

**INFLUENCE OF RESETTLEMENT ON LIVELIHOOD OF PROJECT  
AFFECTED PERSONS IN ISINYA NAMANGA KAJIADO COUNTY, KENYA**

**BY**

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Degree of Masters in Project Planning and Management of the University of Nairobi.**

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**DECLARATION**

This project is my original work and has not been presented for award in any other university.

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## **DEDICATION**

I dedicate this project to my mother, for being the backbone of my education, mentoring me and showing me the essence of education. My late dad Engineer June Odhiambo, my loving mother Dr. Janet Wagude, my sister Meg Odhiambo, my brothers Victor Wagude and Joseph Otunga.

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## **ABBREVIATIONS AND ACRONYMS**

|                       |   |
|-----------------------|---|
| <b>ACC</b>            | Assistant County Commissioner                                 |
| <b>CC</b>             | County Commissioner   |
| <b>DCC</b>            | Deputy County Commissioner                                    |
| <b>DDP</b>            | District Development Plan                                     |
| <b>DEO</b>            | District Environment Officer                                  |
| <b>DO</b>             | District Officer  |
| <b>EMCA</b>           | Environment Management and Coordination Act, 1999             |
| <b>EMF</b>            | Electromagnetic Field   |
| <b>EMP</b>            | Environmental Management Plan                                 |
| <b>EPs</b>            | Entitled Persons  |
| <b>ESIA</b>           | Environmental and Social Impact Assessment                    |
| <b>ICNIRP</b>         | International Commission on Non-Ionizing Radiation Protection |
| <b>IMA</b>            | Independent Monitoring Agency                                 |
| <b>IMU</b>            | Independent Monitoring Unit                                   |
| <b>KCAA</b>           | Kenya Civil Aviation Authority                                |
| <b>Km</b>             | Kilometres  |
| <b>Km<sup>2</sup></b> | Square Kilometres   |
| <b>KPLC</b>           | Kenya Power and Lighting Company Limited                      |

|             |   |
|-------------|---|
| <b>KRU</b>  | KETRACO Resettlement Unit                 |
| <b>KV</b>   | Kilo Volts                                |
| <b>KWS</b>  | Kenya Wildlife Service                    |
| <b>M</b>    | Meters                                    |
| <b>M</b>    | Million                                   |
| <b>Mm</b>   | millimeters                               |
| <b>NEMA</b> | National Environment Management Authority |
| <b>NRPB</b> | National Radiological Protection Board    |
| <b>PAHs</b> | Project Affected Households               |
| <b>PAPs</b> | Project Affected Persons                  |
| <b>PMU</b>  | Project Management Unit                   |
| <b>RAP</b>  | Resettlement Action Plan                  |
| <b>REA</b>  | Rural Electrification Authority           |
| <b>RIC</b>  | RAP Implementation Committee              |
| <b>RIM</b>  | Registry Index Map                        |
| <b>ROW</b>  | Right of Way                              |
| <b>TOR</b>  | Terms of Reference                        |
| <b>WB</b>   | World Bank                                |

## ABSTRACT

Resettlement is the process of moving people to a different place to live because they are no longer allowed to stay in the area they used to live. The purpose of this study was to establish the Influence of resettlement on livelihood of project affected person .The research objectives were to examine how Resettlement restoration arrangement influence livelihood sustainability of project affected persons in Isinya-Namanga,to establish how potential risk influence livelihood of project affected person in Isinya-Namanga Kajiado County,Kenya to examine how resettlement compensation influence livelihood of project affected person in Isinya–Namanga and to determine how the vulnerable persons influences livelihood of project affected persons in Isinya-Namanga.The study used Expost facto design, self developed questionnaire, Interview, and documentary analysis as tools for data collection. Qualitative data was analyzed and presented in themes while quantitative data was analyzed descriptively using percentage, frequencies, mean, and standard deviation. Inferentially, multiple regression analysis was used as tool of analysis to test for significance among various hypotheses. Descriptive statistics was summarized using the most dominant independent variable item as follows, objective 1 (50%, mean4.05, standard deviation0.979), objective 2,(40.44%,mean 3.63,standard deviation 1.191),objective 3,(44.2%,mean,4.25.standard deviation 0.810),objective 4 (45.2%.,mean 3.89,standard deviation 0.847). Four hypotheses were formulated and subsequently tested to establish the influence of various independent variables on livelihood thereof, all the four hypotheses were significant at  $\alpha=.05$  as the values obtained were as follows; hypothesis  $H_0$  1: ( $P=0.00 < P=0.05$ ),  $H_0$  2: ( $P=0.00 < P=0.05$ ),  $H_0$  3: ( $P=0.002 < P=0.05$ ),  $H_0$  4: ( $P=0.00 < P=0.05$ ). The small p-values ( $p < 0.05$ ) implies that there is a significant relationship among the variables leading to rejection of the null hypothesis and hence the research findings concluded that there is a significant relationship between all the independent variables and livelihood s of project affected persons. It is thus recommended that government to set out strategies for the Implementation of PAP, including the process through which to acquire the necessary land and easements for the Implements.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the study**

According to Mathur (2006), one of the social manifestations of large projects is imposed resettlement. Referring to Asia, Gutman (1994) noted that victims of large project displacement in China and India alone were at least 50 million with hydropower and interrelated projects accounting for 20 million displacements. Scholars and stakeholders concur that if forced resettlement or relocation results into high magnitude of socio and economic challenges to the affected population if the resettlement is not properly managed (Carnea, 1995; Gutman, 1994; Downing, 2002; Garikipati, 2005). On the effect of resettlement, Downing (2002) suggested that there is extensive loss of asset which can be physical or non physical. Specifically, Downing (2002) mentioned community culture and values as the non physical assets with income generating assets and homes being the physical assets. The conclusion is that forced resettlement contributes to increase risk vulnerability of the affected population leading to increased impoverisation which hampers their livelihood leading to derailed on stagnating development as the community's development project cannot be sustained under the circumstances (Garikipati, 2005).

When developing plans, programmes and initiatives to reduce or eliminate the challenges emanating from forceful displacement, stakeholders including international agencies and bodies not affiliated to the governments have come up with frameworks, policies and guidelines which are to be followed when effecting resettlement plans (Fernandez, 2002; Muggah, 2000). The policies and guidelines are internationally applicable and ensure adequate economic and social compensation of the affected persons (ADB, 1998; IFC, 2006). For uniformity and application in different scenarios, the policies and guidelines have been expounded to cover wide range of issues inherent to resettlement including: entitlement, compensation scheme, rehabilitation, livelihood restoration and the design of resettlement plan (De Wet, 2006). Despite the guidelines and policies being available for effective resettlement, failure has emerged as most resettlement projects have failed sustainable livelihood and mitigate against impoverishment in the victim communities (Duan & McDonald, 2004).

A study by Vilayvanh Phonepsaseuth (2015) investigated how effective the livelihood restoration and resettlement plans were at ensuring sustainable livelihood in the case of the resettled communities in Nikau plateau of New Zealand. The conclusion from the study was that designed restoration programs for livelihood of the affected communities enhance their capacities achieved through the various set resources and assets during the planned resettlement. Marika (2015) investigated the aspect of livelihood diversification in the rural set-up with focus on the non-farming economy. Similar conclusions were arrived at on the second phase of the Nam Theuri project conducted in Sweden as the resettled households were found to have been permanently altered.

A study in China by Jun (1997) was based on reviewing three resettlement projects namely: the Vinanjing project, Yongjing project and Sanmenxia project. The study concluded that the communities displaced by the projects were not adequately compensated with their life ending up being worse than the people in the neighbourhood who avoided the resettlement. In Sri Lanka the history of development-induced displacements started from rural development projects, namely the set of Mahaweli hydropower projects from the 1960's until 1980's. These developments have been the most massive in the Sri Lankan history, displacing 125,000 families and providing irrigation in a 144,000 hectares area (Perera & Sennema 2002). In Colombo and its neighboring municipalities. The Southern highway infrastructure project relocated more than 1,300 families in 2006–2011 Jayawardena (2011). In Brazil, community activists formed the regional commission against large dams (CRAB), which remained as evidence to people affected by resettlement (Cernea & Guggenheim, 1993). Lund (2009), therefore, calls for a clear distinction to be made between the refugee regime and situations of displacement, especially when the displacement is caused by development projects.

In India, Bhati (2002) assessed the impact of implementing resettlement program in Nutha Jhatri hydro power project and concluded that magnitudes of indices during the 2002 programme and implementation are compared to the baseline data and with the control sample household data in the project area which are not affected by the NJPC project. The data revealed the family size of the PAFs had declined from 7.14 to 5.44 persons per family.

In Africa, the insufficiency of resettlement compensation was noted in two hydro power projects: the Kiambere and the Akosombo Dam projects which led to increased socio-economic deterioration (Mburugu, 1994; Tamaroke, 1994). In Zambia the Kariba project and the Aswan dam in Egypt and Sudan, an estimation of the total number of people displaced by dam projects (including the Bui dam) in Ghana is about 100,216,000. Seventeen potential sites for hydropower generation on the Black Volta, White Volta, Oti, Tano and Pra Rivers had been identified in Ghana including Bui (Gordon, 2006). Since then, development-induced displacements have become more common also in urban areas.

In Uganda a study by Phince Nampungu (2015) on assessment of the Impact of Government involuntary relocation and resettlement programme on the livelihoods of development Induced displaced populations Using Cernea's impoverishment risks and reconstruction (IRR) model developed in the 1990s to explain the consequences of involuntary resettlements, focused on eight risks identified by the model, however it did not explain the impact of the resettlement on livelihood.

In Kenya Adams Kijazi (2014) looked at the Impact of Derema forest corridor on community Livelihood and Forest conservation. Using descriptive survey, in-depth interviews and focus group discussion the study showed that resettlement and resettlement compensation exercise did not adequately address the interest of the farmers .The study recommended that baseline survey be conducted to gain a better understanding of the importance of local livelihood opportunities and options in any area where new protective reserve are to be established or existing ones expanded. However the study did not address the aspect of Resettlement on livelihood. The problem this study seeks to address is influence of Resettlement on livelihood of project affected persons.

### **1.1.1 Concept of resettlement action plan.**

Forced resettlement, depending on the cause, may be categorized under three main headings. First, disaster induced, second, conflict induced and lastly, development induced displacement ( FMO,2010).This forced resettlement study comes under development-induced displacement (DID).On another hand, IDPs, of which forced resettlers are included, are less visible than refugees who cross international boundaries, they receive



less support, and have not been studied to the same extent (Pankhurst & Piguet, 2009). Forced resettlement causes severe impacts on the lives of IDPs. These impacts include direct displacement, inundation of rich farmlands, villages and grazing grounds, sedimentation of river beds, degradation of soils, endangered freshwater habitats, spread of vector borne diseases, stress and trauma, poor governance and management practices, even ethnic cleansing, and lack of access to land and resources at the new settlements (Lund, 2009).

During the past few decades, local communities have faced the consequences of the establishment of infrastructure development such as dams, agricultural projects, national parks, city and urban expansion. Although these development projects are considered to be of national interest, they have been in competition with local communities for access to land and land related resources. The development projects have marginalized local communities excluding them from ancient areas and relocating or forcing them to look for alternative land in marginal areas (De Wet, 2006).

Development projects requiring already occupied land involve varying degrees of forced resettlement (Cernea, 2004). Infrastructural development projects and associated development programmes seem to be one of the main sources of environment problems, thus posing a danger of social unrest.

In Sri Lanka the history of development-induced displacements started from rural development projects, namely the set of Mahaweli hydropower projects from the 1960's until 1980's. These developments have been the most massive in the Sri Lankan history, displacing 125,000 families and providing irrigation in a 144,000 ha area (Perera & Sennema 2002). In Colombo and its neighboring municipalities. The Southern highway infrastructure project relocated more than 1,300 families in 2006–2011 (Jayawardena 2011). Until 1976 the Housing and Town Improvement Ordinance used slum demolitions.

In Brazil, community activists formed the regional commission against large dams (CRAB), which remained as evidence to people affected by resettlement (Cernea & Guggenheim, 1993). Lund (2009), therefore, calls for a clear distinction to be made between the refugee regime and situations of displacement, especially when the

displacement is caused by development projects. Forced resettlement is a problem-oriented field of academic enquiry that potentially combines the study of political, environmental and developmental displacement (De Wet, 2006).

In Ghana, the Akosombo dam flooded about 3.5 per cent of Ghana's total land mass while the Narmada Sardar Sarovar Dam covers 0.01 per cent of India's land mass (Lund, 2009). In Zambia the Kariba project and the Aswan dam in Egypt and Sudan. An estimation of the total number of people displaced by dam projects (including the Bui dam) in Ghana is about 100,216,000. Seventeen potential sites for hydropower generation on the Black Volta, White Volta, Oti, Tano and Pra Rivers have been identified in Ghana including Bui (Gordon, 2006). Since then, development-induced displacements have become more common also in urban areas.

### **1.1.2 Resettlement restoration**

The state organized resettlement began in the 1950's. The reason for state organized resettlement has been development. There have thus been projects such as construction of harbor, roads and dams and the decongestion of a local community. Regarding state resettlements in Ghana, much research work has been done on those caused by dams than the other development projects. Comparing the state and the private institutions, much research has been done on state organized resettlements than of private organizations.

