b) If yes, how useful were the committees?

.....

..... Are any of these committees still active? Y/N.....

b) Were members of community engaged/included as part of the committees? (Y/N)

Please state categories. E.g. Women.

- i. Women
- ii. Old men/women
- iii. Youths
- iv. Elders
- v. County Leaders

5. a) Did you have any challenges with the project?

Please explain

.....

.....

Grievance Redress

b) Did you raise a complaint for help? Y/N.....

- i. If Yes, to whom.....
- ii. How was it resolved?.....

Part 2: PAPS Livelihood Evaluation

6. a) Has the project affected your way of earning a living in any way?

(Y/N).....

b) Please state any positive/negative changes you have witnessed since the project started:

Positive changes.....

Negative changes.....

7. Please indicate your sources of income before and during the project:-

8. Please indicate any changes in your sources of income (Kshs.) before and during the project

Part 3: Compensation and Satisfaction

9. a) Was your land affected by the project (Y/N):

b) If yes, state which category of the affected group you fall under:-

- i. PDP (meant to be displaced/resettled)
- ii. PAPs meant to relocate without vacating their land

c) Which of the following for which you were you compensated for? (Please tick)

- i. Structures
- ii. Land
- iii. Loss of business
- iv. Crops
- v. Any other:

10.a) What were your expectations about the compensation

.....

b)Were your expectations met (i.e. were you satisfied by the payments)? YES...No...

c)How (please explain)

How did you spend your compensation awards?

11.What is change regarding the change in your present location in reference to the pre project situation as regards:

- a.Housing/shelter.....
- c.Access to school.....
- d.Access to health services.....
- e.Access to market:.....
- g.Water sources:.....

12.Kindly give your general opinions about the project?

Document Viewer

Turnitin Originality Report

Processed on: 21-Nov-2018 07:19 EAT
ID: 1043009681
Word Count: 13759
Submitted: 1

ENERGY BASED INVOLUNTARY
RESETTLEMENT, LAND A... By Mo
Okello

Similarity Index 10%	Similarity by Source	
	Internet Sources:	9%
	Publications:	2%
	Student Papers:	4%

include quoted exclude bibliography excluding matches < 7 words download refresh print
mode: quickview (classic) report

- 1% match (Internet from 05-Nov-2015)
<http://www.slideshare.net>
- 1% match (Internet from 09-Sep-2018)
<https://www.enr.com/articles/39140-kenyan-courts-halts-150-million-wind-farm-project>
- 1% match (Internet from 21-Dec-2014)
<http://mtcoffeeliberia.com>
- <1% match (Internet from 02-May-2016)
<http://damsandaalternatives.blogspot.com>
- <1% match (Internet from 11-May-2014)
<http://www.rightsandresources.org>
- <1% match (Internet from 27-Jan-2018)
<http://www.transport.go.ke>
- <1% match (student papers from 29-Aug-2017)
Submitted to Kwame Nkrumah University of Science and Technology on 2017-08-29
- <1% match (publications)
[Scheidel, Arnim, and Alevgul H. Sorman. "Energy transitions and the global land rush: Ultimate drivers and persistent consequences", Global Environmental Change, 2012.](#)
- <1% match (student papers from 28-Oct-2018)
Submitted to Aston University on 2018-10-28
- <1% match (Internet from 19-Oct-2012)
<http://mikroekonomia.net>
- <1% match (Internet from 16-Dec-2009)
<http://www.cehat.org>
- <1% match (Internet from 26-Oct-2018)
<http://blog.minitab.com>
- <1% match (Internet from 11-Aug-2017)
<http://commdev.org>
- <1% match (Internet from 14-Oct-2018)
https://www3.opic.gov/Environment/WIIA/roughsolar/RAP_June_2017.pdf

Yamani Deam
DEAN
 21/11/18
SCHOOL OF PHYSICAL SCIENCES
UNIVERSITY OF NAIROBI.