### **1.1.3 Resettlement compensation**

Involuntary resettlement, if left unmitigated, normally gives rise to severe economic, social, and environmental risks (Cernea 2000). People face impoverishment when their productive assets or income sources are lost and social networks are weakened. Bang & Few (2012) further adds that Indeed, the nine most common impoverishment risks are Landlessness. Expropriation of land removes the main foundation on which many people build productive systems, commercial activities and livelihoods.

Joblessness, Loss of salaried employment occurs both in rural and urban displacement Bang & Few (2012). People losing jobs may be industrial or service workers, landless agricultural laborers, or artisans. Unemployment or underemployment among resettlers

may linger long after physical relocation. Homelessness, Loss of shelter may be only temporary for many people, but for some it remains a chronic condition and is also felt as loss of identity and cultural impoverishment Nayak (2000). Reddy (2000) observes that Marginalization occurs when relocated families lose economic power and slide down towards lesser socio-economic positions, middle-income farm-households become small landholders, small shopkeepers and craftspeople lose business and fall below poverty thresholds. Increased morbidity and mortality.

#### **1.1.4 Vulnerability of persons.**

Vulnerability of the poorest people to illness is increased by forced relocation, because it tends to be associated with increased stress, psychological traumas, or the outbreak of parasitic diseases. Cerneaa (2000) continues that Food insecurity, Forced uprooting diminishes self-sufficiency, dismantles local arrangements for food supply, and thus increases the risk of chronic food insecurity. Educational loss, involuntary displacement disrupts all public services at the departure sites, with heavy effects particularly on schools' functioning Meija (2000). Loss of access to common property. Poor farmers, particularly those without assets, suffer a loss of access to the common property goods belonging to communities that are relocated like loss of access to forests, water bodies, grazing lands and cemetery lands he further adds that Social disarticulation. The dismantling of community structures and social organization, the dispersion of informal and formal networks, local associations, is a massive loss of social capital. Such disarticulation undermines livelihoods in ways usually not recognized and not measured by planners, and is a cause of disempowerment and impoverishment ( world Bank ,2000).

#### **1.1.5 Livelihood sustainability.**

A Livelihood comprises the capabilities, assets(including both material and social resources, and activities required for a means of living. livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future while not undermining the natural resource base (Sconnes,1998).

## **1.2 Statement of the problem**

A sustainable livelihood approach acts as an operational tool to assist work in poverty reduction (Altereli & Carloni, 2000). According to Scones (1998), livelihood is considered to be sustainable when it shows the ability to respond, cope and recover from stresses and shocks, maintain or enhance its capabilities and assets while not undermining the natural base Scones (1998). However, during the process of resettlement livelihoods are normally interrupted due to physical movement of people from one environment to a new environment, impact on the facilities like dams, number of persons displaced, compensation and the overall success of resettlement. However, none attempted to assess the extent to which the affected people have coped with the change in location, income and living conditions. According to World Bank (2009), Bujagali hydropower dam inspection panel report findings and the July 2008 report findings by the AFDB independent review mechanism, there existed a range of important problems regarding how the Bujagali hydropower project failed to meet the expectations of the local people displaced by the project. Both reports put into question the benefits for the local population and indicated that negative effects had not been adequately taken into account. This touches the heart of the project's purpose and mission to reduce poverty that should guide the policy choices of all stakeholders involved. One of the key findings in the World Bank Inspection Panel report 2009 was that the affected people in the area around the Bujagali dam have seen their livelihoods diminish and have not or insufficiently been compensated. It is on the basis of the above problems that the study sought to establish the Influence of resettlement on livelihood sustainability of project affected person in Kajiado, Kenya. In addition, limited focus has been given to linear projects in previous studies, several projects in Kenya have experienced delays because of grievances related to resettlement of project affected persons. This points to weaknesses in the RAP and lack of confidence in it by the PAPs. The study seeks to bridge this knowledge gap by highlighting the uniqueness and heterogeneity of project affected persons in linear projects such as the transmission line projects.

### **1.3 Purpose of the study**

The main aim of the study was to investigate the influence of resettlement on livelihood on project affected persons.

### **1.4 Objectives of the study**

The study was guided by the following objectives.

- i. To examine how resettlement restoration arrangement influences livelihood of project affected persons in Isinya-Namanga Kajiado County, Kenya.
- ii. To establish how potential risk influences livelihood of project affected person in Isinya-Namanga line Isinya-Namanga Kajiado County, Kenya.
- iii. To examine how resettlement compensation influences livelihood of project affected person in Isinya –Namanga Kajiado County, Kenya.
- iv. To determine how vulnerable persons Influences livelihood of project affected persons in Isinya –Namanga Kajiado County, Kenya.

### **1.5 Research Questions**

The study sought to answer the following questions.

- i. How does resettlement restoration arrangement influence livelihood of affected persons within Isinya –Namanga Kajiado County, Kenya.
- ii. How does Potential Risk influence livelihood of project affected persons within Isinya-Namanga Kajiado County, Kenya.
- iii. How does resettlement compensation influence livelihood of project affected persons in Isinya –Namanga Kajiado County, Kenya.
- iv. How does vulnerable persons influence livelihood of project affected person in Isinya-Namanga Kajiado County, Kenya.

### **1.6 Research Hypotheses**

1. H<sub>1</sub>: There is a significant relationship between resettlement restoration arrangement and livelihood of project affected persons in Isinya Namanga Kajiado County, Kenya.

2. H<sub>1</sub>: There is a significant relationship between Potential Risk and livelihood of project affected persons in Isinya Namanga Kajiado County, Kenya.

3. H<sub>1</sub>: There is a significant relationship between resettlement compensation and livelihood of project affected persons in Isinya-Namanga Kajiado County, Kenya.

4. H<sub>1</sub>: There is a significant relationship between vulnerable persons and livelihood of project affected persons in Isinya-Namanga Kajiado County, Kenya.

### **1.7 Significance of the study**

It is hoped that the study provide information to the government that would stimulate the formation of appropriate policy and legal framework to address the gaps in the existing resettlement action plans. Companies dealing with Electricity projects and relevant stakeholders would understand and appreciate the perception of the resettlement community on influence of livelihood sustainability. Potential investors and other relevant stakeholders in the various sectors would appreciate the extent to which livelihood values could be considered to ensure mutual sustainability for livelihood and its resettlement communities in Kenya. Energy companies for instance will use the findings to strategize how to arrest real or potential problems peculiar to energy-induced resettlement community in Kenya. And this strategy would minimize company-community conflicts which would have positive knock-on effect on investment flow into energy sector of the country. Also the study is likely to help other researchers to have a conceptual framework to investigate further into the subject. Finally, the outcome of the research would assist landowners, energy companies, public and private valuers, land administrators and other stakeholders to understand the elements of dissatisfactions in estimating adequate resettlement compensation in land acquisition for electricity projects. Exploring the relationship between these variables is expected to contribute to the body of knowledge in this area of study by serving as a useful material of project managers in the field of energy, scholars both in Kenya and globally.

### **1.8 Limitation of study**

There is the challenge of distance to the field. Since the transmission line is a long line, the researcher could face difficulty in accessing respondents due to distance and expenditure. Some of the respondents are pastoralists and the researcher may not access them. Since the project is in the pre-implementation stage, the researcher may not have the time to monitor the impact of resettlement implementation since it is not a longitudinal study and the project will take several years to complete. It is therefore hard to get full details on impact of resettlement on livelihood within the proposed research timeframe.

### **1.9 Definitions of significant terms used in the study.**

**Resettlement** - The movement of people from one area to another.

**Project Affected persons** – These are people who are affected by a project and are going to be compensated.

**Livelihood**-It is the supporting of one's existence especially financially or vocationally.

**Restoration Arrangement**-It is the arrangement of resettling people from one area to another.

**Potential Risk**-This is the risk that is associated with the damage that might occur with project affected persons.

**Resettlement Compensation**-This is the arrangement in terms of resources that are going to be given to the project affected persons in case of any damage.

**Vulnerable Persons** - These are people who are unable to protect or take care of themselves against harm or exploitation by reasons of age, illness, trauma, disability or any other reason.

### **1.10 Organization of the study.**

This thesis was organized in five chapters, chapter one described the background of the study, the statement of the problem, purpose of the study, research objectives, research questions, research hypothesis, significance of the study, limitation and delimitation, basic assumptions, and definitions of terms. Chapter two has reviewed literature using introduction themes on resettlement under potential risk and livelihood sustainability of project affected person, resettlement restoration and livelihood project affected persons, resettlement compensation and livelihood of project affected persons and vulnerable person. Chapter three discussed, research design, target population, sample size and sampling procedure, research instrument, pilot testing of research instrument, validity of instrument, reliability of research instrument, data collection procedure, data Analysis technique, and ethical consideration. Chapter Four discussed data analysis, presentation, interpretation and discussion. Chapter five discussed the summary of finding, contribution to body of knowledge and area of further research.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

In this chapter, Literature was reviewed under the following thematic concerns of resettlement restoration arrangement and livelihood of project affected persons, potential risks arrangement and livelihood of project affected persons, resettlement compensation and livelihood of project affected persons, vulnerability of persons and livelihood sustainability of project affected persons.

#### **2.2 Concept of Resettlement and livelihood sustainability of project affected persons**

Resettlement guidelines and resettlement policies in a number of countries, states and multilateral organizations, have been formulated thus improving forced resettlement outcomes, for example, projects in China (Picciot et al. as cited in De Wet, 2006). According to the World Bank (as cited in Lund, 2009), dam projects have displaced people since the 1950's by reconstruction after the Second World War in Western countries. Similarly, newly independent countries such as Ghana experienced development-related displacement. However, during the last two decades, the magnitude of forced displacements caused by development programmes reached 10 million people each year or some 200 million people globally (Cernea, 2004). Turton (2006) prefers the use of 'forced resettlement' rather than DID due to the fact that the term is used to refer to those groups of people who have been resettled by government politically motivated programmes which use resettlement as a technique of rural development and political control (as used in Tanzania, Ethiopia, and South Africa). Therefore, unlike refugees, forced resettlers have no choice about leaving their homes and do not have any hope of returning to them. However, it is possible to plan for the move of forced resettlers well in advance. Authorities undertaking forced resettlement can therefore take steps to ensure that the impacts of the move on the affected persons are minimized and the standard of living of the settlers is improved, or at least maintained.

In China has been identified as having the largest portion of DID project. For instance, the Three Gorges Dam is the world's largest hydropower project. It is claimed that the project

displaced more than 1.2 million people from 13 cities, 140 towns and 1,350 villages. Furthermore, the length of the reservoir stretch more than 600 kilometers. However, various sources claim that the project was marred by corrupt practices, human rights violations, environmental challenges and resettlement difficulties (International Rivers, 2011). Other countries with similar problems in Asia are Indonesia and Sri Lanka.

Latin America and the Caribbean are less affected when compared to Asia; these regions have nevertheless experienced a large number of controversial resettlement operations. For example the Tucuru dam project in Brazil, the Chixoy in Guatemala and the Aleman dam project in Mexico displaced particularly Indian populations (Lund, 2009).

In Ghana, the Akosombo dam flooded about 3.5 per cent of Ghana's total land mass while the Narmada Sardar Sarovar Dam covers 0.01 per cent of India's land mass (Lund, 2009). In Zambia the Kariba project and the Aswan dam in Egypt and Sudan. An estimation of the total number of people displaced by dam projects (including the Bui dam) in Ghana is about 100,216,000. Seventeen potential sites for hydropower generation on the Black Volta, White Volta, Oti, Tano and Pra Rivers have been identified in Ghana including Bui (Gordon, 2006).

### **2.3 Resettlement restoration arrangement and livelihood of project affected persons.**

The state organized resettlement began in the 1950's Scheyvens (2003). Readon (2007) in his study on Forced resettlements in Ghana confirmed that forced resettlement may be divided into two parts; state and private firm organized resettlements. There have thus been projects such as construction of harbour, roads and dams and the decongestion of a local community Haggard (2007).. Regarding state resettlements in Ghana, much research work has been done on those caused by dams than the other development projects Hossain (2008). Comparing the state and the private institutions, much research has been done on state organized resettlements than of private organizations Hossain (2008). Liendholm in his study of resettlement restoration using descriptive survey observed that there are three dams including Bui in Ghana which has resulted in forced resettlement however he did not include the Kpong dam because its resettlement component was undertaken by VRA, an autonomous state institution. Consequently Merion (2013) while addressing Resettlement

Policy Framework (RPF) observed that RPF is a resettlement document to be prepared if the extent and location of resettlement cannot be known at appraisal because the project has multiple components or if the final design (as in this case) is determined at a later stage (final design during construction process).

Merion (2013) continue to observe that the policy framework establishes resettlement objectives and principles, organizational arrangements, and funding mechanisms for any resettlement operation that may be necessary during project implementation, however he did not address the aspect of Poe (2014) in his study on large scale hydro projects using questionnaire and interview as tool for data collection adds that the framework also estimates the probable number of affected persons and resettlements, and especially for financial intermediary projects, assesses the institutional capability to design, implement, and oversee resettlement operations. Further NTPC (2014) adds that during project implementation the extent of resettlement in any sub project becomes known, a RAP is prepared before the investment is approved for funding.

NTPC (2014) adds that Resettlement Action Plan (RAP) is a resettlement document to be prepared when the exact location of the project i.e. final detailed line routing and exact tower locations are identified. If the final line impacts settlements below the safety distance specified in the law, land acquisition leads to physical displacement of persons, and/or loss of shelter, and /or loss of livelihoods and/or loss, denial or restriction of access to economic resources concludes Poe (2014). Like Poe (2014) as mentioned in Souksavath (2014) in his study on reconstruction of the livelihood of resettlers from the NAM Theum 2 hydropower projects in LAOS alludes that RAPs are prepared by the party impacting on the people and their livelihoods. RAPs contain specific and legally binding requirements to be abided by to resettle and compensate the affected party before implementation of the project activities causing adverse impacts Souksavath (2014). RAPs contain a census of PAPs, including cadastral information and a detailed inventory of losses concludes (Poe, 2014). A study by Phince Nampungu (2014) in Uganda on assessment of the Impact of Government involuntary relocation and resettlement programme on the livelihoods of development Induced displaced populations, using Cernea's impoverishment risks and reconstruction (IRR) model developed in the 1990s to explain the consequences of

involuntary resettlements, focused on eight risks identified by the model to explain the risks. It was thus discovered during the study that the resettlers' livelihoods have worsened since the relocation as they lost land and jobs mainly fishing since they were banned by the government from fishing near the dam, lost social and family ties, lost common property such as the lake, forest and shrines.

The research further discovered that the resettlers in Naminya also felt homeless having been relocated far from their original area in Bujagali and were hopeless and food insecure. Some of their children had to drop out of school while some of the girls opted for marriage. Increased domestic violence due to money related issues was on the increase in Naminya as the men were more or less redundant. What was largely observed however was the fact that many resettlers were still bound by poverty and some worse off than before relocation despite having been promised a better life by both the Government of Uganda and dam developers (AES Nile Power and Bujagali Energy Limited). It was recommended that increased community participation process should be transparent and gender sensitive, extension of credit facilities to facilitate in economic restoration and social services such as schools, hospitals, and markets should be built close to the resettlement village. The study however did not address the aspect of resettlement restoration arrangement and livelihood sustainability which this study is tackling.

#### **2.4 Potential Risk and livelihood sustainability of project affected persons.**

Direct and indirect impacts of relocation are many Nayak (2000). Cernea (2000) has designed an Impoverishment Risk and Reconstruction (IRR) model, a widely acknowledged framework for planners, policy-makers and social scientists to apply in case of displacements, be it disaster or development induced. This tool considers landlessness, joblessness, homelessness, marginalization, food insecurity, increased morbidity, education loss, loss of access to common property resources and social disarticulation to be serious risks to involuntarily displaced people. On the other hand, Perara and Sennema (2002) in their study towards sustainable development in Mahaweli settlement through farmer participation participatory development added that; joblessness causes homelessness, which causes marginalization, and so on. Bang and Few (2012) further states that each risk also influences another Bang and Few (2012) in their study of social

risks and challenges in post –disaster resettlement: the case of Lake Nyos continues to say that. All these risks and their causalities need to be acknowledged and considered in practice in order for the resettlers to reconstruct their everyday life in the new areas. Nape (2012) further observes that these strategies are found by responding to each impact and turning the model on its head. For example, joblessness should be overwritten with reemployment and marginalization with social inclusion (Nape,2012). However, World Bank (2014) observes that the IRR model is widely used in social sciences and in studying the impacts of resettlement).

Consequently, Stenholm (2015 ) is of the view that Landlessness is the most severe risk to those whose livelihoods depend on it, often rural agrarian communities in urban environments the risk for evictions in unauthorized land is significant especially in the political and economic atmosphere that encourages urban renewal processes, and where land value is high. On the other hand the loss of land has foremost economic impacts, but also political and ecological consequences depending on the context (Nayak 2012). Nayak (2012) continues to observe that loss of land affects people’s mindset and identity he further adds that Involvement and attachments to land also reflect to the ways in which resettlement compensation is perceived and utilized. On the other hand Bhang and few in their study of Social risk and challenges in post –disaster resettlement; the case of Lake Nyos adds that Resettlement compensation measures include land for land, cash for land and employment for land. However, the quality of resettlement compensation always needs careful revision, as it should meet the needs of people and imitate original conditions. It is not only the loss of physical land, but also of one’s origins World Bank (2012). According to the World Bank (2014), there are different forms of tenure; aside from conventional ownership, especially in the urban areas dwellers might have a lease on government land. The quality of ownership can have an impact to the ways in which tenants are treated legally, and socially.

Using survey design and interview as a tool for collecting data Matos (2012) asserts that of course, uncontrollable urbanization and no access to markets cause also illegal occupation of land in large scale. Consequently, these forms of tenure imply three groups of people, those who have formal legal entitlement to land, those who do not have the formal right per se but have the land or assets that proof ownership, and are therefore

recognized under law, those who do not have formal legal rights to the land they are occupying Matous (2012). On the same wave line (World Bank 2014) voices the fact that for the latter group, insecure tenure is a constant threat, especially in unauthorized slums, increasing the risk of forced displacement. Occasionally, neither a lease contract nor ownership deed are sufficient in terms of access to services. However, Hickey (2011) brings in the fact that involuntary displacement causes a high risk for economic deprivation. This is then a further risk to, for example, food insecurity, Loss of land can mean loss of crop production, a significant livelihood strategy for many urban poor. In displaced communities, such as underserved settlements, economic factors should be thoroughly considered. Displacement means not only the loss of physical home but often also livelihood strategies (Hickey (2009).

UN-Habitat (2010) in their paper Innovative approaches for Involuntary Resettlement. Lunawa environmental Improvement and community programming-Habitat Sri Lanka observed that the risk is highest in communities that depend on common property resources. In urban environments, livelihood strategies are usually more heterogeneous, but planners should then consider commuting distance and time, as well as public spaces for informal economies (Reddy 2011). Not only adequate resettlement compensation is enough to ensure sustainable resettlement, but also technical and structural assistance is needed in order to adapt to the changes. The support in maintaining old jobs is essential too. Additionally, a large scale of alternatives for livelihood strategies as well as the ability to change jobs seems to bring positive outcomes (Mejía 2011 Sorensen 2011). Low level of education or lack of sense of community can prevent the capacity to reorganize, as many poor communities are highly depend on social support and networks. It is crucial to underline that ways to scale up and improve livelihoods should be a standardized objective of resettlement projects, and participatory approaches and planning can help to achieve this. However, it is still common that resettlement projects lack the understanding of the indirect consequences that stem from economic deprivation, and thus also recovery measures can remain inadequate.

Matous & Ozawa (2010) in their study on measuring social capital in a Philipian slum. have shown that slum dwellers, and poor communities in general, are dependent on social

capital, e.g. networks and community participation, as a response to the lack of established public assistance and services from the city Matous & Ozawa (2010) adds that for women, these networks are a lifeline, providing financial assistance and help in daily tasks. In many developing countries, corruption is vast at the top-level formal institutions, while grassroots' and informal systems provide necessary services and support for the less well off. Narayan-Parker (2010) in his study on participation from tyranny to transformation exploring new approaches to participation in development using a comparative design and observation as a tool for data collection in New York concluded that social interaction and informal economies form the basis of daily activities and survival strategies in many underserved settlements. However, strong social capital also requires mutual understanding of values and norms of life, and collides of such can cause segregation and/or conflicts. Due to displacement, these networks are easily disrupted, and reformation can be challenging in a new environment. Social marginalization, a common consequence of displacement and impoverishment, is often linked to economic loss in resettlement Narayan-Parker (2010).

Koenig (2010) adds that the loss of access to resources and infrastructure that would prevent impoverishment also means that displaced people lose the abilities to restore their lives, and therefore the capacity to improve their lifestyles .However, marginalization is also a psychological phenomenon that is enforced when the lowest sector of the society is countered with the powerful margin in public Koenig (2010). Furthermore, social exclusion can have many direct and indirect consequences. Ignorance by authorities and therefore services, physical lack of access, exclusive policies, targeted subordination or strong social stigma are common Koeing (2010). Exclusion can be policy-driven, but it can also be simultaneous; the poor do not have extra to spare on the services and opportunities the city has to offer, and will therefore stay in their own areas UN-Habitat (2013). Also, communities identified with exclusion can easily form an oppositional culture of disobedience, leading to drug use and other illegalities. As other issues increase, also opposition to norms increased UN-Habitat (2013). Exclusive urban policies and public confrontation of people create lack of trust and physical segregation (UN-Habitat 2003).

Exclusion endangers the capabilities to social participation and expression of opinions, and threatens the ability for the poor to take ownership for their lives and development. This is crucial in pursuing general social development as well Hickey & Mohan (2013), let alone in the context of recovering from displacement. Reducing social exclusion also minimizes social deprivation and issues stemming from it (UN-Habitat 2013). Despite its thorough analysis of displacement consequences, IRR has also been criticized for perceiving communities homogenous, and undermining the complex knowledge systems in them Mehta (2013). Furthermore, it is challenging to try to specify particular variables that should always be included in project planning, as each case is different. Generally, it could be stated, that besides physical property, people also need ownership to land and social development. These are, however, also gender-related issues, something that IRR does not consider. Additionally, cultural and social norms and habits need to be addressed, as they have major impacts in rehabilitation. From a geographical perspective, IRR does not consider the sense of place, its formation, destruction and impacts for resettlement and rehabilitation processes. Furthermore, the model is not feasible if the issues causing poverty, insecurity, health hazards and social exclusion in the first place are not tackled profoundly Poe (2014).

Soouksavath (2013) in his study of reconstruction of livelihood of resettlers from the Nam Theon 2 hydropower project in Laos concluded that involuntary resettlement, if left unmitigated, normally gives rise to severe economic, social, and environmental risks. Like Soouksavath (2013) in Poe et al (2014) he observes that People face impoverishment when their productive assets or income sources are lost and social networks are weakened. Indeed, the nine most common impoverishment Risks are: Landlessness. Expropriation of land removes the main foundation on which many people build productive systems, commercial activities and livelihoods. Often land is lost forever; sometimes it is partially replaced, seldom fully replaced or fully compensated. This is the main form of de-capitalization and pauperization of the people who are displaced. Both Natural and man-made capital is lost. Joblessness and loss of salaried employment occurs both in rural and urban displacement. People losing jobs may be industrial or service workers, landless agricultural laborers, or artisans. Unemployment or underemployment among resettles may



linger long after physical relocation. Creating new jobs for them is difficult and requires substantial investments, new creative approaches, and reliance on sharing project benefits.

Homelessness and loss of shelter may be only temporary for many people, but for some it remains a chronic condition and is also felt as loss of identity and cultural impoverishment. Loss of housing may have consequences on family cohesion and on mutual help networks if neighboring households of the same kinship group get scattered. Therefore, group relocation of neighbors is usually preferable over dispersed relocation. Marginalization occurs when relocated families lose economic power and slide down towards lesser socio-economic positions: middle-income farm-households become small landholders; small shopkeepers and craftspeople lose business and fall below poverty thresholds. Economic marginalization tends to be accompanied by social and psychological marginalization, expressed in a drop to a lower social status with its attached stigma, in resettlers' loss of confidence in society and in themselves. World Bank (2012). Increased morbidity and mortality. Vulnerability of the poorest people to illness is increased by forced relocation, because it tends to be associated with increased stress, psychological traumas, or the outbreak of parasitic diseases. Decreases in health levels result from unsafe water supply and sewage systems that proliferate epidemic infections, diarrhea, and dysentery Souksavath & Nakayama (2013).

Food insecurity. Forced uprooting diminishes self-sufficiency, dismantles local arrangements for food supply, and thus increases the risk of chronic food insecurity. This is defined as calorie-protein intake levels below the minimum necessary for normal growth and work Mirumachi & Torriti (2012). Souksavath & Nakayama (2013). Educational loss. Involuntary displacement disrupts all public services at the departure sites, with heavy effects particularly on schools' functioning. Interruption of school attendance causes prolonged loss of access to education; some children do not return to school at all and are prematurely sent by their families to join the labor force Mirumachi & Torriti (2012). Loss of access to common property. Poor farmers, particularly those without assets, suffer a loss of access to the common property goods belonging to communities that are relocated (e.g., loss of access to forests, water bodies, grazing lands, cemetery lands, etc.). This represents

a form of income loss and livelihood deterioration that is typically overlooked by planners and therefore uncompensated Souksavath& Nakayama (2013).

Social disarticulation. The dismantling of community structures and social organization, the dispersion of informal and formal networks, local associations, etc. is a massive loss of social capital. Such disarticulation undermines livelihoods in ways usually not recognized and not measured by planners, and is a cause of disempowerment and impoverishment. Because resettlers are non-homogeneous groups, the risks highlighted above differentially affect various categories of people: rural and urban, indigenous and non-indigenous groups Souksavath& Nakayama (2013).

A study by Haggblade et AL (2010 ) shows that women suffer the impacts of displacement more severely than men do he further adds that The Project will impact on a wide range of households, business operators, institutions and community members. These impacts, however, manifest at individual and group level. Some of the losses qualify for resettlement compensation and resettlement assistance include: Loss of residence People who will be displaced by having to move their place of residence to allow for the construction of the road, camps, access roads, or any other associated infrastructure.

Loss of business, People who will be displaced by having to move their places of business to allow for the construction of the road related infrastructure. These can be business shelters, places such as brick ovens, sand collection and selling points Mirumachi&Torriti (2012). Loss of land, People who will lose land over which they have established ownership or rights of usufruct (either in a permanent or temporary fashion) to allow for the construction of the road associated infrastructure Renkow (2012). Communal resources, Members of communities who will lose access to their communal resource base. These will include boreholes, water taps, communal play grounds, market places and other resources. Readon (2012). Places of worship, Worshipers who may be affected through having their place of worship having to be relocated. Socio-economy ,There will be an increased demand for land, water, food, supplies, labour, sexual activities, medical, entertainment, and educational facilities in the project impact following the coming in of different people seeking employment and to conduct different businesses Luzinda (2012).