[Signature]
 23.11.2018

Department of Geography
 and Environmental Studies
 UNIVERSITY OF NAIROBI

[Signature]
 21 NOV 2018
 21.11.18
 P. Box 30197, NAIROBI

UNIVERSITY OF NAIROBI

Declaration of Originality Form

This form must be completed and signed for all works submitted to the University for examination.

Name of Student MICHAEL OTIENO OKELLO

Registration Number 156/71277/2014

College BIOLOGICAL & PHYSICAL SCIENCES

Faculty/School/Institute PHYSICAL SCIENCES

Department GEOGRAPHY & ENVIRONMENTAL STUDIES

Course Name MASTER OF SCIENCE IN SUSTAINABLE URBAN DEVELOPMENT

Title of the work

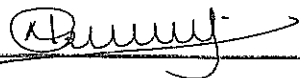
ENERGY BASED LAND ACQUISITIONS, INVOLUNTARY

RESETTLEMENT AND STRATEGIES FOR LIVELIHOOD SUSTAINABILITY

DECLARATION

1. I understand what Plagiarism is and I am aware of the University's policy in this regard
2. I declare that this PROJECT (Thesis, project, essay, assignment, paper, report, etc) is my original work and has not been submitted elsewhere for examination, award of a degree or publication. Where other people's work, or my own work has been used, this has properly been acknowledged and referenced in accordance with the University of Nairobi's requirements.
3. I have not sought or used the services of any professional agencies to produce this work
4. I have not allowed, and shall not allow anyone to copy my work with the intention of passing it off as his/her own work
5. I understand that any false claim in respect of this work shall result in disciplinary action, in accordance with University Plagiarism Policy.

Signature



Date

8/11/2018

THE SCIENCE, TECHNOLOGY AND
INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science,
Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

National Commission for Science, Technology and innovation
P.O. Box 30623 - 00100, Nairobi, Kenya
TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dg@nacosti.go.ke, registry@nacosti.go.ke
Website: www.nacosti.go.ke

THIS IS TO CERTIFY THAT:
MR. MICHAEL OTIENO OKELLO
of UNIVERSITY OF NAIROBI, 86140-200
NAIROBI, has been permitted to conduct
research in *Isiolo , Marsabit , Samburu*
Counties

on the topic: **ENERGY-BASED LAND
ACQUISITIONS, INVOLUNTARY
RESETTLEMENT AND STRATEGY FOR
SUSTAINABILITY OF LIVELIHOODS (CASE
STUDY OF BILATERAL INTEGRATION OF
ENERGY BY EASTERN ELECTRICITY
HIGHWAY PROJECT)**

for the period ending:
8th November, 2019


Applicant's
Signature



REPUBLIC OF KENYA



National Commission for Science,
Technology and Innovation


RESEARCH LICENSE

Serial No.A **21804**

CONDITIONS: see back page

Permit No : NACOSTI/P/18/16035/26847
Date Of Issue : 8th November, 2018
Fee Recieved : Ksh 1000




Director General
National Commission for Science,
Technology & Innovation

UNIVERSITY OF NAIROBI
GRADUATE SCHOOL
GRADUATE STUDENTS PROGRESS REPORT

The following is a format for postgraduate quarterly progress reports for graduate Student undertaking the programme by thesis. A completed report should be sent to the Director, GS through Chairman and Dean/Director with a copy to the Principal of the respective College.