Traffic and transport, there will be increased movement of construction plants and vehicles on site and access roads which will result in increased creation of dust through excavation, blasting and increased risks to road safety in the area; h Archaeology and cultural heritage .There are no known archaeological remains and structures of historical importance in the area. Places of cultural heritage include the three grave yards identified along the proposed road project Luzinda (2012).Loss of utilities; the project corridor has a number of utilities such as boreholes, water pipes and electricity poles which will be relocated. Replacement of the utilities will have to be done before the people are resettled.

### **2.5 Resettlement compensation and livelihood sustainability of project affected persons.**

In recently projects executed thus far, rehabilitation of the displaced and prevention of their impoverishment have been anchored on monetary factor disseminated through compensation packages usually in the form of payments made to the victims. According to Mathur (1995) and in a document by ADB (1998), stakeholders and victims have conveniently replaced the concept of resettlement with cash compensation paid for the acquired assets which include land and property on it.

To this end, the argument was that the assets which the projects acquire resulting into the displacement of persons have monetary value and thus making payments in form of cash or just in kind to the affected persons effectively eliminates the barrier towards acquisition of such assets. It is noted that the projects have resorted to offering cash in lump sum to the affected persons who impact is so little has it has failed to prevent acceleration of the people into impoverishment as would be expected (Mathur, 1995 and Duan & McDonald, 2004).

In some cases of resettlement, alternative land has been sourced. However, the productivity of such land has always been found to be low to ensure adequate production and buffer the victims from economic hardships (Mathur, 1995 and McDonald, 2006). Thus, resettlement programs have been found to be less adequate, especially from the perspective of compensation, with the affected livelihoods deteriorating rather than being restored. This has been revealed by studies on resettlement projects in Africa and Asia.

Jun (1997) conducted a review of three projects with massive resettlement activities in China. The study on the projects of Sanmenxia, Xin-Anjkang and Yurngijing found that the people who are actually displaced receive compensation which is insufficient leaving them to be worse than people who were not displaced and thus did not receive any resettlement compensation. In India, Murickan and Boband (2003) working on the Kerala project found dissatisfaction with the compensation received by the affected persons considering it to be insufficient in enhancing their living standards. In Africa, Mburugu (1994) and Tamakloe (1994) noted that there is increased prevalence of socio-economic impoverishment among the resettled persons in Kiambere and Akosombo dam projects which was attributed to the inadequate compensation offered.

From the above studies in China, India and Africa, it can be deduced that compensation is not effective in reducing alleviating impoverishment which may occur due to resettlement of populations. As such, stakeholders are of the opinion that only structured and careful planning through appropriate and customized programs for the affected populations can the impoverishment be alleviated. According to Cernea (1991) and WCD (2001) the most effective way of ensuring that the displaced persons are restored to their original livelihood is by considering resettlement as an independent project with its own objectives. Similarly, Fernandez (2000) argue that having the beneficiaries as the number one objective of the project can prevent the related risks of impoverishment making the displaced persons not to bear the negative impact of the project. Cernea (199) explains that in the application of this line of thinking, there is need for change from the traditional way resettlement with focus being on planning of the resettlement program as opposed to compensation as the main focus. This view was termed as resettlement with development by McDonald (2006).

In modern resettlement projects, resettlement with development focus has been increasingly propagated by scholars in the resettlement field especially in the formation of policies for national governments, humanitarian groups and international institutions (Cernea, 1995; Mahapatra, 1999 and Muggah, 2000). In line with this philosophy, the expectation is that during forced resettlement, the life of the affected persons should be transformed positively. The risks of impoverishment associated with resettlement can adequately be mitigated using the philosophy of resettlement development.

It has been shown that each risk of impoverishment is related to livelihood reconstruction in an inverse relationship such that increased impoverishment risk leads to decreased livelihood reconstruction (Cernea & McDowell, 2000). Thus it is possible to restore the livelihood of the affected population with improved income so that their living standards become better than the period before displacement (Cernea, 1997). Based on this statement, it is considered that development is initiated and made to occur rather than occurring spontaneously on its own. Despite the existing support and agreement with reference to application of the development concept of resettlement, there is little research on resettlement especially on the agreed criteria of development measurement.

For a resettlement program to be considered as development, it must be able to enhance human capabilities and increase the space for social benefits which will be able to address the social limitations as well as personal constraints of the affected persons. To date, the many years of empirical studies have given valuable lessons from previous experiences on livelihood restoration leading to development of new strategies, policies and risk mitigation plans in case of development initiated displacement of persons.

displacement and resettlement (DIDR). These changes have been put into consideration in most of the international financial institution policies and framework, especially where unintentional resettlement has taken place (WB, 2001, 2004). The main aim of these policies and frameworks are that unintentional resettlement should not be encouraged. However, where it is inescapable, suitable measures to alleviate or minimize unfavorable socio-economic effects on displaced people and host communities should be cautiously designed and executed and to ascertain that livelihoods and living standards of resettled people are maintained or improved (WB, 2001, 2004; ADB, 2003, IFC, 2006).

A primary aim in achieving these objectives in Resettlement Action Plan (RAP) as stated by Downing (2002) is to set out procedures and requirements for resettlement with minimum socio-economic interference of the displaced households. These plans have also spelt out clearly what the project has achieved hitherto and the next cause of action (Overnden, 2007).

With these frameworks put in place, the project will have the capacity to lessen the unfavorable social-economic impacts and to take care of losses and damages that may come up as a result of involuntary resettlement and give development advantages to the resettled households (Overnden, 2007). Most crucial, the incorporation of the sustainable development concept into socio-economic welfare reinstatement initiatives also known as rehabilitation was seen as deserving greater significance in resettlement and development discourses (Downing, 2002; Muricken, 2002; Muricken et al, 2003).

Joshi (1987) also elaborate that rehabilitation is settling community in a new location without compromising sustainable socio-economic development of the displaced people. The process of rehabilitation also puts into account the resettlement compensation to ensure that, income streams and other revenue indicators of the affected people are sustained (Mander, Hemadni & Wagaraji, 1999).

The main aim of rehabilitation is to guarantee displaced people favorable resettlement and not making them worse before displacement (Mahapatra, 1999). Mahapatra (1999) further argued that this process of rehabilitating the displaced people should ensure that the affected people continue with life as it was without any interruption to the humanity. The concept of restoration of the resettled people as a result of being displaced is therefore in line with the fundamental philosophy of sustainable socio-economic development. Cernea, (1998) also acknowledge the rehabilitation and restoration as a component of social capital in the society, where the host community and the displaced persons coexist in harmony and peaceful. Peaceful coexistence fosters economic development of an area and as such social capital promotes sustainable development (Pearce, 1999).

Many authors such as Gutman (1994) and Duan & McDonald (2004) also argued that any loss of social capital weakens the local potential to rebuild their lives and livelihood. This loss further disempowered the displaced people in terms of advocating for their lives (Gutman, 1994, Downing, 2002). A resettlement and rehabilitation framework would therefore need the local potential to examine these resources could assist in addressing the plight of the displaced and resettled people (Cernea, 1998; McDonald, 2006). From a

sustainable livelihood perspective, people rely on a number of capital assets and resources which they can draw upon to make their livelihoods (DFID, 1999, 2004; Carney, 2003).

The livelihood capitals consist of the building blocks that can be amalgamated or substituted for each other. Therefore, people can adopt one or more types of capitals to access to others (DFID, 1999; Carney, 2003). Reconstructing livelihood capitals and strengthening the local capacity to access these capitals should be very important for accomplishing sustainable livelihood outcomes.

## **2.6 Vulnerable persons and livelihood sustainability of project affected persons.**

The Sustainable Livelihoods framework portrays vulnerability as an external factor, which threatens the livelihood conditions of the household. In the terminology used in this study, it is the hazard which is an external factor, while vulnerability is a characteristic of the household in their context. Pain and Lautze (2002) who argue that the conventional livelihoods framework is inadequate for analyzing vulnerability because it treats it as an external factor, rather than linking people's livelihoods like assets levels to their vulnerability. Wisner (2004) conclude that most people who are vulnerable are so because they have livelihoods which lack resilience in the face of shocks. A vulnerable livelihood becomes the opposite of a sustainable livelihood. It lacks resilience to shocks because it may not provide enough to live on, may lead people into hazardous places, or be embedded in exploitative social relations Chambers (2002). Like this study also concludes, Wisner (2004) observe that health and resilience are closely related.

A livelihood comprises the capabilities, assets and activities required for a means of living (Chambers and Conway 1992). A livelihood is specific to a certain household, but is closely related to the context. Davis and Hossain (2007) asserts that the concept of 'vulnerable livelihoods' is an important supplement to the understanding of people's vulnerability because of its focus on the dynamic (not static) aspects of being vulnerable. The time dimension is important in vulnerability analysis. The consequences of a hazard may produce an impact on the household livelihood conditions immediately, gradually or after some time, Davis and Hossain (2007). New vulnerabilities may also be born out of the inadequate coping and recovery after a disaster. Adger (2007) stress that vulnerability to

hazards needs to be understood as a downward spiral of increasing vulnerability rather than one-off events. Repeated stress undermines the resources, which would normally be reserved for any unusual stress/disaster.

Adger (2007) discusses vulnerability as divided into individual and collective vulnerability. Individual vulnerability is determined by access to resources, the diversity of income sources and social status within the community. The collective vulnerability of a social grouping is determined by institutional and market structures, such as formal and informal social security and insurance, infrastructure and income. Bebbington (2009) recognizes that individual and collective vulnerability overlap and can be difficult to separate analytically. Institutional- and market structures, for example, also result in differences in vulnerability within the community. In chapter 7 the relation between individual and collective vulnerability is discussed from the perspective of access to resources, which is seen as crucial in understanding vulnerability. Bebbington (2009) discusses collective and individual aspects of access. The former is when the organization of access to resources is institutionalized for the community or a larger group of households, while the latter depends on factors specific to the individual household. The relation between individual and institutionalized access and capacity to recover will be explored Hewitt (2008). To understand vulnerability it is important to understand the socio-economic and political processes that influence the distribution of resources under normal conditions, not only in the context of the hazard. Vulnerability is in fact created under normal conditions, but becomes explicit during disaster (Hewitt, 2000).

## **2.7 Theoretical models of Resettlement**

The study was anchored on impoverishment Risk and reconstruction (IRR) model advanced by Cernea (1990). Cernea's Impoverishment Risks and Reconstruction (IRR) model arose in the 1990s. Unlike the Scudder–Colson model, the IRR model does not attempt to identify different stages of relocation, but rather aims to identify the impoverishment risks inherent to forced resettlement and the processes necessary for reconstructing the livelihoods of the displaced. Precisely, this model emphasizes that, unless specifically addressed by targeted policies, forced displacement can cause impoverishment among displaced by bringing about landlessness, joblessness,



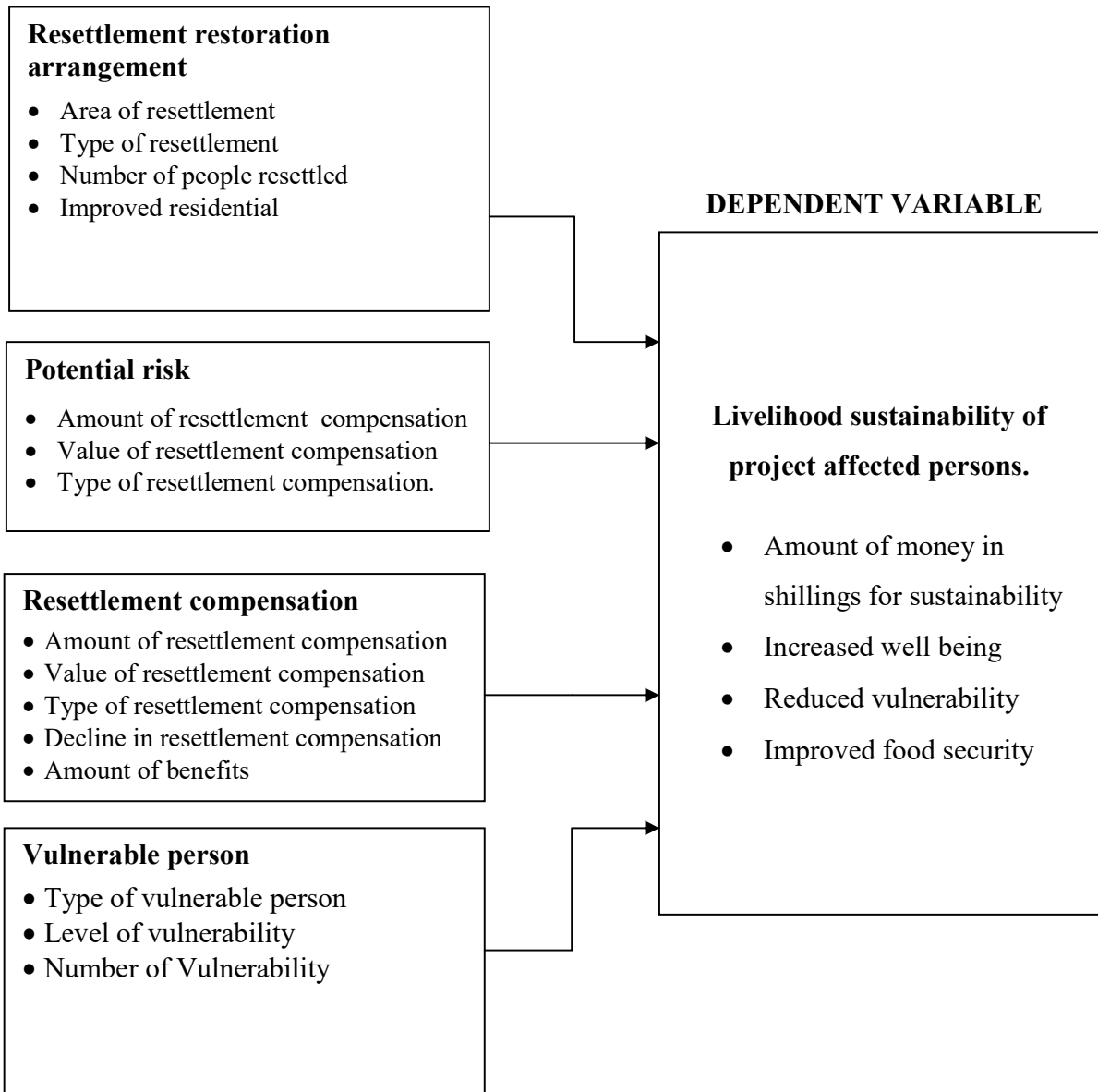
homelessness, marginalization, food insecurity, loss of access to common property resources, increased morbidity and mortality, and community disarticulation. The IRR model has been used as a framework for a number of studies including Mahapatra (1996,) who used the model to examine India's experience with involuntary resettlement from 1947-97, Thangaraj (1996) employed the model to analyze resettlement operations in two of Indian projects, the Upper Indravati Hydroelectric Project and the Orissa water resources consolidation project and Lassailly-Jacob (1996) looked specifically at land-based resettlement strategies in African dam projects. In Uganda, this model has been used by Henry Luzinda (2008) who looked at involuntary resettlement of the Benet people in Mt. Elgon National park.

## 2.8 Conceptual framework

This study was guided by the following conceptual framework, showing the relationship between resettlement and livelihood of project affected persons.

### INDEPENDENT VARIABLE

#### RESETTLEMENT



**Figure 2.1: Conceptual framework on resettlement and livelihood of project affected persons**

**Source: Researchers own concept**

The dependent variable for this study is livelihood of project affected person.

The indicators are amount of income, increased wellbeing, reduced vulnerability and improved food security. The Independent variables are potential risks, resettlement restoration arrangement, resettlement compensation, vulnerable persons and if enhanced will contribute the livelihood of project affected persons.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter described methodology that was used to conduct the study this includes: research design, target population, sample procedure and sample size, research instruments, pilot testing, validity and reliability of the instrument, data collection procedure, data analysis techniques, ethical consideration and operationalization of the variables.

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

The study used ex-post facto design research design. This design was suitable for this study because it helps in conducting social research when it was not possible or acceptable to manipulate characteristic of human participation, (Kerlinger & Ront, 1986). The design was chosen for this study since it attempted to explain a consequence based on antecedent conditions, determine the influence of a variable on another variable and test claim using statistical hypotheses techniques, and the independent variable would not be manipulated. In the context of social science the design investigation would seek to reveal possible relationship by observing an existing condition or state of affairs and serving back in the time for plausible and contributing factors. It is a method of testing out possible antecedent of events that have happened but cannot be manipulated by the investigator. By identifying possible cause retrospectively the study adopted an Expost facto approach to test hypotheses. It was thus examining, retrospectively, the influence of a naturally occurring event on a succeeding result with an aim of finding out a causal link between them, and tests another variable.

#### **3.3 Target population**

The target Population of the study was Nkoile 20, Kumpa 30, Ilidan, Sajiloni 60, and Basil 50 which gave a total population of 160 PAPS

#### **3.4. Sample Size and sampling procedure**

### 3.4.1 Sample size

The proposed study targets project affected persons along the Kenya -Tanzania which is 94.8 Km long and 60m wide wayleave corridor. The target population is 160PAPs but the proposed study was conducted on a sample size of 134 PAPs. The sample size was arrived by the use of Krecjie and Morgan table (1970).For purposes of planning resettlement, the RoW will be divided into four Lots as shown in the table below. The proposed study will utilize this allotment to identify a sample in every Lot.

**Table 3.1: Sample size**

| <b>Location</b> | <b>Sub location</b> | <b>Distance</b> | <b>Target population</b> | <b>Sample size</b> |
|-----------------|---------------------|-----------------|--------------------------|--------------------|
| Nkoile          | Nkoile,Kumpa        | 20              | 20                       | 19                 |
| Kumpa           | Olkiruti,Sajiloni   | 24              | 30                       | 28                 |
| Ilidan,Sajiloni | Nkiwan              | 50.8            | 60                       | 52                 |
| Bisil           | Olerai              | 40              | 50                       | 35                 |
| <b>Total</b>    |                     | <b>134.8</b>    | <b>160</b>               | <b>134</b>         |

The study applied both probability and non probability sampling procedures to obtain the number required for the study from the livelihood of Kenya Tanzania transmission line. The probability sampling used was stratified and simple random sampling technique. From each stratum, simple random sampling would be applied to arrive at 134 out of 160 PAPs.

### 3.4.2 Sampling procedure and sample size.

The sample size table was arrived at using Krejcie (1970) model and generated by Morgan (1990) statistical formulae and it consisted of 134 PAPs selected from 160 PAPs in Kajiado County, 134 is therefore a representative size for a population of 160.

### 3.5 Research Instrument

The data collection instruments was researcher developed questionnaire for the PAPs and PDPs Interview schedule for the administrators, and document analysis.

## **Questionnaire**

Quantitative data for the study was collected using questionnaire since the study focused on variables that cannot be directly observed such as views, opinions, perceptions and feelings of the respondents. According to Oso & Onen (2008) such information is best collected through questionnaires. The sample size is also quite large and therefore questionnaire is the ideal tool for collecting data. The target population is also largely literate and is unlikely to have difficulties in responding to questionnaire items.

## **Interview.**

Interviews are interpersonal, face-to-face conversation method of qualitative data collection, which involves the interviewer asking questions to the interviewee who in turn responds to them. In this study, semi-structured interview was used to collect information from one project affected person per community. Semi structured interviews was seen as a suitable method as it accentuates the understandings of events and processes from the perspective of the interviewee (Flowerdew & Martin, 2005). Standardized interview will adhere strictly to pre-planned questions for consistency across all respondents Borg (2001). This will be done to ensure the researcher concentrate on a common body of information response to resettlement action plan on livelihood sustainability. The qualitative data yielded from the interviewees will enable the study to balance between quality and quantity of data collected.

## **Semi-structured interviews**

The study used semi-structured interview to collect both quantitative and qualitative type of data. Longhurst (2003) explains that a semi structured interview is a simple and innocuous verbal exchange where the researcher illicit qualitative information from the respondents based on the open ended questions asked. Furthermore, Chamber (1997) and Gray (2004) reiterate that semi-structured interviews are non-standardized and are often adopted when soliciting for qualitative research.

Although this type of data collection instrument consists of list leading questions, the researcher may deviate from the main script when new but significant matters come up (Longhurst, 2003). Owing to its nature, semi-structured interviews were well placed to

draw more qualitative information from the respondents on complex issues, hence were used as a method of data collection in this research.

### **Documentary Analysis**

The study will also use secondary data, which will consist of government statistics, local and regional government reports, archives, university research and reports from various institutions (Overton & Drerman, 2003). In this study, secondary materials were used to complement literature review and also supplement quantitative and qualitative data collected using methods aforementioned. The documents used for the study were policy documents and guidelines, international financial institutions reports, autonomous monitoring groups and project developers.

#### **3.5.1 Pilot testing of the instrument**

A pilot study is an important part of questionnaire development, particularly with regard to the identification of fundamental design errors (Oso&Onen, 2009). An aspect that must be tested includes ambiguity of questions and instructions, accuracy of statements, boredom, loss of concentration, difficulty of questions and suitability of response options. It also helps in enhancing reliability of the instructions. A pilot study was undertaken, in a convenience sample of project affected persons in Kajiado County. The instruments were piloted by the researcher to 10 PAPs selected randomly in Kajiado County and they were not included in the sample size. This is in line with Connelly (2008) who suggests that a pilot study sample should be 10% of the sample project for the larger percent study. As a result of the pilot study a few minor changes with regard to the wording, and therefore ambiguity, of questions were made for the completed questionnaire.

#### **3.5.2 Validity of the Instrument**

Validity refers to the extent to which an instrument measures what it claims to measure. It is the degree to which results obtained from the analysis of the data actually represent the phenomena under study (Kothari, 2008). Content validity was ascertained by using expert opinion to check the content and format of an instrument judge whether or not it was appropriate. This was ensured through use of experts who are the supervisors of the student. The questionnaires were given to the two supervisors to evaluate and rate each item

in relation to the objectives as “not relevant” or “relevant” on a scale of 1-4 such that 1 was *not relevant*, 2 was *somewhat relevant*, 3 was *quite relevant* and 4 was *very relevant*. The supervisors assessed the relevance of the content used in the instrument. Their recommendations were then used to make the necessary corrections in the final questionnaire.

### 3.5.3 Reliability of Research Instruments.

Jack & Clarke (1998) defines reliability as the repeatability, and internal consistency of the quantitative research tools such as questionnaire. Cronbach’s alpha reliability test was adopted to examine the reliability of the questionnaires. An instrument was considered reliable if the score on the same test twice was similar. In this study, 10 questionnaires were piloted by issuing them randomly to 10 different project affected person. The questionnaires were then coded and responses put into SPSS version 20 which used to obtain the Cronchbar reliability coefficient.

**Table 3.2: Test reliability test for influence of resettlement on livelihood of project affected persons**

| <b>Reliability Statistics</b> |              |
|-------------------------------|--------------|
| Cronbach’s Alpha              | No. of items |
| 0.723                         | 104          |

Findings presented in Table 3.2 shows the Cronbach’s Alpha Coefficient of 0.723 for influence of influence of resettlement on livelihood sustainability of project affected persons projects was achieved. This is acceptable because it is above the Cronbach’s Alpha Coefficient of 0.7 and therefore qualifies for subsequent analysis.

### 3.6 Data Collection Procedure

Data collection procedure started in July 2016immediately the instruments were received. The researcher obtained research permission from the Kajiado county office and the list of the entire project affected person. The researcher also got permission from the respective household for the sample for the study. The questionnaires were then administered to the project affected persons. The researcher and research assistant then carried out the exercise



by distributing the questionnaires to all the project affected persons. The questionnaires were taken to the selected locations in Kajiado, County. The questionnaires were left with the PAPS who completed them and then by the research assistants. This was done in three phases. Phase one captured assessment of Project affected persons. Phase two involved resettlement characteristics and livelihood. Phase three involved interview with selected PAPS. After a week, the researcher and research assistants collected the questionnaires for analysis. Thereafter the researcher identified seven project affected persons that were interviewed each interview lasted for 15 minutes. The interview data were collected by note taking or tape recording.

### **3.7 Data analysis techniques**

Quantitative analysis begun by editing, coding, cleaning and transforming data. Data were analyzed using descriptive statistics of arithmetic means, standard deviations, frequencies and percentages. Inferential statistics was used to analyze data from the likert scale. Each hypothesis was analyzed using multiple linear correlation coefficient (R) and coefficient of determination ( $R^2$ ) to test the relationship of various characteristics of the four independent variables from the four research hypothesis namely,  $H_{A1}$ : There is significant relationship between resettlement restoration arrangement and livelihood of project affected person in Isinya Namanga., hypothesis  $H_{A2}$ : There is significant relationship between potential risks and livelihood of project affected persons in Isinya Namanga..  $H_{A3}$ : There is significant relationship between resettlement compensation and Livelihood sustainability of project affected persons in Isinya Namanga and  $H_{A4}$ : There is significant relationship between vulnerable persons and livelihood of project affected persons in Isinya Namanga. The hypotheses were tested at 95% confidence level, implying that 95 times out of 100 we can be sure that there is a significant correlation between two variables, and there is a 5% chance that the relationship does not exist. This error margin of 5% was used to test the null hypothesis. For the variables whose calculated p-value were less than  $\alpha=0.05$ , the null hypotheses was rejected.

### **3.8 Ethical Consideration**

The Belmont Report (1979) outlines three basic principles relevant to the ethics of research involving human subjects, namely respect of persons, beneficence, and justice. In conducting this research great care was taken to understand and be familiar with any and all of the regulations associated with field of the study. It was extremely important to protect the right of the participants. Cooper and Schindler (2003) argued that research must be designed so that a respondent does not suffer physical harm, discomfort, pain, embarrassment, or loss of privacy. Informed consent, confidentiality, anonymity and, the participant right to privacy were some of the measures used to ensure that the participant, respondent or subject would be treated with principal of respect of the person, beneficence and justice.

### 3.9 Operationalization of variables

This table discusses the operationalization of variables.