Name of Student: **Michael Otieno Okello** Reg. No. **156/71277/2014**

Programme: **M.Sc. Sustainable Urban Development (Renewable Energy)**

Department **Geography & Environmental Studies**

Faculty/School/Institute: **School of Physical Sciences** Date of Registration: **January 10, 2014**

Proposed date of completion: **December 21, 2018**

TITLE OF PROJECT/THESIS

"Energy Based Involuntary Resettlement, Land Acquisition and Strategies for Livelihood Sustainability (Case Study of Bilateral Integration of Energy Transmission by Eastern Electricity Highway"

Where project is being conducted **Isiolo, Marsabit & Samburu Counties in Kenya**

SUPERVISORS: NAME DEPARTMENT

1. Dr, Alice Oluoko-Odingo Geography & Environmental Studies

2. Prof. David N Mungai Wangari Mathai Institute for Peace & Environmental Studies

1) SHORT INTRODUCTION AND OBJECTIVES

The study evaluates the implementation of energy transmission projects, its benefits and associated challenges and in the light of best practices, rule of law, international standards, and corporate policies recommends strategic actions by Policy makers, learning institutions, Project implementers in the energy sector and the community with an aim of ensuring sustainability of livelihoods and success of Government energy expansion projects in the region.

Objectives of the Study

General objectives

The general objective of the study is to evaluate the resettlement from the perspective of the sustainability of livelihoods of the affected community with reference to the implementer's performance targets. .

Specific Objectives

The study has the following specific objectives:-

- i) To establish the social economic profile of the communities affected by project.
- ii) To find out the livelihood changes resulting from involuntary resettlement on the affected households.
- iii) To establish the relationships between the performance targets (expected outcomes) and the public perceptions.

2) ACCOMPLISHED WORK FOR SPECIFIED PERIOD: FROM (2016) TO (2018)

a) Planned progress. (Gantt)

Key tasks	2016				2017				2018			
	¼ 1	¼ 2	¼ 3	¼ 4	¼ 1	¼ 2	¼ 3	¼ 4	¼ 1	¼ 2	¼ 3	¼ 4
Literature reviews:- -case studies and -problem statement	■											
Meetings and discussions with Supervisors		■	■	■	■	■	■	■	■	■	■	
Draft Study Proposal			■									
Preliminary Studies i) Site Pre-visits ii) Proposal for review				■	■							
Filed Work/Analysis/ Reporting:- i) Data collection and analysis ii) Draft Study Report iii) Final report					■	■	■	■	■			
Presentation i) Submission examination ii) Oral presentation									■	■		
Review of final report Ready for submission											■	■

b) Actual Progress Summary

1. Literature reviews – January 1, 2016 to March 30, 2016
2. Discussion and Meeting with Supervisor April 1, 2016 to October 21, 2018
3. Study Proposal / Pre-study/ Proposal Reviews – September 1, 2016 to March 30, 2017
4. Filed Work/Analysis/ Reporting – April 1, 2017 to March 30, 2018
5. Submission of Research Work for examination – May 1, 2017 to August 30, 2018
6. Oral presentation September 1, 2018 to October 30, 2018
7. Review and Binding of Research Project- November 1, 2018 to November 20, 2018

3) REMAINING WORK

a) State clearly what remains to be done for the stated period if any. If not,

There are no pending works. I am finalizing with clearance by 10th December 2018

b) State what assistance is required.

The copies of Bound Research Project, Originality / Plagiarism Report and Progress Report need to be signed by Supervisors/ Chairman of Department/Dean.

4) Any other comments

Student Name: Michael Otieno Okello Signature: [Signature] Date: 20th November 2018

5) Comments by supervisors

1) Name Dr. Abaci A. Dehogo Department Geography & Environmental studies

Comments

The candidate has worked very hard and completed his work.

Signature [Signature] Date 23. 11. 2018

2) Name Prof. D. Ngunjiri Department WMI

Comments

Satisfactory progress.

Signature [Signature] Date 28/11/18.

Comments by Chairman

Make statement on progress of the student and proposed improvement.

The student is so far progressing well, awaiting for the study of the department

Name Dr. Mwangi Signature [Signature] Date 23/11/18

Comments by Dean/Director

Make statement on progress of the student and proposed improvement.

Satisfactory progress

Name Prof. C.M. Nyamathi Signature [Signature] Date 23/11/18
DEAN
SCHOOL OF PHYSICAL SCIENCES
UNIVERSITY OF NAIROBI.