**Table 3.3: Operationalization of the variables**

| Research objectives   | Independent Variables    | Indicators  | Level of measurement | Research design | Tools of analysis                    | Dependent variable                                     | Indicators  |
|---|--------------------------|---|----------------------|-----------------|--------------------------------------|--|---|
| Examine how resettlement restoration arrangement influence livelihood sustainability of project affected persons. | Resettlement restoration | <ul style="list-style-type: none"> <li>• Area of resettlement</li> <li>• Type of resettlement</li> <li>• Type of natural resources</li> <li>• Number of people resettled</li> <li>• Improved residential facility.</li> </ul> | Likert scale         | Ex post facto   | Inferential & descriptive statistics | Sustainability of project affected persons             | <ul style="list-style-type: none"> <li>• More income</li> <li>• Increased well being</li> <li>• Reduced vulnerability</li> <li>• Improved food security</li> </ul>  |
| Establish how potential risks influence livelihood sustainability of project affected persons.                    | Potential risks          | <ul style="list-style-type: none"> <li>• Number of vulnerable families</li> <li>• Loss of residential structure</li> <li>• Loss of infrastructure</li> <li>• Size of agricultural land lost</li> </ul>                        | Likert scale         | Ex post facto   | Inferential & descriptive statistics | Livelihood sustainability of project affected persons. | <ul style="list-style-type: none"> <li>• More income</li> <li>• Increased well being</li> <li>• Reduced vulnerability</li> <li>• Improved food security.</li> </ul> |

|   |  |   |              |               |                                      |  |   |  |
|---|--|---|--------------|---------------|--------------------------------------|--|---|--|
| Examine how resettlement compensation influence livelihood sustainability of project affected persons | Resettlement compensation                | <ul style="list-style-type: none"> <li>• Amount of resettlement compensation</li> <li>• Value of resettlement compensation</li> <li>• Type of resettlement compensation</li> <li>• Decline in resettlement compensation</li> <li>• Amount of benefits.</li> </ul> | Likert scale |               | Ex post facto                        | Inferential & descriptive statistics                   | Livelihood sustainability of project affected persons | <ul style="list-style-type: none"> <li>• More income</li> <li>• Increased well being</li> <li>• Reduced vulnerability</li> <li>• Improved food security</li> </ul> |
| Establish how vulnerability influence livelihood sustainability of project affected persons.          | Vulnerability of project affected person | <ul style="list-style-type: none"> <li>• Number of vulnerable families</li> <li>• Loss of residential structure</li> <li>• Loss of infrastructure</li> <li>• Size of agricultural land lost</li> </ul>  | Likert scale | Ex post facto | Inferential & descriptive statistics | Livelihood sustainability of project affected persons. | Livelihood sustainability of project affected persons | <ul style="list-style-type: none"> <li>• Amount of Income</li> <li>• Increased well being</li> <li>• Improved food security</li> </ul>                             |

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

#### 4.1. Introduction

#### 4.2 Questionnaire response rate

A research population of 160 drawn from five locations in Kajiado East and Kajiado West was targeted. Questionnaires were administered to 134 PAP out of which 104 responded back by dully filling up their questionnaires, thereby giving a response rate of 75.4% which was regarded as the responsive instrument for subsequent analysis as per the views of Cooper and Schiendler(2005)who observe that 75% of above response rate is reasonable enough for statistical generalization

#### 4.3 Demographics Profile of the Project affected persons (PAP)

The demographic characteristics of the Project affected persons that were considered by the researcher in this study were; administrative region, gender, age group, and level of education. The responses of the Project affected persons are shown in table 4.1

**Table 4.1: Demographic characteristics of the Project affected persons (N=104)**

| Characteristics             | N  | %     |
|-----------------------------|----|-------|
| <b>Location(Sub County)</b> |    |       |
| Nkoile                      | 18 | 17.30 |
| Kumpa                       | 33 | 31.70 |
| Bisil                       | 19 | 18.30 |
| Ilidan/Sajiloni             | 34 | 32.70 |
| <b>Gender</b>               |    |       |
| Male                        | 58 | 55.80 |
| Female                      | 46 | 44.20 |
| <b>Age(years)</b>           |    |       |
| 30-35                       | 23 | 22.10 |
| 35-40                       | 31 | 29.80 |
| 40-45                       | 21 | 20.20 |
| 45-50                       | 18 | 17.30 |
| 50 and above                | 21 | 10.60 |
| <b>Education Level</b>      |    |       |
| None                        | 17 | 16.30 |
| Secondary                   | 34 | 32.70 |
| College                     | 31 | 29.80 |
| University                  | 22 | 21.20 |

The research findings indicate that 18(17.30%) of the Project affected persons were from Nkoile Location; 33(31.70 %) come from Kumpa Location; 19(18.30%) from Bisil Location; 16(15.40%) from Ilidan and 18(17.30%) from Sajiloni Location; the results reveals that Kumpa location had the largest number (33) of the project affected persons while Bisil had the lowest (16).Gender distribution among the Project affected persons indicated that 58(55.80%) were male while 46(44.20%) were female. The distribution of project affected persons was dominated by male; this discrepancy is spurred mainly by resettlement conditions. Most (79(77.90%)) of the Project affected persons were above 35 years old, with (21(22.10%)) were aged below between 35 years, implying that sample composition was characterized by adults who were able to respond to issues raised in the questionnaires .The research findings indicate that 17(16.30% ) Project affected persons had no education background ,34(32.70%) had secondary level of education; 31(29.80%) had college level of education and 22 (21.20%) had University level of education.

#### **4.4 Analysis of livelihood of Project affected persons**

##### **4.4.1 Resettlement restoration and livelihood of project affected persons**

Descriptive statistics were used to summarize patterns in the sample's responses. These statistics were used to describe the distribution

This was the first objective that the study sought to achieve. The respondents were requested to the statements in the Likert Scale of 1-5 where 5=strongly agree, 4=Agree, 3=Neutral, 2=Disagree1= strongly disagree. These are presented in table 4.2

| <b>STATEMENTS</b>   | <b>SA</b> | <b>A</b>  | <b>N</b>  | <b>D</b>  | <b>SD</b> | <b>Mean</b> | <b>Std. dev</b> |
|---|-----------|-----------|-----------|-----------|-----------|-------------|-----------------|
| Resettlement restoration have assisted the construction of livelihood                                       | 35(33.7%) | 52 (50%)  | 8(7.7%)   | 5(4.8%)   | 4(3.8%)   | 4.05        | .979            |
| Resettlement restoration have helped people access more education, income and health care                   | 21(20.2%) | 47(45.2%) | 26(25%)   | 5(4.8%)   | 5(4.8%)   | 3.71        | 1.002           |
| Resettlement restoration have changed the local capabilities& access to livelihoods                         | 33(31.7%) | 49(47.1%) | 12(11.5%) | 6(5.8%)   | 4(3.8%)   | 3.97        | 1.009           |
| Resettled people are happy with their new houses and gardens  | 28(26.9%) | 43(41.3%) | 19(18.3%) | 9(8.7%)   | 5(4.8%)   | 3.77        | 1.090           |
| Wellbeing of the project affected communities has improved due to resettlement and livelihood restoration   | 32(30.8%) | 49(47.1%) | 16(15.4%) | 5(4.8%)   | 2(1.9%)   | 4.00        | .914            |
| Resettlement program me has enabled us learn restoration livelihood   | 31(29.8%) | 47(45.2%) | 15(14.4%) | 5(4.8%)   | 6(5.8%)   | 3.88        | 1.073           |
| Resettled people are aware of their rights that impact on their livelihood                                  | 24(23.1%) | 42(40.4%) | 20(19.2%) | 10(9.6%)  | 8(7.7%)   | 3.62        | 1.168           |
| Resettled people have adequate shelter. water supply and good sanitation                                    | 18(17.3%) | 51(49%)   | 19(18.3%) | 13(12.5%) | 3(2.9%)   | 3.65        | 1.003           |
| Restoration program me has assisted the reconstruction of livelihood for those involuntary resettled people | 24(23.1%) | 58(55.8%) | 14(13.5%) | 5(4.8%)   | 3(2.9%)   | 3.91        | 0.904           |
| Natural resources are available after resettlement  | 15(14.4%) | 30(28.8%) | 35(33.7%) | 20(19.2%) | 4(3.8%)   | 3.31        | 1.062           |

Ten items were developed to measure the extent of Influence of resettlement restoration on livelihood of project affected persons. Item 1 sought to find out how resettlement restoration have assisted in the construction of livelihood of project affected persons, the mean score was highest (4.05) and the standard deviation was relatively as low as 0.979 in comparison with the other items. This result indicate that majority (52; 50%) of project affected persons strongly agreed that resettlement restoration have assisted in the construction of their livelihood; This Item was followed closely by item 5(mean=4.00; standard deviation of 0.914) which sought to find whether the wellbeing of the project affected communities had improved due to resettlement and restoration. The findings revealed that a majority (49; 47.1%) project affected persons

strongly agreed that wellbeing of the project affected communities had improved due to resettlement and livelihood restoration. Item 10 sought to find out whether natural resources are available after resettlement of project affected persons; this item (item number 10) had the lowest mean (3.31) in comparison with the other items and similarly a higher variability (standard deviation=1.062) implying that project affected persons were not very homogeneous in their response concerning the availability of natural resources after they had been resettled; These results are in agreement with the views of Bang and Few(2012) who observed that all risks and their causalities need to be acknowledged.

H0 There is no significant relationship between resettlement restoration and livelihood sustainability of project affected persons

**Table 4.2: Model Summary of resettlement restoration on livelihood of the project affected persons.**

| <i>Model</i> | <i>R</i>          | <i>R Square</i> | <i>Adjusted R Square</i> | <i>Std. Error of the Estimate</i> |
|--------------|-------------------|-----------------|--------------------------|-----------------------------------|
| 1            | .567 <sup>a</sup> | .322            | .249                     | 1,216                             |

a. Predictors: resettlement restoration items  
b. Dependent variable: livelihood

*ANOVA<sup>b</sup>* of resettlement restoration on livelihood of the project affected persons

| <b>ANOVA<sup>a</sup></b> |            |                |     |             |       |                   |
|--------------------------|------------|----------------|-----|-------------|-------|-------------------|
| Model                    |            | Sum of Squares | Df  | Mean Square | F     | Sig.              |
| 1                        | Regression | 65.263         | 10  | 6.526       | 4.414 | .000 <sup>b</sup> |
|                          | Residual   | 137.496        | 93  | 1.478       |       |                   |
|                          | Total      | 202.760        | 103 |             |       |                   |

a. Dependent Variable: AMOUNT IN SHILLINGS FOR LIVELIHOOD SUSTAINABILITY  
b. Predictors: (Constant), Resettlement restoration items

The multiple linear correlation coefficient = 0.567 indicates that there is moderate positive correlation between the observed livelihood and those predicted by the resettlement restoration characteristics. In terms of variability in observed livelihood accounted, this amounts to a proportion of  $R^2=0.322$  implying that 32.2% of the total variation in livelihood is explained by



the variation in the resettlement restoration characteristics (items). Use of this adjusted measure leads to a revised estimate that 24.9 % of the variability in livelihood can be explained by the variation in the resettlement restoration characteristics (items). In the above result; in which the hypothesis is that there is no significant relationship between resettlement restoration and livelihood of the project affected persons, the *F* statistic has a value of 4.414 with the associated significance level of .000 (Technically, the *p*-value is less than 0.05). The significance level shows that the hypothesis of no relationship between resettlement restoration and livelihood sustainability of the project affected persons is rejected under the  $\alpha=0.5$  significance level. Accordingly, it can be concluded that there is significant relationship between resettlement restoration and livelihood sustainability of the project affected persons.

#### 4.4.2 Potential risk and livelihood of project affected persons

| STATEMENT  | SA        | A          | N         | D         | SD        | Mean | Std. Dev. |
|--|-----------|------------|-----------|-----------|-----------|------|-----------|
| Relocated people run the risk of suffering social acceptability in their new areas. they may be rejected by the host   | 29(27.9%) | 27(26.00%) | 19(18.3%) | 25(24.0%) | 4(3.8%)   | 3.50 | 1.239     |
| Loss of assets such as houses, farm land ,small livestock ,poultry, rearing is felt                                    | 26(25.0%) | 42(40.4%)  | 15(14.4%) | 14(13.5%) | 7(6.7%)   | 3.63 | 1.191     |
| Loss of harvest due to theft, inadequate means to transport produce &lack of proper storage facilities in the new area | 23(22.1%) | 37(35.6%)  | 17(16.3%) | 19(18.3%) | 8(7.7%)   | 3.46 | 1.238     |
| Risk of project affected persons contracting diseases from host population   | 8(7.7%)   | 18(17.3%)  | 35(33.7%) | 24(23.1%) | 19(18.3%) | 2.73 | 1.176     |
| Risk of project affected persons infecting residents in host communities   | 7(6.7%)   | 21(20.2%)  | 42(40.4%) | 21(20.2%) | 13(12.5%) | 2.88 | 1.082     |
| Increase in school drop-out rate by going children   | 6(5.8%)   | 32(30.8%)  | 21(20.2%) | 29(27.9%) | 16(15.4%) | 2.84 | 1.191     |
| Social frictions over agro-field, grazing rounds, water resources  | 33(31.7%) | 28(26.9%)  | 21(20.2%) | 13(12.5%) | 9(8.7%)   | 3.61 | 1.288     |

Seven items were developed to measure the extent of influence of potential risk on livelihood of project affected persons. Item 2 sought to find out how loss of assets such as houses, farm land, small livestock, poultry, rearing is felt by project affected persons, the mean score was highest (3.63) as compared with the rest of statements and the standard deviation was relatively as low as 1.191. This result indicates that the majority (42; (40.4%)) of project affected persons agreed that loss of assets such as houses, farm land, small livestock, poultry, rearing made them exposed to livelihood risks. This item was followed closely by item 1 (mean=3.50; standard deviation of 1.239) which sought to find out whether relocated people run the risk of suffering social acceptability in their new areas due to rejection by the host. The results revealed that a majority (29; (27.9%)) of project affected persons strongly agreed that they run the risk of suffering social acceptability in their new areas due to rejection by the host. Item 4 sought to find out whether project affected persons risk contracting diseases from host; it had the lowest mean (2.73) in comparison with the other items and similarly a higher variability (standard deviation=1.176) implying that project affected persons were heterogeneous in their response concerning the risk of contracting diseases from host. These results are in agreement with Poe (2014) who observed that people face impoverishment when their productive assets or income sources are lost and social networks are weakened.

H<sub>0</sub>:2 There is no significant relationship Potential risk and livelihood of the project affected persons

A multiple linear regression analysis was done on all the characteristics (statements) of Potential risks on an indicator of livelihood sustainability (amount of money in shillings given for resettlement to PAP). The output is as shown on table 4.3

**Table 4.3: Model Summary of Potential risks on livelihood of the project affected persons.**

| <i>Model</i> | <i>R</i>          | <i>R Square</i> | <i>Adjusted R Square</i> | <i>Std. Error of the Estimate</i> |
|--------------|-------------------|-----------------|--------------------------|-----------------------------------|
| 1            | .546 <sup>a</sup> | .298            | .247                     | 1,217                             |

a. Predictors: resettlement restoration items  
b. Dependent variable: livelihood of project affected persons

| Model | ANOVA <sup>a</sup> |         |             |       |       |                   |
|-------|--------------------|---------|-------------|-------|-------|-------------------|
|       | Sum of Squares     | Df      | Mean Square | F     | Sig.  |                   |
| 1     | Regression         | 60.501  | 7           | 8.643 | 5.833 | .000 <sup>b</sup> |
|       | Residual           | 142.258 | 96          | 1.482 |       |                   |
|       | Total              | 202.760 | 103         |       |       |                   |

a. Dependent Variable: AMOUNT IN SHILLINGS FOR LIVELIHOOD SUSTAINABILITY

b. Predictors: (Constant), Potential risk items

The multiple linear correlation coefficient=0.546 indicates that there is moderate positive correlation between the observed livelihood and those predicted by the potential risk characteristics. In terms of variability in observed livelihood of project Affected persons accounted for, this amounts to a proportion of  $R^2=0.247$  implying that 24.7% of the total variation in livelihood sustainability is explained by the variation in the potential risk characteristics (items). Use of this adjusted measure leads to a revised estimate that 24.9 % of the variability in livelihood can be explained by the variation in the resettlement restoration variables (items). In the above result; in which the hypothesis is that there is no significant relationship between potential risk and livelihood sustainability of the project affected persons , the *F* statistic has a value of 5.833 with the associated significance level of .000 (Technically, the *p*-value is less than 0.05). The significance level revealed that hypothesis of no relationship between potential risk and livelihood sustainability of the project affected persons is rejected under the  $\alpha= .05$  significance level. Accordingly, it can be concluded that the there is significant relationship between potential risk and livelihood sustainability of the project affected persons.

#### 4.4.3 Resettlement compensation and livelihood of project affected person

| STATEMENT  | SA        | A         | N         | D        | SD      | Mean | Std. Dev. |
|--|-----------|-----------|-----------|----------|---------|------|-----------|
| Resettlement compensation is subject to approval of all the land valuation board determined by agreement   | 45(43.3%) | 41(39.4%) | 10(9.6%)  | 5(4.8%)  | 3(2.9%) | 4.15 | 0.983     |
| Physically displaced persons are offered a choice of replacement properties of equal or higher value       | 36(34.6%) | 44(42.3%) | 10(9.6%)  | 10(9.6%) | 4(3.8%) | 3.94 | 1.087     |
| Resettlement compensation in kind is preferred option  | 33(31.7%) | 38(34.6%) | 21(20.2%) | 9(8.7%)  | 5(4.8%) | 3.80 | 1.127     |
| Resettlement assistance in terms of money allowance will form part of resettlement compensation            | 43(41.3%) | 39(37.5%) | 12(11.5%) | 9(8.7%)  | 1(1.0%) | 4.10 | 0.981     |
| Crops/trees on fields cultivated by those affected will be compensated by giving cash                      | 46(44.2%) | 42(40.4%) | 12(11.5%) | 4(3.8%)  | 0(0.0%) | 4.25 | 0.810     |
| Resettlement compensation of lost forest ,l and including lost timber at full replacement value is delayed | 31(29.8%) | 45(43.3%) | 19(18.3%) | 4(3.8%)  | 5(4.8%) | 3.89 | 1.033     |

Six items were developed to measure the extent of influence of resettlement compensation on livelihood of project affected persons. Item 5 sought to find out how project affected persons are compensated through cash whenever crops/trees on fields cultivated by them are destroyed , the mean score was the highest (4.25) and the standard deviation was relatively as low as 0.810 in comparison with the other items. This result indicates that the majority (46; (44.2%) of project affected persons strongly agreed that they receive cash resettlement compensation whenever the crops/trees they cultivate on their fields are destroyed. This Item was followed closely by item 1 which had a mean (mean=4.15; standard deviation of 0.983) and it sought to find whether resettlement compensation is subject to approval of all the land valuation board determined by agreement. The findings indicated that a majority (45;( 43.3%) project affected persons strongly agreed that resettlement compensation is subject to approval of all the land valuation board determined by agreement. Item 3 sought to find out whether resettlement compensation in kind is preferred option to project affected persons ; it had the lowest mean of (3.80) in comparison with the other items and similarly a higher variability (standard deviation=1.127)

implying that project affected persons were relatively varied in their response concerning resettlement compensation in kind as a preferred option ; These results are of the same voice like McDonald (2004)who observed that displaced people were dissatisfied with the amount of resettlement compensation received .

H<sub>0</sub>:3: There is no significant relationship between Resettlement compensation and livelihood sustainability of the project affected persons

A multiple linear regression analysis was done on all the characteristics (statements) of resettlement compensation on an indicator of livelihood (amount of money in shillings given for resettlement to PAP). The output Tables obtained were;

**Table 4.4: Model Summary of resettlement compensation and livelihood of the project affected persons.**

| <i>Model</i>   | <i>R</i>          | <i>R Square</i> | <i>Adjusted R Square</i> | <i>Std. Error of the Estimate</i> |
|--|-------------------|-----------------|--------------------------|-----------------------------------|
| 1  | .435 <sup>a</sup> | .190            | .139                     | 1,302                             |
| <i>a. Predictors: resettlement compensation items</i>                |                   |                 |                          |                                   |
| <i>b. Dependent variable: livelihood of project affected persons</i> |                   |                 |                          |                                   |

| ANOVA <sup>a</sup> |            |                |     |             |       |                   |
|--------------------|------------|----------------|-----|-------------|-------|-------------------|
| Model              |            | Sum of Squares | Df  | Mean Square | F     | Sig.              |
| 1                  | Regression | 38.446         | 6   | 6.408       | 3.783 | .002 <sup>b</sup> |
|                    | Residual   | 164.313        | 97  | 1.694       |       |                   |
|                    | Total      | 202.760        | 103 |             |       |                   |

a. Dependent Variable: amount in shillings for livelihood of project affected persons.

b. Predictors: (Constant), Resettlement compensation items

The multiple linear correlation coefficient=0.435 indicates that there is moderate positive correlation between the observed livelihood and those predicted by the resettlement compensation characteristics. In terms of variability in observed livelihood accounted for, this amounts to a proportion of  $R^2=0.190$  implying that 19.0% of the total variation in livelihood is explained by the variation in the resettlement compensation characteristics (items). Use of this adjusted measure leads to a revised estimate that 13.9 % of the variability in livelihood can be

explained by the variation in the resettlement compensation variables (items). In the above result; in which the hypothesis is that there is no significant relationship between resettlement compensation and livelihood of the project affected persons, the  $F$  statistic has a value of 3.783 with the associated significance level of  $\alpha = .002$  (Technically, the  $p$ -value is less than 0.05). The significance level tells us that the hypothesis of no relationship between resettlement compensation and livelihood of the project affected persons is rejected under the .05 significance level. The study therefore concludes that there is significant relationship between resettlement compensation and socio-economic welfare (livelihood) of the project affected persons.

H<sub>0</sub>:4: There is no significant relationship between vulnerability and livelihood of the project affected persons

A multiple linear regression analysis was done on all the characteristics (statements) of vulnerability on an indicator of livelihood sustainability (amount of money in shillings given for resettlement to PAP). The output Tables obtained were;

#### 4.4.4 Vulnerability and livelihood of project affected persons

| STATEMENT   | SA        | A         | N         | D         | SD      | Mean | Std.Dev. |
|---|-----------|-----------|-----------|-----------|---------|------|----------|
| Project affected persons were able to cope with the problems  | 26(25.0%) | 47(45.2%) | 25(24%)   | 6(5.8%)   | 0(0.0%) | 3.89 | 0.847    |
| Livelihood and the production systems in the different geographical context influenced capacity to cope | 25(24.0%) | 50(48.1%) | 22(21.2%) | 5(4.8%)   | 2(1.9%) | 3.88 | 0.900    |
| Institutions were able to support the recovery for different groups                                     | 18(17.3%) | 50(48.1%) | 26(25.0%) | 9(8.7%)   | 1(1.0%) | 3.72 | 0.886    |
| Children under five were able to get malnourished   | 25(24.0%) | 33(31.7%) | 35(33.7%) | 10(9.6%)  | 1(1.0%) | 3.68 | 0.978    |
| Our population began to suffer chronic energy deficiency  | 25(24.0%) | 36(34.6%) | 33(31.7%) | 7(6.7%)   | 3(2.9%) | 3.70 | 1.004    |
| We were left with small ratio of agricultural land to cultivate   | 25(24.0%) | 37(35.6%) | 22(21.2%) | 15(14.4%) | 5(4.8%) | 3.60 | 1.145    |
| Environmental sustainability  | 18(17.3%) | 39(37.5%) | 29(27.9%) | 11(10.6%) | 7(6.7%) | 3.55 | 1.034    |

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got interfered with

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Seven items were developed to measure the extent of vulnerability of project affected persons. Item 1 sought to find out how Project affected persons were able to cope with the problems , the mean score was the highest (3.89) and the standard deviation was relatively as low as 0.847 in comparison with the other items. This result indicate that the majority (47; (45.2%) of project affected persons agreed that they were able to cope well with the problems they face; This Item was followed closely by item 2(mean of=3.88; standard deviation of 0.900) which sought to find whether the livelihood and the production systems in the different geographical context had influence on the wellbeing of the project affected persons. The findings revealed that a majority (50; (48.1%) project affected persons agreed that livelihood and the production systems in the different geographical context influenced their capacity to cope. Item 7 sought to find out whether environmental sustainability got interfered with by project affected persons; it had the lowest mean of (3.55) in comparison with the other items and similarly a higher variability (standard deviation=1.034) implying that project affected persons were not very homogeneous in their response concerning interference of the environmental. These results are similar to the observations made by Cerna (2001) who asserted that the socio-economic welfare of the people could be reinstated and then made better to allow their revenue exceed pre-displaced levels.

**Table 4.5: Model Summary of vulnerability on livelihood of the project affected persons.**

| <i>Model</i> | <i>R</i>          | <i>R Square</i> | <i>Adjusted R Square</i> | <i>Std. Error of the Estimate</i> |
|--------------|-------------------|-----------------|--------------------------|-----------------------------------|
| 1            | .563 <sup>a</sup> | .317            | .266                     | 1,197                             |

*a. Predictors: resettlement compensation items*  
*b. Dependent variable: livelihood sustainability*

| Model        | ANOVA <sup>a</sup> |     |             |       |                   |
|--------------|--------------------|-----|-------------|-------|-------------------|
|              | Sum of Squares     | df  | Mean Square | F     | Sig.              |
| 1 Regression | 61.827             | 7   | 8.832       | 6.168 | .000 <sup>b</sup> |
| 1 Residual   | 133.163            | 93  | 1.432       |       |                   |
| Total        | 194.990            | 100 |             |       |                   |

a. Dependent Variable: Amount In Shillings For Livelihood Sustainability

b. Predictors: (Constant), Vulnerability items

The multiple linear correlation coefficient= 0.563 indicates that there is moderate positive correlation between the observed livelihood and those predicted by the vulnerability characteristics. In terms of variability in observed livelihood accounted for, this amounts to a proportion of  $R^2=0.317$  implying that 31.7% of the total variation in livelihood is explained by the variation in the vulnerability characteristics (items). Use of this adjusted measure leads to a revised estimate that 26.6 % of the variability in livelihood can be explained by the variation in the resettlement restoration variables (items). In the above result; in which the hypothesis is that there is no significant relationship between vulnerability and livelihood sustainability of the project affected persons , the  $F$  statistic has a value of 6.168 with the associated significance level of .000 (Technically, the  $p$ -value is less than 0.05). The significance level tells us that the hypothesis of no relationship between vulnerability and livelihood sustainability of the project affected persons is rejected under the  $\alpha=.05$  significance level. Accordingly, it can be concluded that the there is significant relationship between vulnerability and livelihood sustainability of the project affected person



## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents summary of findings, conclusions and recommendations. The summary of the findings for each objectives is presented. The conclusions presented in this section were guided by the research objectives and informed by the findings, analysis, interpretation and discussion in the study. Based on the conclusions made, the contribution of the study to knowledge was examined. Recommendations were based on the results for policy and practice as well as suggestions for further research was made.

#### 5.2 Summary of findings

In the testing of the hypothesis in the study, multiple linear regression analysis was employed. In total, four hypotheses were formulated and subsequently tested in the study in order to establish their influence on livelihood thereof,

##### 5.2.1 Resettlement restoration and sustainability.

Statement 1(how resettlement restoration have assisted the construction of livelihood project affected persons) had the highest, mean score (4.05) and a relatively low standard deviation(0.979) in comparison with the other items. This result indicated that the majority (52; 50%) of project affected persons strongly agreed that resettlement restoration have assisted the construction of livelihood project affected persons;. Statement 10 ( whether natural resources are available after resettlement of project affected persons) ; had the lowest mean (3.31) in comparison with the other items and similarly a higher variability (standard deviation=1.062) implying that project affected persons were not very homogeneous in their response concerning the availability of natural resources after they have been resettled; In hypothesis 1, ( $H_0$ : There is no significant relationship between resettlement restoration and livelihood of the project affected persons) , The significance level from results obtained revealed that the hypothesis of no relationship between resettlement restoration and livelihood sustainability of the project affected persons is rejected under the  $\alpha=0.05$  significance level leading to a conclusion that the there is significant relationship between resettlement restoration and livelihood sustainability of the project affected persons (P-value=0.00<P=0.05),

### **5.2.2 Potential risk and livelihood of project affected persons**

Statement 2 (how loss of assets such as houses, farm land, small livestock, poultry, rearing is felt by project affected person), had the highest mean score (3.63) as compared with the rest of statements and the standard deviation was relatively as low as 1.191. This result indicate that the majority (42; 40.4%)of project affected persons agreed that loss of assets such as houses, farm land, small livestock ,poultry, rearing made them vulnerable. Statement 4 ( whether project affected persons risk contracting diseases from host); had the lowest mean (2.73) in comparison with the other items and similarly a higher variability (standard deviation=1.176) implying that project affected persons were not very close to one another in their response concerning the risk of contracting diseases from host; In hypothesis 2, ( $H_0$ : There is no significant relationship between potential risk and livelihood of the project affected persons) , The significance level from results obtained revealed that the hypothesis of no relationship between potential risk and livelihood of the project affected persons is rejected under the  $\alpha= 0.05$  significance level leading to a conclusion that the there is significant relationship between potential risk and livelihood of the project affected persons ( $P\text{-value}=0.00 < P=0.05$ ),

### **5.2.3 Resettlement compensation and livelihood of project affected persons**

Statement 5 (how project affected persons are compensated through cash whenever crops/trees on fields cultivated by them are destroyed), had the highest mean score of (4.25) and the standard deviation was relatively as low as 0.810 in comparison with the other items. This result indicates that the majority (46; 44.2%) of project affected persons strongly agreed that they receive cash resettlement compensation whenever the crops/trees they cultivate on their fields are destroyed. statement 3 sought to find out (whether resettlement compensation in kind is preferred option to project affected persons) ; had the lowest mean (3.80) in comparison with the other items and similarly a higher variability (standard deviation=1.127) implying that project affected persons were relatively varied in their response concerning resettlement compensation in kind is a preferred option ;In hypothesis 3, ( $H_0$ : There is no significant relationship between resettlement compensation and livelihood of the project affected persons) , The significance level from results obtained revealed that the hypothesis of no relationship between resettlement compensation and livelihood of the project affected persons is rejected under the  $\alpha=0.05$  significance level leading to a conclusion that the there is significant relationship between resettlement compensation and livelihood of the project affected persons ( $p = 0.02 < p=0.05$ ),

#### **5.2.4 Vulnerability and livelihood sustainability of project affected persons**

Statement 1 (how Project affected persons were able to cope with the problems), had the highest mean score (3.89) and the standard deviation was relatively as low as 0.847 in comparison with the other items. This result indicate that the majority (47; 45.2%) of project affected persons agreed that they were able to cope well with the problems they face; Statement 7 sought ( whether environmental sustainability got interfered with by project affected persons); had the lowest mean (3.55) in comparison with the other items and similarly a higher variability (standard deviation=1.034) implying that project affected persons were not very homogeneous in their response concerning interference of the environmental sustainability. In hypothesis 4, ( $H_0$ : There is no significant relationship between vulnerability and livelihood of the project affected persons) , The significance level from results obtained revealed that the hypothesis of no relationship between vulnerability and livelihood of the project affected persons is rejected under the  $\alpha= 0.05$  significance level leading to a conclusion that the there is significant relationship between vulnerability and livelihood of the project affected persons (P-value=0.00<P=0.05),

#### **5.3 Conclusions**

This section presents the conclusions for the study. Four research objectives were formulated to examine how they influences livelihood of project affected persons. Various statements (items) were developed to measure the extent of influence of the independent variables on livelihood sustainability .The indicators for livelihood was amount of money in Kenya shillings given for livelihood. The multiple linear correlation output table through linear regression on the various statements of the independent variables showed that all the independent variables characteristics were statistically significant ( $P<0.05$ ) against the indicator of livelihood , similarly there was relatively high degree of positive multiple correlation ( $R=0.567$ ) exhibited between the resettlement restoration items as compared with the rest of independent variables whereas resettlement compensation had the least positive multiple correlation( $R=0.435$ ) implying that the more the project affected persons are resettled and restored, leveraged from potential risks, compensated and non vulnerable the more their livelihood improved better. The small p-values ( $p<0.05$ ) implies that there is a significant relationship among the variables leading to rejection of the null hypothesis and hence the research findings concluded that there is a significant relationship between all the independent variables and livelihood of project affected persons.

## 5.4 Contribution to the body of knowledge

| No | Objectives   | Contribution to knowledge  |
|----|--|--|
| 1  | To examine how resettlement restoration influences livelihood of project affected persons in Kajiado county.   | Well being of the project affected communities has improved due to resettlement and livelihood.        |
| 2  | To establish how potential risk influences livelihood of project affected persons in Kajiado county.           | Risk of project affected persons contracting diseases from hosts.                                      |
| 3  | To determine how resettlement compensation influences livelihood of project affected persons in Kajiado county | Crops/trees on field cultivated by those affected will be compensated by giving cash.                  |
| 4  | To establish how vulnerability influences livelihood of project affected persons in Kajiado county.            | Livelihood & the production systems in the different geographical context influenced capacity to cope. |

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## 5.5 Recommendations

This section presents recommendations made in the study based on the research findings, analysis, interpretation and discussion.

### 5.5.1 Recommendations for Policy issues.

1. Government to set out strategies for the Implementation of PAP, including the process through which to accure the necessary land and easements for the Implementation.
2. Consultation to be done with community members and other stakeholders including Project Affected Persons, and make them away of the project sub-content.

3. Community members with the help of government to help determine the extent of involuntary resettlement impact associated with relevant project activities and put in place measures to mitigate those impacts.

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

1.A study to be done on compensation values awarded and livelihoods of PAPS.

2.A study to be done on access to Education and PAP household

3.A study to be done on vulnerable social groups and acceptable resettlement of PAPS.

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## **APPENDICES**

### **APPENDIX 1: LETTER OF TRANSMITTAL**

YVONNE ODHIAMBO

P.O.BOX 1738, KISUMU

E-mail:[yvonneodhambo@yahoo.com](mailto:yvonneodhambo@yahoo.com)

0720332665

Dear Sir/Madam,

**RE:INFLUENCE OF RESTLEMENT ON LIVELIHOOD OF PROJET  
AFFECTED PERSON IN ISINYA NAMANGA KAJIADO COUNTY KENYA.**

I am a student of the UoN. I am carrying out a research on “Influence of Resettlement on livelihood of project affected person in Isinya Namanga Kajiado county Kenya.

The questionnaire is designed to gather information from project affected persons in the County. Kindly complete the questionnaires to the best of your ability and please return the completed questionnaires to the researcher as soon as you can. The information given will be strictly confidential.

Yours Faithfully,

Yvonne Odhiambo

UoN.

**APPENDIX 2**

**QUESTIONNAIRE FOR PROJECT AFFECTED PERSONS.**

| SURVEY QUESTIONNAIRE |   |   |                                    |
|----------------------|---|---|------------------------------------|
|                      | QUESTIONS                                   | RESPONSES   | INSTRUCTIONS                       |
| 1.0                  | INTRODUCTION                                |   |                                    |
| 1.1                  | Date of interview                           | _____/_____/_____/  | DD/MM/YY                           |
| 1.2                  | Administrative region                       |   |                                    |
| 1.3                  | Name of the PAP                             |   | Type the name of the LOCATION      |
| 2.0                  | SOCIO-DEMOGRAPHIC PROFILE                   |   |                                    |
| 2.1                  | Tick where your age group falls.            | 30-35<br>35-40<br>40-45<br>45-50<br>50 & above                      | <i>INCOMPLETE YEARS</i>            |
| 2.2                  | Gender                                      | Male .....1<br>Female .....2  |                                    |
| 2.3                  | What is the highest level of your education | None.....1<br>Secondary.....2<br>College.....3<br>University .....4 | <i>CIRCLE THE MOST APPROPRIATE</i> |

### **Interview schedule**

1. Describe what comprises of your livelihood strategy at present in comparison to before
2. What is the level of your financial gain?
3. Discuss the level of competition and how you set up business
4. What is the attitude and aspirations of the younger generation in regards to livelihoods and rural non-farm activities?
5. Have the Isinya-Namanga resettlement and livelihood restoration programs assisted the reconstruction of livelihood for those resettled people on Kajiado County?
6. What are the key lessons learnt from the Isinya-Namanga resettlement and livelihood restoration programs?
7. What is your overall impression about the project and general impacts of the resettlement and livelihood restoration reconstruction activities?



**APPENDIX 3**

**QUESTIONNAIRE FOR.....**

Place an × in the appropriate box

Key: 5=SA Strongly Agree 4= A: Agree 3: N: = Neutral 2: D= Disagree: 4

1: SD: =Strongly Disagree

**Resettlement restoration arrangement & livelihood of project affected persons.**

**Section A.**

| STATEMENTS  | SA | A | N | D | SD |
|---|----|---|---|---|----|
| Resettlement restoration have assisted the construction of livelihoods  |    |   |   |   |    |
| Resettlement restoration have changed the local capabilities &access to livelihoods                                     |    |   |   |   |    |
| Resettlement restoration have helped people access more education, income, education& healthcare                        |    |   |   |   |    |
| Resettled people are happy with their new houses & gardens  |    |   |   |   |    |
| Welfare of the project affected communities has been elevated as a result of the resettlement & livelihood restoration. |    |   |   |   |    |
| Resettlement programme has enabled us learn restoration livelihood  |    |   |   |   |    |
| Restoration programme has assisted the reconstruction of livelihood for those involuntary resettled people.             |    |   |   |   |    |
| Resettled people are aware of their rights that impact on their livelihood  |    |   |   |   |    |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| Natural resources are available after resettlement                 |  |  |  |  |  |
| Resettled people have adequate shelter, water supply & sanitation. |  |  |  |  |  |

**Potential risk and livelihood of project affected persons**

**Section B.**

| <b>STATEMENTS</b>   | <b>SA</b> | <b>A</b> | <b>N</b> | <b>D</b> | <b>SD</b> |
|---|-----------|----------|----------|----------|-----------|
| Displaced but relocated people risk from suffering social acceptability and integration in their new areas. In most cases, they are rejected by the host. |           |          |          |          |           |
| Loss of assets such as houses, farm land, small livestock, poultry, rearing houses is felt  |           |          |          |          |           |
| Loss of harvest due to theft, inadequate means to transport produce & lack of proper storage facilities in the new area.                                  |           |          |          |          |           |
| Risk of project affected persons contracting diseases from host population.   |           |          |          |          |           |
| Risk of project affected persons infecting residents in host communities  |           |          |          |          |           |
| Increase in school drop –out rate by school going children  |           |          |          |          |           |
| Social frictions over agro-field, grazing rounds, water resources.  |           |          |          |          |           |

## Resettlement compensation and livelihood of project affected persons

### Section C.

|  | SA |  | A | D | SD |
|--|----|--|---|---|----|
| Resettlement compensation is subject to approval of all the land valuation board be determined by agreement          |    |  |   |   |    |
| People with physical disabilities are given a choice of replacement properties of similar or higher value.           |    |  |   |   |    |
| Resettlement compensation in kind is preferred option  |    |  |   |   |    |
| Resettlement assistance in terms of money allowance will form part of resettlement compensation                      |    |  |   |   |    |
| Crops /trees on the fields cultivated by those affected will be compensated by giving cash                           |    |  |   |   |    |
| Compensation for resettlement of lost forest and land inclusive of lost timber at whole replacement value is delayed |    |  |   |   |    |

## Vulnerability and livelihood sustainability of project affected persons

### Section D: Vulnerability statements

| STATEMENT   | SA | A | N | D | SD | Mean | Std.Dev. |
|---|----|---|---|---|----|------|----------|
| Project affected persons were able to cope with the problems  |    |   |   |   |    |      |          |
| Livelihood and the production systems in the different geographical context influenced capacity to cope |    |   |   |   |    |      |          |
| Institutions were able to support the recovery for different groups                                     |    |   |   |   |    |      |          |
| Children under five were able to get malnourished   |    |   |   |   |    |      |          |
| Our population began to suffer chronic energy deficiency  |    |   |   |   |    |      |          |
| We were left with small ratio of agricultural land to cultivate   |    |   |   |   |    |      |          |
| Environmental sustainability got interfered with  |    |   |   |   |    |      |          |